



## SEWER LATERAL POLICY

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION  
8130 Allison Avenue, La Mesa, CA 91942

REVISION DATE: June 21, 2016

SUBJECT: Policy for the Design, Construction, Permitting and Maintenance of Sewer Laterals

PURPOSE:

The purpose of the sewer lateral policy is to:

- Provide guidelines for the design, construction, permit requirements, and maintenance of sanitary sewer laterals.
- Protect public health, safety, and the environment by reducing number and severity of sewer backups and overflows.
- Minimize inconveniences to residents and businesses.
- Reduce cost of services to customers.
- Improve sewer system performance.
- Reduce inflow and infiltration of storm water into the wastewater collection system.
- Comply with the Federal Clean Water Act.
- Comply with Requirements of Region 9 Water Quality Control Board .

SCOPE:

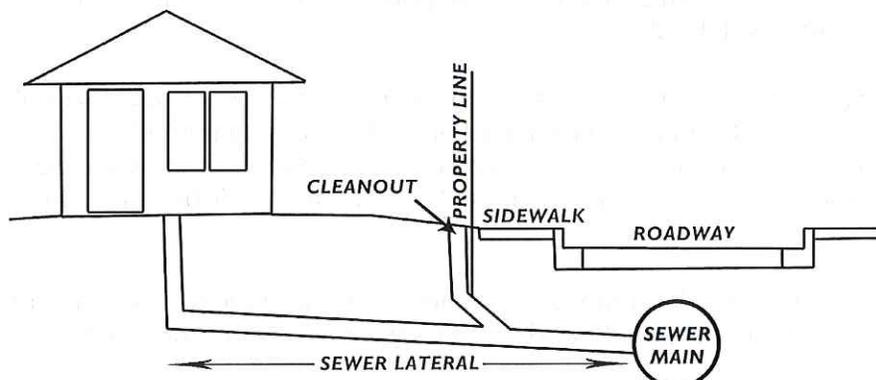
This policy shall apply to all sewer laterals to the maximum extent practicable.

DEFINITIONS:

- **Building Sewer:** All plumbing and fixtures located within private property. Building sewers and portions of sewer laterals within private property are under the City's building division purview and shall comply with the building division's requirement including but not limited to the building and plumbing codes. Contact the building division for permitting and inspection requirements.
- **Sewer Lateral:** The segment of pipe, appurtenances and fixtures that connect the building sewer to the City sewer main. The portion of the pipe within the public right-of-way or an easement shall be subject to the engineering division's review, permitting and inspection and shall comply with the policies and requirements set forth herein.

Chronic Sewer Lateral Problem: Sewer laterals with chronic problem are those that have:

- a) at least three blockages on record over two year period
- b) major structural issues (pipe defects, collapse or break)
- c) major root intrusion



## A. Design and Construction Criteria

1. *Size and Number of Sewer Laterals:* Minimum size of a sewer lateral shall be 4 inches for single family and duplexes and 6 inches for multi-family, commercial, and industrial properties. Every building with plumbing fixtures shall be separately and independently connected to the public sewer, except where one building stands in the rear of another; and when two or more buildings on the same property are under one ownership and the property is not subdividable. The property may then be served by a single adequately sized connection to the public sewer. The address of each property must be indicated on the plans.

Developers of subdivisions, multi-family dwellings, commercial and industrial properties shall submit a sewer impact report for the City's approval. The sewer impact report shall include the following:

- Estimate of sewer generation from the new development
- Sewer capacity analysis of the existing pipe within the study area
- Sewer capacity impact of the additional flow from the new development on the pipe within the study area
- Sizing of new pipe for the required new capacity within the study area

The limits of the study area shall be determined by the City Engineer.

