

SECTION III

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PRESSURIZED SEWER SYSTEM SPECIFICATIONS

1. PURPOSE AND GENERAL REQUIREMENTS

1.1 Purpose

This publication is to provide information to all Engineers, Contractors, Builders, Developers and other interested persons or firms, on the District requirements with respect to design and construction of pressure sewer systems within the District. This publication presents technical specifications for the design and installation of raw sewage and effluent mains and should be used in conjunction with the District Rules and Regulations by any firm or individual planning to design or construct raw sewage and effluent systems within the District. In all cases in these specifications where reference is made to "District Engineer," the "District Engineer" shall mean any representative designated by the District to provide inspection of the water system construction.

1.2 General Requirements

It is the intent of these specifications to coincide and be similar to Section I - (Water Systems Specifications) with the exception of the following provisions:

1.2.1 All mains shall be profiled on the construction plans. All mains shall be PVC pipes.

1.2.2 Approved construction plans and a copy of these specifications must be kept on the job site by the Contractor at all times. Approved construction plans will expire six (6) months from the date of approval.

1.2.3 No work shall be backfilled (including bedding) materials above the spring line of the pipe) until the construction has been inspected and approved for backfilling by the District Engineer.

1.2.4 The details for the water system specifications are to be used in construction of pressurized sewer systems.

1.2.5 The maximum distance between main line valves shall be 1500 feet. Valves shall also be located at all intersections.

1.2.6 Fire hydrants shall have NST (National Standard Thread). Color shall be safety green.

1.2.7 Squeegee bedding shall be used. On-site material is not acceptable without the approval of the District Engineer.

2. LOCATION OF LINES AND APPURTENANCES

2.1 Mains in Streets

When mains are placed in streets, they shall be placed as follows:

2.1.1 The main shall be placed 10' (ten feet) minimum horizontally from any domestic water main.

2.2 Mains in Easements

In areas where mains are placed in easements, all mains shall be located within the easements shown on the contract drawings. All main easements must be a minimum of 30' (thirty feet) in width for exclusive easements or 50' (fifty feet) for non-exclusive easements. No trees or structures of any kind will be allowed within the easements. No line shall be located less than 5' feet (five feet) from the edge of an easement.

2.3 Valves

Valves shall be located, where possible, at a point on the main that would be intersected by the extension of a property line. Gate valves shall be used on sewage effluent mains and plug valves shall be used on raw sewage mains. Appropriate valve trim and seats shall be employed to prevent corrosion.

3. PIPE

3.1 General

Sizing shall be determined by the District Engineer. Pipe in sizes 10" or 14" generally will not be allowed. Additional requirements for type of pipe shall be determined by the District Engineer.

3.2 Polyvinyl Chloride (PVC) Pressure Pipe

All PVC pressure pipe must be green in color. All polyvinyl pipe furnished under this specification shall be manufactured in strict accordance with AWWA Standard C900 and shall conform to the following additional requirements:

3.2.1 Size of Pipe - This specification shall cover polyvinyl chloride pipe in 6-inch

and 8-inch nominal diameters with cast iron pipe equivalent outside diameters.

3.2.2 Joint Type - Pipe joints shall be made using an integral bell with an elastomeric gasket push-on type joint or using machined coupling of a sleeve type with rubber ring gaskets and machined pipe ends to form a push-on type joint.

Solvent cement joints are strictly prohibited.

3.2.3 Class and Type – See Materials Specifications.

3.2.4 Pipe Lengths - Each length of pipe will be a standard laying length of 20 feet. Random lengths shall not be acceptable.

3.2.5 Manufacturer – Please see Appendix A “material specifications” for approved products

3.2.6 Fittings - All fittings shall be ductile iron, Epoxy lined, and shall conform to AWWA C-110/A21.10-82 for mechanical joints and AWWA C-111-71 or ANSI A21.11 for push on joint gasket or latest revisions thereof. Other linings may be used when authorized by the District Engineer.

Fittings shall be wrapped in polyethylene.

4. MAIN EQUIPMENT

4.1 Buried valves shall be open-left (counter-clockwise) and shall have valve boxes similar to domestic water valves except the valve box lid shall be labeled "Sewer".

4.2 Above ground valves shall be open-left (counter-clockwise) and be equipped with an appropriate hand-wheel or lever operator.

4.3 Marker posts shall be 4" steel posts painted green with a 12" long yellow section beginning 6" below the top which will contain the stenciled lettering or 4" x 4" redwood post, router letters and numbers painted black.

4.4 Warning signs shall be placed along pressurized sewer systems at the direction of the District Engineer to warn the public that pressurized sewer system is non-potable water.

END OF SECTION