

SECTION 3 – GENERAL STANDARDS

3.1 GENERAL POLICY

Public improvements are conditioned through the development review and land use approval process, described and administered under the Local Planning Department administering the Zoning and Development Ordinance or by Federal, State, or other Local Government regulation. These Standards cannot provide for all situations and are intended to assist but not to substitute for competent work by design professionals. It is expected that Engineers will bring to each project the best of skills from their respective disciplines. These Standards are not intended to limit unreasonably any innovative or creative effort which could result in better quality, cost savings, or both.

Pursuant to the objectives found in Section 1 of these Standards, any sanitary sewer system designed and constructed shall:

1. Be of adequate design to carry the expected flow, within the design life, and at sufficient size and depth to serve adjacent properties;
2. Have sufficient slope to maintain a minimum velocity of two (2) feet per second when flowing half full;
3. Have sufficient structural strength to withstand all external loads which may be imposed;
4. Be of materials resistant to both corrosion and erosion with a minimum design life of 50 years;
5. Be economical and safe to build and maintain; and
6. Prevent infiltration or inflow of ground and surface waters and exfiltration of sewage.

3.2 DEVELOPMENT POLICY

3.2.1 Development of a Property

When development of a property or tract of land is proposed, all dwelling units within the boundaries of the proposal shall be connected as part of the approved plan to the Public Sanitary Sewers System.

3.2.2 Existing Onsite Sewage Disposal Systems

All existing onsite sewage disposal systems shall be abandoned per ODEQ Regulations. For additional information contact Clackamas County Soils Department.

3.2.3 Point of Service for Upstream Parcels

A point of service for upstream parcels if required shall be provided to facilitate an orderly extension of the Public Sanitary Sewers System. This shall include the extension of Public Sanitary Sewer mainlines in Right-of-Way or easements across the property to serve the upstream properties.

3.2.4 Trunk Line Sanitary Sewers

Trunk line sanitary sewers if required will be sized to provide capacity for the entire future development of the upstream basin. Sanitary Sewer System for future development shall be designed per the District's master plan or in absence of such plan on case by case basis as approved by the District.

3.3 ENGINEERING POLICY

It shall be the policy of the District to require compliance with Oregon Revised Statute 672 for professional Engineers.

All engineering Plans, reports, or documents shall be prepared by a registered professional Engineer, or by a subordinate employee under the Engineer's direction, and shall be stamped with the Engineer's seal and signed to indicate the Engineer's responsibility for the design. It shall be the Engineer's responsibility to review any proposed public facility extension, modification or other change with the District prior to engineering or proposed design work, to determine any special requirements or whether the proposal is permissible. A "Plans Approved for Construction" (or equivalent) stamp of the District on the Plans, etc., for any project, does not in any way relieve the Engineer of responsibility to meet all requirements of the District for obligation to protect life, health, and property of the public. The Plan for any project shall be revised or supplemented at any time it is determined that the full requirements of the District Regulations have not been met.

All Drawings submitted for approval shall be stamped and signed by a registered professional Engineer. No Plan review or approval shall be made without the Plans being stamped and signed by the Engineer.

3.4 SANITARY SEWER STANDARD DETAIL DRAWINGS

Except as otherwise provided by these Standards, the engineering design and construction shall be in accordance with the most updated revision of the Sanitary Sewer Standard Detail Drawings included in Appendix D.

3.5 APPROVAL OF ALTERNATE MATERIALS AND METHODS

Any substitution of materials or alternate methods not explicitly approved herein will be considered for approval as set forth in Section 1.7 of these Standards. Persons seeking such approvals shall make application in writing. Approval of any deviation from these Standards shall be in written form. Approval of minor matters will be made in writing if requested.

Any alternative material or method must meet or exceed the minimum requirements set forth in these Standards.

The written application is to include, but is not limited to, the manufacturer's specifications and testing results, design drawings, calculations, reason and justification, and other pertinent information.

Any deviations or special problems shall be reviewed on a case-by-case basis and approved by the District. When requested by the District, full design calculations shall be submitted for review with the request for approval.

3.6 SPECIAL DESIGN APPLICATIONS

Special applications not covered in these Standards require review and approval by the District. Submittal of full design calculations, supplemental drawings and information shall be required prior to any approval.

Such application which may occur requiring special review and approval are among, but not limited to, the following:

- Public Sanitary Sewer Force Mains
- Public Sanitary Sewage Pump Stations
- Relining of Public Sanitary Existing Sewers
- Internal Sealing of Public Sanitary Existing Sewers
- Sanitary Sewer Regulatory Devices
- Sanitary Sewer Flow Measurement/Monitoring Devices