

Town of Queensbury

DEPARTMENT OF WASTEWATER

**STANDARD SPECIFICATIONS
FOR SANITARY SEWER CONNECTIONS**

Adopted Pursuant to
Town Board Resolution No. _____

Revised- 2000

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Section One-General

1.1 Sewer Department Control

- A. The following specifications apply for all commercial and residential Sanitary Sewer Connections to the Public Sewers in the Town of Queensbury.
- B. All installations of Sanitary Sewer Connections shall be subject to the approval and control of the Town of Queensbury Department of Wastewater.
- C. Authority for the Wastewater Department control is derived from the Town of Queensbury Local Law No. 3 of 1988. The following Sections 1.2 through 1.5 outline the general requirements contained in the Local Law.

1.2 Use of Public Sewers

- A. The Owner (s) of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purpose, situated within the Sewer District and located within 225 feet of a Public Sanitary Sewer and abutting on any street, alley, or right-of-way in which there is now located or may in the future be located a Public Sanitary Sewer of the Sewer District, is hereby required at the owner(s) expense to contract with a contractor to install suitable plumbing facilities, therein and to connect such facilities, directly to the nearest Public Sewer, in accordance with these specifications.
- B. Under normal circumstances, connections shall be made as follows:

<u>Distance from structure To Public Sewer</u>	<u>Time to Complete Connection Upon Notice</u>
0-125 feet	12 months
125-225 feet	18 months

However, the Owner(s) may appeal to the Town Board if substantial physical obstructions will be incurred or additional time is necessitated.

1.3 Prohibited Discharges

- A. No person(s) shall discharge or cause to be discharged any unpolluted waters such as storm water, groundwater, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process water into any sanitary sewer. Foundation drainage, floor drains, and sump pumps shall not be connected to any sanitary sewer.

- B. Waters or wastes containing contaminants hazardous or injurious to the Sewers or the Sewage Treatment Facilities are also excluded. A complete description of such wastes is found in the Local Law.

1.4 Permits and Fees

- A. No unauthorized person(s) shall uncover, make any connections with or opening into, use, alter, or disturb any public Sewer Appurtenance, thereof, without first obtaining a written permit from the Town.

- B. Two classes of Building Sewer Permits will be issued:

Residential-Commercial--\$10 fee **

Industrial-Negotiable *

*Volume of sewage, number of connections, and quality of discharge will determine fee.

****Plus any Buy-in fees**

- C. Before making a Sewer Connection, the property owner, (or his agent), shall apply for the appropriate permit on a form furnished by the Wastewater Department, and shall provide all information required. The combined Permit and Inspection Fee shall be paid to the Wastewater Department at the time the permit is issued. Permits are issued at the Wastewater Department Monday-Friday between 8:00 a.m. and 4:30 p.m.
- D. All costs and expenses incidental to the installation and connection of the building to the Sewer shall be borne by the Owner(s). The Owner(s) shall indemnify the Sewer District and Town from any loss or damage that may directly or indirectly be occasioned by the installation of the building to the Sewer.

1.5 Insurance

All contractors performing connections must have a certificate of insurance on file with the Wastewater Department.

Section Two-Layout of Sewer Connection

2.1 Building Sewer

- A. The building sewer is defined as the extension of the building drain to the Public Sewer. The building drain is defined as beginning at the point five (5) feet outside the inner face of the building wall. (See figure 1)