2. *Sewer Lateral Pipe Type:* The pipe shall be PVC, SDR 35 (Green).
3. *Sewer Service Availability:* If a property does not have an existing sewer service and there is no sewer main within the immediate vicinity of the property to serve the property, the sewer main must be extended past the prolongation of the property sideline by at least 10 feet. The sewer main must end with a clean out or a manhole at the direction of the City Engineer. Sewer laterals must run perpendicular to the proposed main. Four-inch laterals should not be connected to a clean out or manhole at the main line.
4. *Wet Tap Connection:* Connection to the main shall be with rigid PVC saddle, stainless steel clamps, and concrete cradle up to spring line. The vertical angle from the horizontal centerline of the pipe cross section to the center line axis of the saddle/lateral pipe shall not exceed 45 degrees. The main line must be inspected before and after coring. After coring the main and locking installation of the saddle, the connection point must be inspected by the City prior to connecting the lateral and backfilling the trench.
5. *Sewer Lateral Cleanout:* A PVC or ABS "Wye" type sewer cleanout (toward the sewer main) shall be installed at the final vertical bend, preferably 2 feet offset into the property line. The cleanout shall be installed per Regional Standard Drawings (RSD). It is recommended that double "Wye" (two "Wye") type cleanouts be installed in order to facilitate cleaning the building and sewer main sides of the lateral.
6. *Minimum Depth:* A sewer lateral in the street that is less than 3 feet deep (from flow line) must be capped with concrete per RSD SP-03.
7. *Marking the Curb:* where the sewer lateral crosses the curblines, the applicant shall stamp or etch the letter "S" for sewer on the face of the curb.
8. *Root Control (Optional):* Root barrier may be wrapped around pipe joints, and strapped to the pipe to prevent root intrusion into the lateral.
9. *Existing Improvements:* Prior to removal, existing improvements shall be saw cut. Sidewalk shall be replaced from joint to joint. Curb and gutter removal shall be a minimum of seven and one half (7½) feet and joined to existing curb and gutter through dowels; however; the remaining portion of the curb to the nearest joint shall not be less than five (5) feet. Cross-gutter shall be replaced from joint to joint and doweled to existing improvements.
10. *Metallic Identification Tape:* A 6-inch metallic identification tape labeled "Sewer" shall be installed above the sewer lateral between the subgrade and the structural section of the surface improvements from the property line to the main.

11. *Backwater Valve Assembly:* A backwater valve shall be installed when the lowest building plumbing fixture's trap outlet is less than two feet (2 ft) above the rim of the nearest upstream manhole from the point of connection of the sewer lateral to the public sewer. It is highly recommended that the backwater valve should be installed at the point of lowest elevation of the ground surface of the building site outside of the building or such other location as is permitted by the City, providing that at any such location, the elevation of the ground surface is not less than two (2 ft) below the lowest trap outlet served by the building sewer. Renovation projects that do not include re-plumbing work, are required to install backwater valve assembly on their building sewers. Backwater valves shall be installed per City's standard drawings.
12. *Fats, Oils and Grease:* Development or renovation projects containing food establishments shall comply with the City's Fats, Oil and Grease (FOG) Ordinances and program. These establishments shall install grease interceptors as per requirements of the plumbing code and building division.
13. *Interceptors:* Interceptors shall be used to filter out of wastewater non-cooking oils, flammable waste, sand, plaster, lint, hair, and ground glass. Non-cooking oil, flammable waste, sand, plaster, lint, hair, and ground glass interceptors shall be provided when, in the opinion of the City Engineer, they are necessary for proper handling of liquid wastes containing unacceptable solid or liquid waste in excessive amounts. Interceptors are required in commercial buildings, primarily, to accumulate and recover objectionable substances from wastewater.

Each interceptor must be located to provide easy access for maintenance and for removing the accumulated matter. Interceptors must be maintained in efficient operating condition by periodically removing the accumulated waste. Detailed drawings must be submitted to the City for approval. When interceptors are required, waste not requiring separation must not be discharged through an interceptor.

*Gasoline, Oil, and Sand Interceptor:* Interceptors must be provided to prevent the introduction of gasoline, grease, oil or sand into the sewer system as follows:

- Any place where motor vehicles are repaired and floor drainage is provided.
- Any place where motor vehicles are washed.
- Public storage garages where floor drainage is provided.
- Any place where oil, gasoline or other volatile liquids can be discharged into the sewer system.
- Plants where parts are washed to remove oil or greasy substances.

*Meat Processing Interceptors:* Where an establishment slaughters, prepares or processes meat, the waste from the floors must pass through a specially designed floor drain before entering the grease interceptor.

*Laundry Interceptors:* Lint interceptors must be installed on the sewer pipes from commercial laundries or multi-family laundries. The lint interceptor should have a removable ½ inch mesh screen metal basket or a similar device to collect solids such as lint, string, and buttons.

