

**OLIVENHAIN MUNICIPAL WATER DISTRICT**  
**STANDARD SEWER NOTES**

- 1) Unless otherwise indicated pursuant to District Standards, all work shall be done in accordance with the:
  - a) Standard Specifications for Public Works Construction (SSPWC), latest approved edition.
  - b) The Regional Supplemental Amendments to the Standard Specifications for Public Works Construction, latest edition.
  - c) San Diego Regional Standard Drawings (SDRSD), latest edition.
  - d) Olivenhain Municipal Water District Standards for the Construction of Water, Recycled Water, and Sewer Facilities, June 2008, or latest edition.
- 2) Pipe bedding, trench backfill, and trench width shall be per SDRSD S-4, for pipe up to and including 15-inch nominal pipe diameter, unless otherwise noted. For pipe greater than 15 inches in nominal pipe diameter, trench width shall be per specifications in the SSPWC, section 306-1.
- 3) Pipe bedding and trench backfill shall conform with SSPWC, section 306-1.2.
- 4) After completion of pipe laying and before final paving, all mainline sewers, sewer laterals and structures shall be tested in the presence of the District inspector. Air pressure test, per SSPWC section 306-1.4.4 and mandrel test per section 306-1.2.12 shall be used unless otherwise directed by the District Inspector. Final acceptance of sewer lines will be subject to internal television inspection. It will be the permittee's responsibility to pay for the cost of this work.
- 5) The construction of PCC sewer manholes for pipelines up to and including 15-inch nominal diameter shall conform to SDRSD S-17. For sewers greater than 15 inches in nominal diameter or depths exceeding 12 feet, manholes shall conform to SDRSD S-2. Poured in place manhole bases shall be a monolithic pour finished complete at the time of pour.
- 6) The construction of 4-inch sewer laterals shall conform to SDRSD S-13 for standard sewer laterals and S-14 for deep-cut sewer laterals. Sewer laterals shall not discharge directly into a sewer manhole. A sewer cleanout, per SDRSD S-3 Type B, shall be installed at the edge of an easement, however in no case shall the cleanout be more than 15 feet from the sewer main. If the sewer is located within a public or private street, the cleanout shall be installed two (2) feet inside the property line.

- 7) The construction of cut-off walls shall be in accordance with OMWD STD. E-3.2 on all segments having a slope of 25% or greater. Construction of concrete anchor walls shall be per SDRSD S-9.
- 8) All sewer mains and sewer laterals shall be constructed with a minimum of 48 inches of cover, provided that the invert of the sewer lateral at the property line is above the soffit line of the sewer main.
- 9) The final location and elevation of sewer laterals shall be shown on the original plans prior to acceptance of work.
- 10) All design changes of the sewer system shall be approved by the District Engineer in writing, prior to acceptance of work.
- 11) Fill areas must be compacted to 90% relative compaction prior to acceptance of work.
- 12) The Contractor shall notify the District's Inspection Department 48 hours prior to the beginning of work by calling 760-753-6466, extension 195, to arrange for inspection of the project.
- 13) The Contractor shall purchase a permit from the County Department of Public Works for any excavation within County right-of-way. Contract Record Drawings must be submitted prior to final acceptance of work. The plans must reflect post construction verification of the pipe lengths and invert elevations.
- 14) The contractor shall guarantee all work for a period of 1 year after the date of acceptance for the project. The contractor shall repair or replace any or all such work, together with any other work which may be displaced in so doing, that may prove defective in workmanship and/or materials within the 1 year period from the date of acceptance without expense whatsoever to the District, ordinary wear and tear, unusual abuse or neglect excepted.
- 15) The Contractor must call "Dig Alert of Southern California" to have underground-service utilities located prior to construction. This call will be made at least 48 hours prior to any work being performed in the public right-of-way.
- 16) The contractor shall furnish and install, per specifications, the appropriate buried utility warning and identification tape above all public sewer lines and sewer laterals located in the public right-of-way.
- 17) Gravity sewer pipe deeper than 15 feet shall consist of C-900 Class 150 pipe.
- 18) All sewer manholes not located within street paving shall be raised twelve (12) inches above finished grade, and locking manholes covers shall be installed. If

manholes are located within a graded lot, raise manhole 6-inches above finished grade.

- 19) The separation of sewer, water, and reclaimed water shall conform to the *State of California Department of Health Services Criteria for Separation of Water Mains and Sanitary Sewers* for both vertical and horizontal clearances.
- 20) The Contractor shall maintain a minimum 12 inches vertical separation between the top and bottom surfaces of crossing utilities
- 21) Where indicated, manholes shall be coated and lined. Manhole shaft and cone sections, and grade rings shall have an Ameron T-Lock liner, or an approved equivalent product. For the interior of manhole bases, provide an approved epoxy/urethane coating system on all interior surfaces. This system shall be a two-coat system utilizing a moisture tolerant epoxy base coat and a high build polyurethane elastomer topcoat. The epoxy base shall be applied in two coats of 5 mils DFT each. The polyurethane shall be applied in one coat of 125 mils DFT. All application shall be in accordance with the epoxy/urethane coating system shall be Sancon 100 as manufactured by Sancon Engineering Inc.; Zebron 386; or an approved equivalent product.