- B. A building sewer has been constructed from a "Y" fitting (wye) in the public sewer main to the owner's property line (or permanent easement boundary). At this point, the building sewer has been capped and marked to await connection by the property owner(s).
- C. Where a new building is constructed and there is no building sewer from the main to the property line, the installation of this lateral and tapping of the main will be done by an approved contractor.
- D. In all cases, it will be the property owner's responsibility to extend and construct at his own expense, the building sewer across his property to a proper point of connection described in the Local Law.
- E. A separate and independent building sewer shall be provided for every building, except for special connections described in the Local Law.
- F. The facilities of the Sewer District have been installed to at least serve the first floor of the buildings. The District facilities may not necessarily serve basements or facilities in a finished basement. All building sewers shall be brought to the building at an elevation below the building's first floor. In all buildings in which any building's first floor drain is too low to permit gravity flow to the Public Sewer, sanitary sewage carried by such building drain shall be lifted by a means approved by the Wastewater Department and discharged to the building sewer.
- G. The building sewer shall be laid at a depth sufficient or so installed to afford protection from frost, (4' 0" Deep Minimum), and at a uniform grade of 1/4" per foot (about 2%). Use a lesser grade, which in no case shall be less than 1/8" per foot (about 1%) or lesser depth if conditions warrant and adequate alternate measures are taken. Exceptions on a written case-by-case basis.
- H. No building sewer shall be laid within three (3) feet of and parallel to any bearing wall footing.
- I. Necessary changes in direction shall be made only with properly curved pipes and fittings. Ninety-degree bends are not acceptable. Two 45-degree bends connected with a one-foot nipple, or a 90-degree long bend, must be installed where needed.
- J. A four-inch minimum diameter cleanout pipe shall be installed with easy access inside or outside the building on the building drain. (See figure 1)
- K. Certain Commercial sewer connections may be required by the Sewer District to incorporate a grease trap. The Wastewater Department shall approve the type and details of grease trap installation.

2.2 Building Drain

Figure 2 illustrates the requirements for a typical building drain.

Section 3-Materials

3.1 Building Sewer Pipes and Fittings

- A. All standard building pipes and fittings shall not be less than six-inches in diameter. Fiber wall pipe is not acceptable under any circumstances.
- B. Listed below are the specifications for acceptable materials:
 - * DUCTILE IRON WATER PIPE – 6-inch minimum diameter and Strength-Class 50
 - * Pipe and Fittings – ANSI A 21.51
 - * Push-on Joints
 - * CAST IRON SOIL PIPE – 6-inch minimum diameter and strength – Extra Heavy
 - * Pipe and Fittings – ASTM A 74
 - * Rubber Gasket Joints ASTM C 564
 - * ABS PIPE – 6-inch minimum diameter SDR 35 and Strength-Solid Wall Extra Strength
 - * Pipe and Fitting – ASTM D 1788, ASTM D 2751
 - * Joints – Solvent Weld Couplings
 - * PVC PLASTIC PIPE – 6-inch minimum diameter and strength – Class SDR 35
 - * Pipe and Fitting – ASTM 3034
 - * Joints – Rubber Gasket Joints

3.2 Building Drain Pipes and Fittings

All building drainpipes and fittings shall conform to the latest requirements of the New York State Building Construction Code Applicable to Plumbing, including latest Revisions.

3.3 Connection to Existing Public Sewer Main

- A. Except in rare occasions, there will be a building sewer already provided for extension to the building drain. However, it may sometimes be necessary for the property owner to connect to the existing public sewer main and construct the entire building sewer from there to the building drain.
- B. Such connections to the public sewer main may involve special construction, such as sewer taps and risers, and will be considered by the Wastewater Department on a case-by-case basis.

3.4 Connection to Existing Building Sewer

- A. Connection of a new building sewer to an existing building sewer shall be made air and water tight in an acceptable manner.

- B. The standard connection shall utilize the standard pipe fitting (or manufacturer's recommended adapter) designed to join the type of pipes involved.

3.5 Building Sewer to Building Drain Connection

- A. The connection shall be made air and water tight in an acceptable manner.
- B. The standard connection shall utilize the standard pipe fittings (or manufacturer's recommended adapter) designed to join the type and sizes of pipes involved.

3.6 Cleanout to Grade

- A. Cleanout to grade shall use a 4-inch minimum diameter riser, tapped with a 4-inch cleanout plug (raised square head design). The cleanout plug shall be installed using pipe thread compound. Joints in the cleanout riser must be rubber-gasketed or caulked lead and oakum. No cement mortar joints are allowed.
- B. All building drain cleanouts shall use a combination wye and 1/8 bend (long turn pattern only) at the base on the drain with the cleanout riser extending vertically to a point at least 3-inches above final grade.
- C. The Wastewater Department must approve the type and details of all building sewer cleanouts.