*Other Trap Requirements:* Bottling plants are required to discharge their process wastes through an interceptor that is designed to separate broken glass and other solids from liquid waste. Establishments that generate hair in large quantities are required to use interceptors similar to those used in commercial laundries or swimming pools. Animal hospitals and dog grooming establishments are required to install hair strainers (interceptors) on sewer lines from bathtubs or other receptacles where animals are bathed. Dental and Orthopedic sinks where plaster, wax or other objectionable substances will be discharged into the sewer system, require the installation of an interceptor trap in the sewer line.

*Dilution or Neutralizing Tanks:* Corrosive liquids such as, chemicals, acids, or strong alkalis, must pass through an approved dilution or neutralizing tank before discharging into the regular sanitary system.

*Industrial Waste Permit:* Industrial Waste Permit may be required from the City of La Mesa for certain sewer discharges that are regulated through the EPA. To obtain the permit, the applicant shall place an application with the City of San Diego Industrial Waste Division.

14. *Sump Pump*: For properties lower than the sewer main, sump pumps shall be installed in accordance with the Uniform Plumbing Code. A private manhole within the private property shall be installed at the end of the pressure line in accordance with the Regional Standard Drawing or approved equal. To minimize turbulence, it is necessary to align the crown of the force main outlet with the crown of the sewer lateral at the receiving manhole. The invert of the manhole should be sloped smoothly between force main and sewer lateral inverts.

## **B. Encroachment Permit**

1. *Encroachment Permit Requirements*: An encroachment permit from the City will be required for any work within the public right-of-way or a City easement. The following information shall be provided:
- Plot plan showing existing street/easement improvements and right-of-way, property/easement lines, sewer mains and proposed lateral location with elevation at the main and property line, and a cleanout behind the property or easement line. Plot plans shall include pad elevation and upstream manhole elevation for backwater valve needs. Elevation can be referenced from the top of the manhole.
  - Traffic control plans in accordance with Appendix A of the Regional Standard Drawings.
  - Storm Water Pollution Prevention Plan.
  - Name, address and telephone number of the owner and contractor. The contractor shall also provide a 24-hour contact number.
  - Grease interceptor size, location, and maintenance and cleaning frequency for food service establishment projects in accordance with the Uniform Plumbing Code and the City's FOG ordinance, (If required).
  - Lint interceptor device for certain types of industries in accordance with the Plumbing Code, (If required).
  - Trench shoring and dewatering plans. Trenches deeper than 5 feet require a CALOSHA permit.
  - Underground conflict verification including Underground Alert notification 1-800 Dig Alert.
  - Contractor shall have a class "A" license or class "C-42" license and a City business license.
  - Liability insurance (\$1,000,000 minimum) and endorsement certificate naming the City as additionally insured.
  - Performance bond or deposit in the amount of \$2,500 (minimum) or 100% of construction cost whichever is higher.
  - Payment of fees.
2. *Fees and Licenses*: Work will be subject to the following fees in accordance with the current City of La Mesa's Fee Schedule (where applicable):
- Encroachment Permit Fee
  - Inspection Fee
  - Traffic Control Plan Check Fee
  - New Sewer Connection Fees (includes properties with previously abandoned laterals as per Section D.1)
  - Field investigation costs (includes CCTV of sewer and/or storm drain, dye testing smoke testing etc.
  - Sewer Service Agreement without Annexation
  - FOG Permit
3. *Pre-Construction*: Contractor must call the Public Works Inspector at 619-667-1166 to set up a pre-construction meeting 48-hours prior to the start of the work. the applicant shall note that any item of work that has not been inspected and approved by the City inspector is subject to removal at applicant's expense.
4. *Permit Release and Deposit Refund*: Deposit will be released after the following items are completed:
- Project is inspected at each stage of construction by the City Public Works Inspector.
  - Final inspection is performed by the City Public Works Inspector.
  - Permit is "Signed Off" by the City Public Works Inspector.

- d. A verified record plot plan showing location of the sewer lateral in relation to the centerline of downstream manhole is submitted.

### **C. Sewer Lateral Maintenance**

1. *Maintenance Responsibility:* The property owner is responsible for maintaining, cleaning and servicing the sewer lateral from the house or building to the connection at the public sewer in the street or easement. This includes the portion of the lateral on private property and the portion in the right-of-way or easement.
2. *Sewer Lateral Failure or Stoppage:* Whenever failure or blockage of a sewer lateral occurs, City crews will respond only to check the City's sewer main to verify that it is open and flowing. If the sewer main is found to be clear, it is the responsibility of the property owner to call a licensed plumbing contractor to correct the problem.

