

## **SECTION 6.3 SEWER LATERALS**

### **6.3.1 PURPOSE**

The purpose of this section is to provide guidelines for the use and placement of sewer laterals in gravity sewer collection pipelines.

### **6.3.2 STANDARD TERMS AND DEFINITIONS**

Wherever technical terms occur in these guidelines or in related documents, the intent and meaning shall be interpreted as described in Standard Terms and Definitions.

### **6.3.3 GENERAL**

It is the responsibility of the user of these documents to make reference to and/or utilize industry standards not otherwise directly referenced within this document. The Engineer of Work may not deviate from the criteria presented in this section without prior written approval of the District Engineer.

- A. Design for gravity sewer mains shall be in accordance with Section 6.1.
- B. Use and placement of manholes and cleanouts shall be in accordance with Section 6.2.

### **6.3.4 GUIDELINE**

- A. Requirements: Sewer laterals shall be used primarily for gravity applications of conveying raw sewage collected from properties to the district's sewage collection system.
  1. Each parcel or lot shall have a separate connection to the public sewer main. Laterals may not cross more than one (1) property line.
  2. Sewer laterals shall be a minimum four inch (4") and a maximum of six inch (6"). Eight inch (8") laterals may be used only with prior approval of the District Engineer. Laterals shall be sized in accordance with the County or City of Jurisdiction building codes/requirements and these guidelines.
  3. Typically sewer laterals intercepting the main do not require a manhole. Laterals shall be connected to the sewer main at a manhole when the lateral serving a property has two (2) or more branches installed to serve more than one facility on the property. Residential lots with a second dwelling may be excluded from this requirement at the direction of the District Engineer.
  4. Laterals shall have a constant slope of 2% (1/4" per foot) from the property line to the main, the drop to main shall be adjusted as necessary, 1.2ft minimum.
  5. Deep-cut laterals may be allowed when the vertical difference between the lateral and the sewer main is four feet (12') or more. Prior approval of the District Engineer is required. Deep-cut laterals shall be called out as such on the approved plans.

6. Parallel and perpendicular separations between water and sewer laterals shall be 10ft and 1ft respectively.
7. Lateral connections to interceptor mains eighteen inches (18") and larger shall be made at a manhole. The lateral and interceptor main top of pipe elevations shall be matched such that the lateral will have free outflow into the interceptor main. If the top of the lateral cannot be matched to the top of the interceptor pipe because of elevation constraints with the lateral, then the minimum allowable conditions shall be as follows:
  - A. Match the invert elevation of the lateral to maximum D/d ratio of the interceptor pipe. If this cannot be achieved, then calculations shall be provided for a special manhole base design.
  - B. Special notes and details and approval of the District Engineer are required.
8. Certain areas of the District may require connection to the Low Pressure system, refer to that Design Guideline in the Appendix.
9. Sewer laterals are considered private starting at the connection to the main. District will inspect the installation up to the cleanout at the property line per Standard Drawings including connection to the house plumbing. Work beyond the cleanout is governed by the Uniform Building Code and enforced by the local building authority.
10. Laterals shall be installed with a cleanout placed at the property line in accordance with Uniform Building Code and the local building authority.

B. Locations: Laterals shall be located as described below:

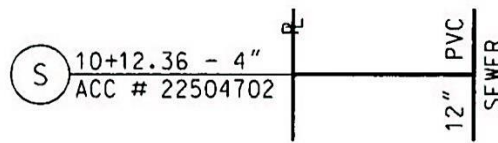
1. Laterals shall run perpendicular from the sewer main to the property line, except in a cul-de-sac.
2. Laterals can connect directly into a manhole at the end of a main or in a cul-de-sac as described in Section 6.2.
3. Laterals shall be a minimum of 5 feet (5') deep at the property line, unless otherwise approved by the District Engineer. Laterals with less than four feet (4') cover will require concrete encasement.
4. Laterals shall have a five foot (5') minimum separation between successive laterals. Refer to Standard Drawing S-11.
5. Laterals shall not be located in the following locations:
  - i. In driveways
  - ii. Parking areas (if possible)
  - iii. Within five feet (5') of the property line between lots.
  - iv. Within heavy landscape areas that receives more than just ground cover. Bushes, trees or brush should not be planted around the area of the lateral.

C. Installation: Sewer Laterals shall be installed at locations shown on the approved plans in accordance with Standard Specification 15065 and Standard Drawings S-11 through S-12.

### 6.3.5 NOTATIONS ON PLANS

Laterals shall be shown in the plan view portion of the sheet(s) only and include, but not be limited to, the following information:

- A. Standard symbols, stationing and plan callout notes in accordance with Section 1.1.
- B. Stationing of the lateral at the connection to the sewer main.
- C. Account number (if applicable)
- D. Refer to Figure 6.3.2 below



**Figure 6.3.2**  
**Sewer Lateral Plan Callouts**

### 6.3.6 MATERIAL SELECTION

Sewer laterals and appurtenant components to be used with the installation of gravity sewers shall be in accordance with Standard Specification 15065 and the Approved Materials List.

### 6.3.7 REFERENCE

Should the reader have any suggestions or questions concerning the material in this section, please contact the District Engineer.

The publications listed below form a part of this section to the extent referenced and are referred to in the text by the basic designation only. Reference shall be made to the latest edition of said publications unless otherwise called for. The following list of publications, as directly referenced within the body of this document, has been provided for the user's convenience. It is the responsibility of the user of these documents to make reference to and/or utilize industry standards not otherwise directly referenced within this document.

1. Valley Center Municipal Water District Standards:

A. Design Guidelines

- i. Section 1.1, Drafting Guidelines
- ii. Section 4.2, Sewer Planning
- iii. Section 6.1, Sewer Pipeline Design
- iv. Section 6.2, Sewer Manholes and Cleanouts

B. Standard Specifications

- i. Section 15065, Polyvinyl Chloride (PVC) Gravity Sewer Pipe

C. Standard Drawings

i. S-11 through S-13

D. Approved Materials List for Sewer Facilities

END OF SECTION