3.7 Building Trap

All building traps shall be double-hand hole running traps incorporating two (2) 4-inch diameter cleanout plugs. Cleanout plugs shall be installed with thread compound.

3.8 Fresh Air Inlet

- A. Fresh air inlet pipes shall be 3-inch diameter cast iron, copper, or plastic.
- B. The fresh air inlet shall terminate outside the building at least 8-inches above final grade. The open end shall be protected by a bug-proof plate or cap, permanently fixed in the mouth of the pipe, with an open ventilating area at least equal to the area of the inlet pipe.

3.9 Backwater Valve

All required backwater valves, whether installed in the main building drain, or in separate connection to the building drain, shall incorporate a cleanout and be of a type approved by the Wastewater Department.

Section 4-Installation

4.1 General Construction

- A. All excavation, pipe installation, and backfilling shall be performed in accordance with modern standard practices and applicable safety standards. More specifically, the following standards shall apply.
 - 1. Pipe laying and trench backfilling:
 - a. Pipe manufacturer's recommendations.
 - b. Sewer pipe trench shall be excavated approximately one-inch deeper than the invert of the pipe. When rock is encountered, trench shall be approximately 6-inches deeper than invert of the pipe and brought to grade with cushion sand or pea gravel.
 - c. All pipes shall be sound, free from cracks and defects.
 - d. The pipes shall be laid at a uniform pitch (at least ¼" per foot or 2% slope) to the building drain near the foundation.
 - e. Backfilling shall be done with fine selected material and thoroughly tamped. There shall be at least 2 feet of backfill cover over the top of the pipes adjacent to the house and in excess of this amount as the line departs from the house.
 - 2. Trench Excavation
 - a. In accordance with New York State Department of Labor Industrial Code Rules (Part 23, 1972 and Part 53, 1975), including latest revisions.
 - b. OSHA Regulations for Construction.
- B. All building drains shall be installed in accordance with the New York State Building Construction Code Applicable to Plumbing.
- C. All excavations shall be adequately protected with barricades and lights. All excavations must be properly refilled to grade in compacted layers, and the original type of surface replaced. Any public property disturbed or destroyed in the course of the work such as sidewalks, streets; drainage courses shall be restored or replaced to the satisfaction of the Wastewater Department or any other authority having jurisdiction.
- D. The opening of streets and sidewalks for the purpose of making sewer connections must be done in accordance with the requirements of Town Law and the requirements of County or State Highway Departments, as applicable. Any required Highway Work Permits should be obtained by the property owner(s) or his contractor prior to the start of construction.

- E. No connection shall be made into the main public sewer (8-inch diameter or greater) except in the presence of a Wastewater Department representative.
- F. No water shall be allowed to gather in excavations or trenches. Many excavations shall require specific measures to control ground water. Pipes shall be laid in a dry trench. Pumping of septic tanks to be abandoned shall not be discharged into the public sewer system.

4.2 *Inspection and Testing*

- A. When the building sewer is installed and completed, but prior to backfilling the trench, the contractor (or property owner) performing the work shall notify the Wastewater Department so that the installation can be inspected and approved prior to backfilling the trench. Trenches backfilled prior to inspection will have to be reopened by the contractor (or property owner) at their expense.
- B. In the discharge of their duties, and for the purpose of sewer inspection, properly identified representatives of the sewer district are legally authorized to enter any premise or property in the Town of Queensbury.

PLANNING YOUR SEWER CONNECTION
GENERALLY THE BUILDING SEWER SHOULD BE MADE AS SHORT, STRAIGHT AND DIRECT AS POSSIBLE. ONE OF THE THREE ALTERNATES BELOW SHOULD COVER YOUR PARTICULAR SITUATION. THE HEAVY LINE INDICATES THAT PORTION OF THE BUILDING SEWER YOU ARE RESPONSIBLE FOR FROM THE BUILDING TO THE PROPERTY LINE OR PERMANENT EASEMENT BOUNDARY.

