

David A. Degear Town of Farmington

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Minimum requirements shall be as established by the New York State Department of Health and/or the Department of Environmental Conservation, the Town of Farmington Sewer Use Law(s) and/or the Town of Victor except as noted herein:

Gravity Sewers

- Sewer mains shall be a minimum of 8-inch (8") diameter except in those areas where the sewer shall be of the diameter outlined in a Master Plan.
- 2 Manhole spacing, maximum of 400 L.F.
- The sewer shall be designed at such a depth to provide basement drainage. If site conditions are such that basement drainage cannot be provided to all units, a specific note to that effect shall be placed on the plan.
- Water mains, sewer mains and sewer laterals shall not be allowed in a common trench. There shall be at least a ten-foot (10') horizontal separation between the water service and this sewer lateral all the way to the basement wall with a minimum eighteen-inch (18") vertical separation.
- All necessary mains and laterals required to connect to the public sewage system as shown on the final approved plan shall be installed by the Developer.
- 6 Elevations Where other utilities parallel or cross the sanitary system, vertical clearance between the systems shall be provided to permit the satisfactory installation of all services.
- 7 Laterals for each individual lot shall be:
 - a) Minimum of four-inches (4") in diameter.
 - b) Minimum of slope 1/4"/L.F. (2%).
 - c) Clean outs shall be provided at maximum distance of 85 feet and one shall be located on the right-of-way or easement line.
- 8 Sanitary Manholes for sewer 8" 12", minimum 4'-0" inside diameter, over 12", minimum 5'-0" inside diameter, three or more pipes in a manhole requires a 5'-0" inside diameter. Larger pipes may require special design.
- 9 Dry Sewers Where required shall be designed to the grades established from the Master Sewer Plan.
- 10 Connections to existing manholes shall utilize core boring with no impact tools and rubber boots with stainless steel snap locks or screw-wedge or sand collars epoxied in place

Rules & Regulations for Sewer Services

Pressure Sewers

- 1 Pressure sewer systems shall be laid out in a configuration that is hydraulically efficient.
- 2 Access shall be provided at the upstream end of each force main branch.
- All appurtenances and fittings shall be compatible with piping system designed and shall be full bore with smooth interior surfaces.
- 4 Building service connections shall have a minimum diameter of 1-1/4 inches and shall tap into the force main with a corporation stop. A check valve shall be provided near the service pump.
- 5 The required pipe size shall be determined on the basis of these principal criteria:
 - a) Velocities adequate to assure scouring should be achieved
 - b) Size should be determined on the basis of the required flow rate
 - c) Head loss should not exceed pumping pressure capabilities
- A velocity of two to five feet (2' 5') per second must be achieved at least once and preferably several times per day based on design flows.
- 7 Design shall be for peak sewage flow rate and negligible infiltration.
- Four-inch (4") diameter pipe shall be the smallest used for raw sewage force mains. Smaller pipe may be considered if grinder pumps or similar equipment are installed. These instances will be reviewed on an individual basis.
- Automatic air-relief valves shall be provided at high points and major changes in slope in the force main to prevent air locking.
- Force mains shall enter a gravity sewer at the bottom of a manhole in line with the flow. If this is not possible, the force main shall not enter the receiving manhole more than two feet (2') above the flow line.
- Force mains in systems that operate on a seasonal basis shall be provided with draining capability.
- Normal operating pressure shall be in the range of 40-60 psi and shall not exceed 60 psi for any appreciable amount of time.
- Clean outs shall be placed at a maximum spacing of 400 feet, at major changes in direction and where one collector main joins another main. These clean outs shall include an isolating valve and capped Y-branch fitting located on either side of the isolating valve and pointed upstream and downstream for access during maintenance procedures.

Rules & Regulations for Sewer Services

Sewage Lift Stations

In all cases, the use of gravity systems is encouraged over pump stations. Specific geographic and/or topographic areas may require the use of sewage lift stations to transmit contributory flows to the trunk sewer system.

