

City of La Quinta Public Works Department – Private Sewer Review Checklist
(PW reviews Private Sewer Plans for Private Commercial Projects based on the California Plumbing Code)

SUBMITTAL REQUIREMENTS

- Precise Grading Plan
- Calculation Summary (including Fixture Equivalent Unit assumptions)
- Reference Architect Building Plan – Isometric or Equal

SEWER LINE PIPE DESIGN STANDARD

- 2% minimum slope - where it is impractical to design a slope of 2% for pipe sizes 4 inches or greater, the City Engineer may approve a slope as low as 1%.
- Minimum 4 inch diameter lateral shall be required for single family home and other related projects.
- Sewer line pipe diameter based on fixture units in accordance with CPC Table 7-3 to Table 7-5 or Appendix L of the CPC. Maximum of 216 fixture units for 4 inch diameter pipe with 2% minimum slope, maximum of 173 fixture units for 1% slope. Sewer shall be equal or greater than the building drain.
- Minimum 6 inch diameter lateral shall be required for multi-family dwellings, commercial, and industrial uses, unless otherwise approved by the City Engineer with backup calculations and no possible expansion. Connection laterals utilize 45 degree connection at the main.

SEWER PIPE MATERIAL

- Schedule 40 PVC DWV (unless otherwise approved alternate, extra strength vitrified clay pipe, etc.)

SEWER PIPE LOCATION

- Minimum Horizontal and Vertical Distances
 - a. Building Structures 2 ft
 - b. Property Line Adjoining Private Property Clear (see also section 315 of the CPC)
 - c. Water Supply Wells 50 ft (may be reduced to 25 ft depending on pipe material)
 - d. On-site Domestic Water Service Line 1 ft (bottom clearance of water pipe shall be at least 1 ft above the top of the sewer or drain line. Water pipes shall be placed on solid shelf excavated on 1 side of common trench w/ minimum clear horizontal distance of at least 1 ft from the sewer or drain line.)
 - e. Public Water Main 10 feet (parallel construction and crossings approved by the Health Department or other responsible County Agency as applicable.
- Minimum sewer line cover
 - Shall be located a minimum of 1ft below the bottom of any nearby waterline.
 - Shall be sufficient to service adjacent property by gravity
 - Shall have sufficient depth in subdivisions to allow water lines to be set with 4 ft min cover without interference from the sewer laterals
- Minimum 50 ft sewer clearance from Public Potable, Non-Potable, and Water Quality Monitoring Wells
- Call out elevations & clearances at all crossings; sewer, water and storm drains.

SEWER CLEANOUTS and MANHOLES

- Shall be installed at the lower end of the building drain and extended to grade. Cleanout minimum spacing = 100 ft, manholes may be installed in lieu of cleanouts with manhole minimum spacing = 300 ft
- Cleanouts shall be gas and water tight.
- Size shall be that shown in Table 7-6 of the CPC.
- Shall be installed at intervals not to exceed 100 ft.
- Shall be installed at all aggregate changes in direction of 135 degrees or more.
- All cleanouts shall be extended to grade.
- Shall be installed to allow cleaning in the direction of flow.
- Shall be adequately protected and extend to be flush with paving.

GENERAL REQUIREMENTS

- Minimum Velocity = 2 fps at full depths defined below
- Pipe Size 8-inch to 24-inch, Full pipe assumed at depth of flow of ½ diameter of pipe
- Pipe Size > 24-inch, Full pipe assumed at depth of flow of 2/3 diameter of pipe
- Inflow & Infiltration I&I = 200 gal/day/acre (Inflow = cracks in pipes & Infiltration = manholes, inlets, etc.)
- Minimum Depth = 7 ft, Depth in excess of 15 ft requires Class B Bedding (See SSPWC 200-1.2 Table A ¾ inches, pp 39).
- Minimum bedding requirements are per Green Book specifications.

SEWER BACKFLOW VALVES

- Provided per the California Plumbing Code, Latest Edition
- Located at shallowest location allowing access for inspection and maintenance.
- Installed by property owner or tract developer and maintained by property owner.

SEWER INDUSTRIAL WASTE PROVISIONS

- Developer shall provide the City with detailed information regarding project expected wastewater quality and quantity.
- Developer shall review which of the following facilities are required:
 - Building Sewer Sampler
 - Wastewater flow monitoring station
 - Gravity separator
 - Industrial waste clarifier
 - Pretreatment facilities.

SEWER GREASE TRAP

- Grease trap location and size specified on sewer plan. Cleanout hatches suitable for service without blocking traffic flow or creating ADA conflicts. Grease trap sizing calculations provided.