ALTERNATE "A"

SEPTIC TANK ON THE SEWER SIDE OF THE BUILDING

THIS IS THE SIMPLEST FORM OF CONNECTION. EXTEND YOUR BUILDING DRAIN TO THE BUILDING SEWER PROVIDED BY THE TOWN'S CONTRACTOR. CHOICE 2 MAY BE USED IF METAL TANKS ARE FILLED.

YOUR SEPTIC TANK SHOULD BE EITHER REMOVED OR EMPTIED, FILLED AND ABANDONED.

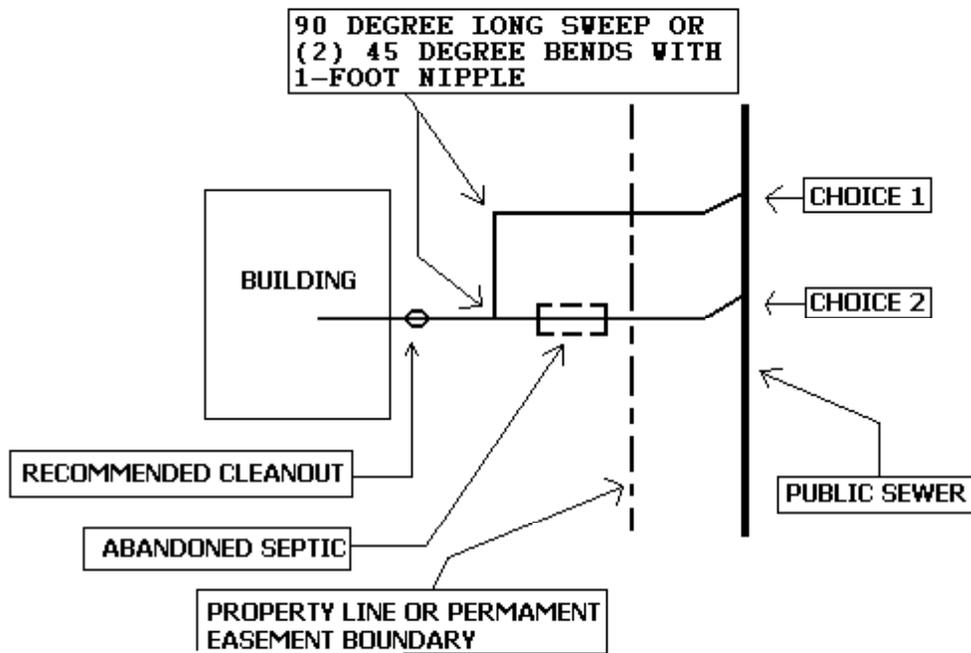


Figure 2

ALTERNATE "B"

SEPTIC TANK AT THE SIDE OF THE BUILDING

CHOICES:

- 1. ROTATE THE INSIDE ELBOW 90 DEGREES AND RUN THE DRAIN ALONG CELLAR WALL AND EXIT AT THE FRONT OF BUILDING IF PRACTICAL.**
- 2. EXIT AT THE SEPTIC TANK SIDE AND USE THE PRESENT DRAIN CONNECTION TO YOUR SEPTIC TANK.**