If the following has been performed:

- a. Property owner obtained the services of a licensed plumber and the licensed plumber certifies in writing that they cannot clear the stoppage using proper tools, and;
- b. The stoppage has occurred between a property line cleanout and the public sewer main, and;
- c. The property has a "Wye" type property line cleanout and the property owner has located and uncovered the property line cleanout, or a qualified plumber has installed a new "Wye" type property line cleanout.

And the blockage has still not been cleared,

Then, the City may provide additional assistance to investigate if resources are available to clear blockage in the lateral. If it is found that the obstruction is in the private lateral, then the City may seek reimbursement of incurred costs.

The City may issue a notice of correction to the property owners with chronic sewer lateral problems. In such cases the property owners are required to submit an action plan to the City Engineer. Failure to comply to the notice may result in further action against the property owner including but not limited to administrative citation by the City.

3. *Root Intrusion:* Root intrusion into a private sewer lateral is typically a symptom of a defect in the sewer lateral. If the roots entered at a joint or connection of a sewer lateral, the property owner is responsible to repair or correct the situation.

If it is determined that a root from a City tree has broken or crushed the sewer lateral, the City will repair the broken/crushed section of the pipe.

Root intrusion into sewer laterals shall not be grounds for removal of a tree in the public right-of-way. The property owner is responsible for regular cleaning or root treating or replacing the lateral.

4. *Root Intrusion from Lateral into Main Line:* Public Works crews are responsible to notify property owners in writing when they find roots from a sewer lateral protruding into the sewer main line. The property owner is then responsible to remedy the situation.
5. *Sewer Lateral Overflow:* Where sewage from a private sewer lateral overflows into the street, the property owner is responsible for immediate cleaning of the spill within the street. In instances where the sewage could reach or enter a storm drain structure or when the property owner has not mobilized to clean the street, the City's Public Works maintenance crew will attempt to prevent storm water pollution and protect public health. If required, the maintenance crew will call on private contractors to secure, mitigate, clear the blockage, and clean and sanitize the area. The cost of abatement and administration may be billed to the property owner.

A sewer overflow is a violation of Sections 5411 and 5412 of the State Health and Safety Code and Section 405 of the Clean Water Act if the overflow reaches surface or state waters. The responsible party

may be required to reimburse the City, its contractors, and the County Department of Environmental Health all costs incurred to mitigate the threat of contamination and to protect the health and safety of the public. Furthermore, any violation of Section 405 of the Clean Water Act may be subject to a civil penalty, not to exceed, \$25,000 per day for each violation and is subject to criminal penalties of \$2,500 to \$25,000 per day of the violation.

**D. Miscellaneous**

1. *Abandonment of Sewer Lateral*

When demolishing a structure or when a sewer lateral is realigned to a new connection point to the public sewer main, the existing sewer lateral shall be abandoned by cutting, plugging, sealing at the sewer main and repair the public sewer pipe. A permit shall be obtained to abandon the lateral.

If a demolished property remains vacant for more than two years from the date of completion of demolition or redevelopment plan approval whichever is longer, the property is subject to connection fees and no credit to the connection fees shall be allowed for the abandoned connection.

2. *Sewer Services to Unincorporated Areas*

Sewer services to unincorporated areas must be in accordance with the Department of Public Works' "Policy and Procedure for La Mesa City Sanitary Sewer Service to Properties in the Unincorporated Areas."

APPROVAL:

  
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Gregory Humora  
Director of Public Works/City Engineer

REFERENCES:

1. City Council Minutes April 11, 1978 and March 9, 1982
2. City Engineer's Memo August 25, 1977
3. San Diego Regional Standard Drawings – latest adopted edition
4. Public Works Standard Specifications and San Diego Supplement – latest adopted edition
5. City of La Mesa Standard Drawings - latest edition
6. Uniform Plumbing Code, Section 710.1 Sump, Interceptors
7. Chapters 7.08 and 17.18 of the City of the La Mesa Municipal Code
8. Sections 17.20.434 and 17.20.435 of the City of La Mesa Municipal Code
9. The City of La Mesa Tree Policy Manual