Before sewage-pumping stations are designed, they should be discussed with the Town to provide compatible equipment to that already in use.

SECTION 3 - Material Specifications

3.01 General Information

The materials intended to establish the degree of excellence are herein included and deemed to be of satisfactory quality for installation within the Town. When new materials may be made available, their use may be permitted in limited test sections with the restriction that should these materials prove unsatisfactory through the test period as established by the Town, they shall be removed and replaced with those herein called for at no expense to the municipality.

3.02 **Sanitary Sewers**

A Polyvinyl Chloride (PVC) Pipe for Gravity Sewer

Shall meet the requirements of ASTM D-3034 for Sewer Pipe and Fittings, minimum wall thickness SDR-35. If depth of main is 16 feet or more, then the sewer main is to have a minimum wall thickness of SDR-21. The joints shall be bell and spigot conforming to ASTM D-3212 with elastomeric gasket conforming to ASTM F477. All pipe and fittings shall be made from PVC components as defined and described in ASTM D-1784. Pipe shall be new enough to have manufacturer's specifications still painted on the length of pipe and consist of glossy finish.

B Polyvinyl Chloride (PVC) Pipe for Sewage Force Mains

Shall meet the requirements of ASTM D-2241 for PVC plastic pipe. Pipe and fittings shall be 160 psi, minimum SDR-21 extruded from clean, virgin, resin compound conforming to ASTM D-1784. Bell and spigot joints are required with elastomeric gaskets conforming to ASTM D-3139. Metallic tracer tape shall be placed over the center of all mains on top of the 18-inch minimum safety cover. Pipe shall be new enough to have manufacturer's specifications still painted on the length of pipe and consist of glossy finish.

C Ductile Iron (DIP) Pipe for Sewage Force Mains

Shall conform to AWWA C-151, minimum allowable thickness shall be Class 51. Rubber gasket push on joints shall be used in accordance to AWWA C-111. All ductile iron pipe shall be cement-mortar lined in accordance with AWWA C-104.

D <u>HDPE Pipe for Sewage Force Mains</u>

Shall be DR 17, PPI designation PE 3408, and conform to AWWA C906. All joints shall be fuse welded mechanical joints with compression couplings and stainless steel inserts. No glued joints allowed underground. Metallic tracer tape shall be placed over the center of all mains on top of the 18-inch minimum safety cover.

Rules & Regulations for Sewer Services

3.02 Sanitary Sewers (continued)

E Sewer Connections for Gravity Sewer

Sewer connections on new sewer main installations shall be made with wye fabricated or injection molded fittings. The minimum strength classifications of these fittings shall be equal to that of the pipe and the fitting shall be compatible with the pipe. Connections to an existing sewer shall be made with GENCO cast iron super "o"-ring gasket, with single-wide stainless steel band and stainless steel or bronze bolts for sewers up to 14-inches in diameter and GENCO bolt-on saddles for sewers greater than 14-inches in diameter. Connections to mains must be separated by a minimum of 10 feet.

F Sewer Lateral Pipe for Gravity Sewer

- 1 Cast iron sewer pipe shall be extra heavy class with rubber gasket joints and maximum lengths equal to 5'-0" per ASTM A-74.
- PVC pipe shall be of a minimum wall thickness SDR-21 with elastomeric gasket joints, supplied in standard lengths and conform to ASTM D-3034. All SDR-21 pipe will be bedded in stone as indicated in these specifications.

No glued joints will be allowed underground, elastomeric or mechanical joints only will be allowed.

All commercial applications within building walls shall be XHCI. Consult with Building Inspector for further limitations.

G Sewer Pressure Pipe for Forcemain

- Polyvinyl chloride (PVC) pipe and fittings shall meet the same requirements as PVC force mains.
- Polyethylene (PE) pressure pipe and fittings shall conform to ASTM D-2737 with pressure class PE 2305. Connections shall be made with compression joint construction.
- 3 High Density Polyethylene (HDPE) 3408

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