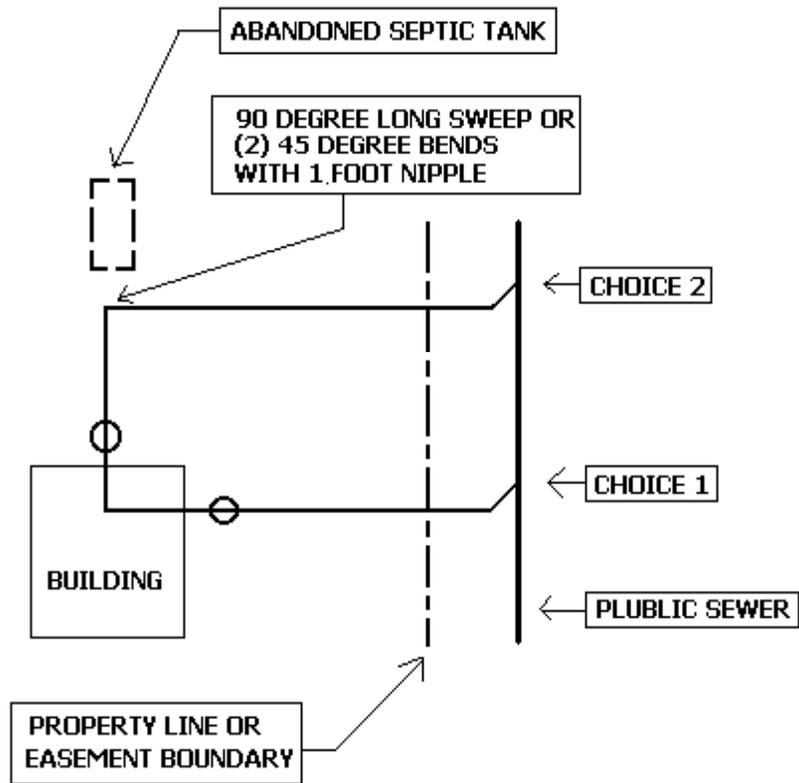


Figure 2

ALTERNATE "C"

SEPTIC TANK ON OPPOSITE SIDE OF BUILDING FROM SEWER LINE

CHOICES:

1. **RELOCATE THE BUILDING DRAIN UNDER THE CELLAR FLOOR AND EXIT AT FRONT OF BUILDING. CONSIDER ONLY IF YOU DO NOT WANT DRAIN PIPE ON INTERIOR WALL.**
2. **SAME AS CHOICE 1 ALTERNATE b. IF YOU HAVE FINISHED CELLAR THIS MAY NOT BE ACCEPTABLE TO YOU.**
3. **EXIT AT THE SEPTIC TANK SIDE AND USE THE PRESENT DRAIN CONNECTION TO YOUR SEPTIC.**

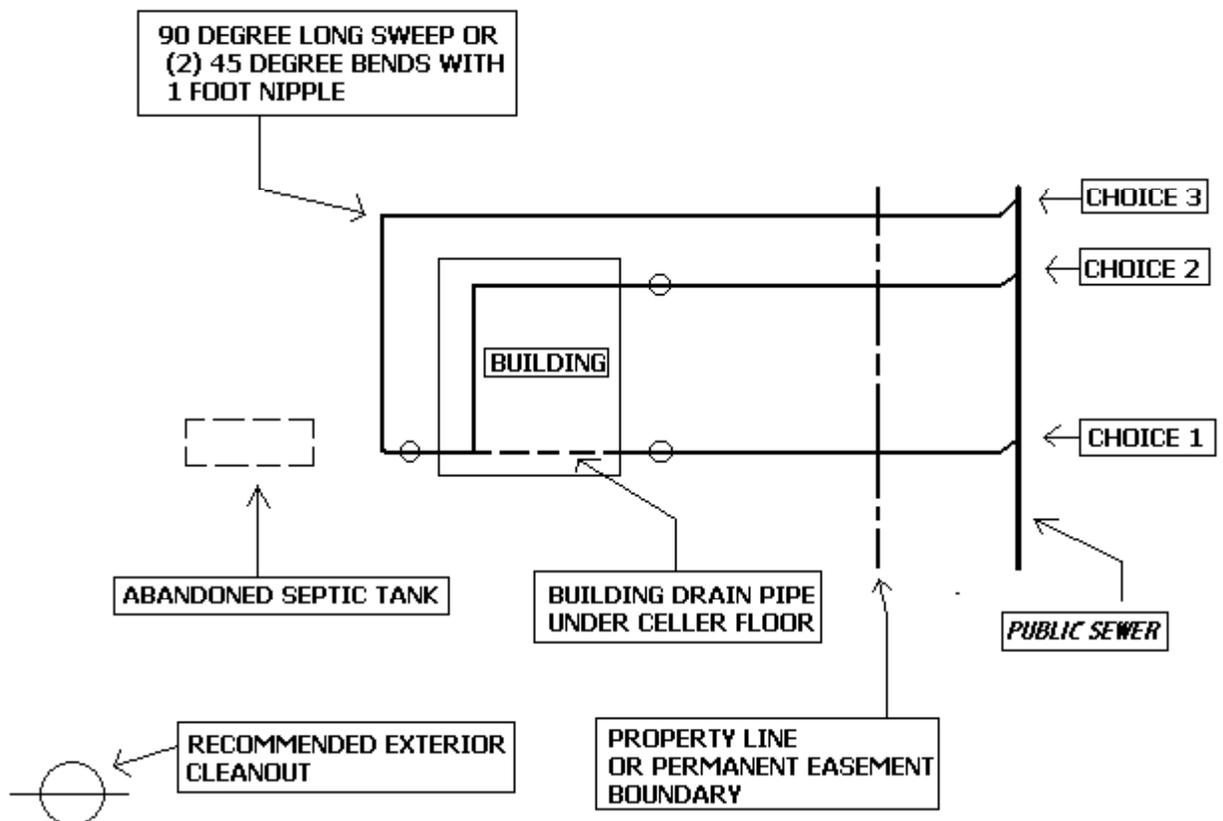
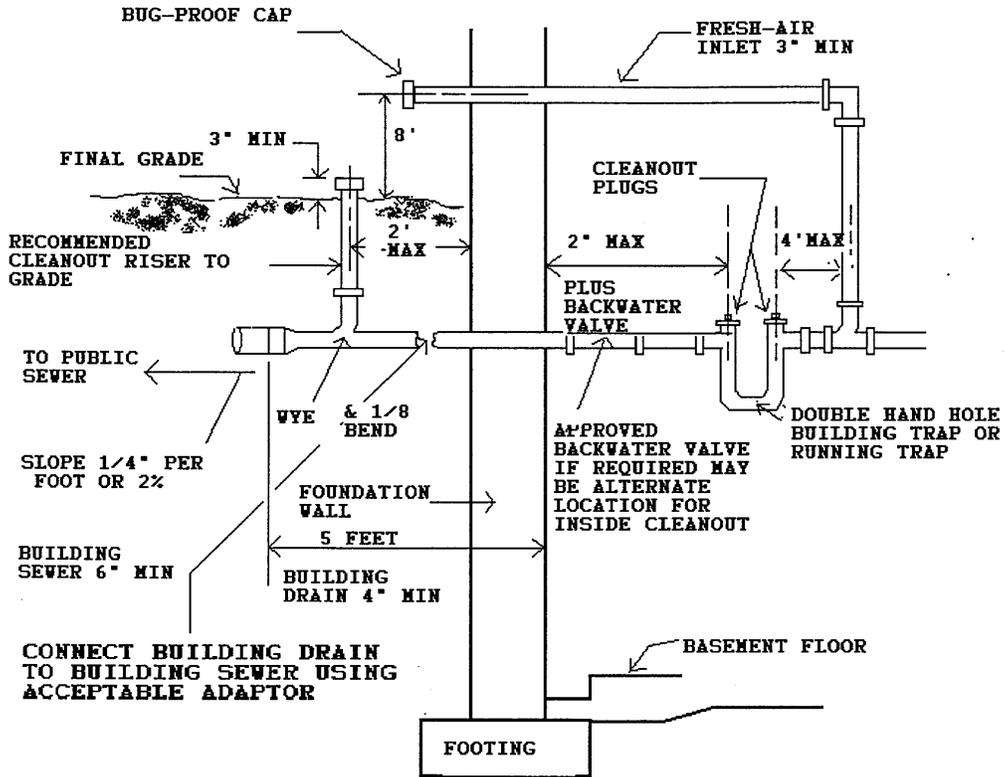


Figure 2

**TYPICAL BUILDING DRAIN
FIGURE TWO**



NOTE: THIS DIAGRAM IS PURELY SCHEMATIC AND IS INTENDED TO REPRESENT MANY SITUATIONS WHICH MAY BE ENCOUNTERED DURING INSTALLATION OF YOUR SEWER CONNECTION