Lateral Creativity



Patrick McNelly, Principal Staff Analyst
Orange County Sanitation District (OCSD)
Fountain Valley, CA
SCAP "Collection Systems in Motion" Workshop

What are Private Sewer Laterals?



Different Definitions?

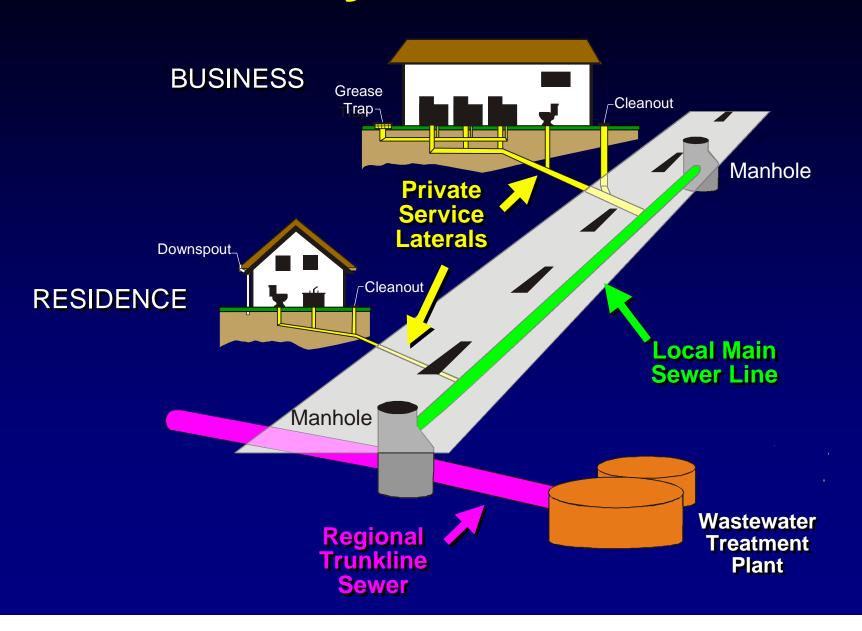
- **u** Main Sewer
- u Side Sewer
- u Building Sewer
- **u** Lateral Sewer
- **u** House Sewer

What Do You Call it?

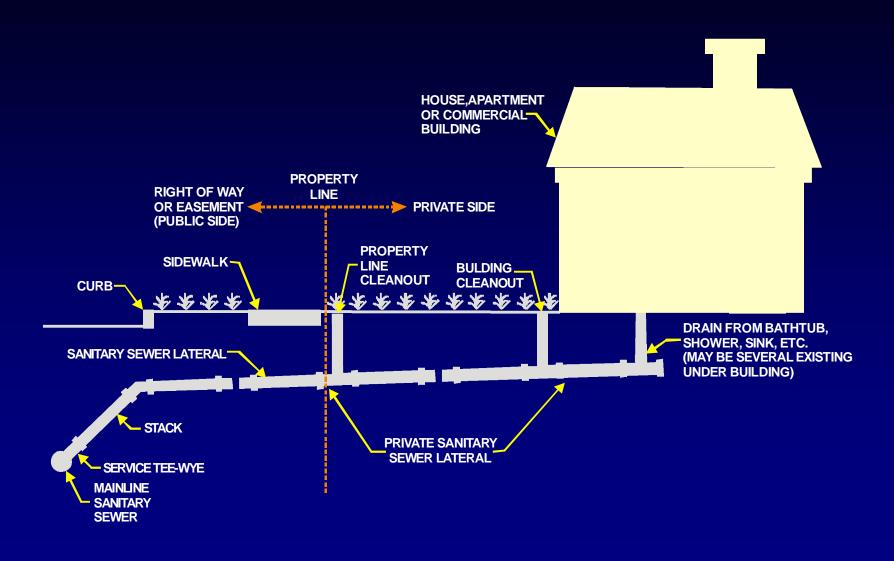
- u Upper Lateral
- **Lower Lateral**
- u Right-of-way
 Lateral
- u Encroachment Lateral

- u Easement Lateral
- Shared Lateral
- u Side Sewer
- u Building Sewer

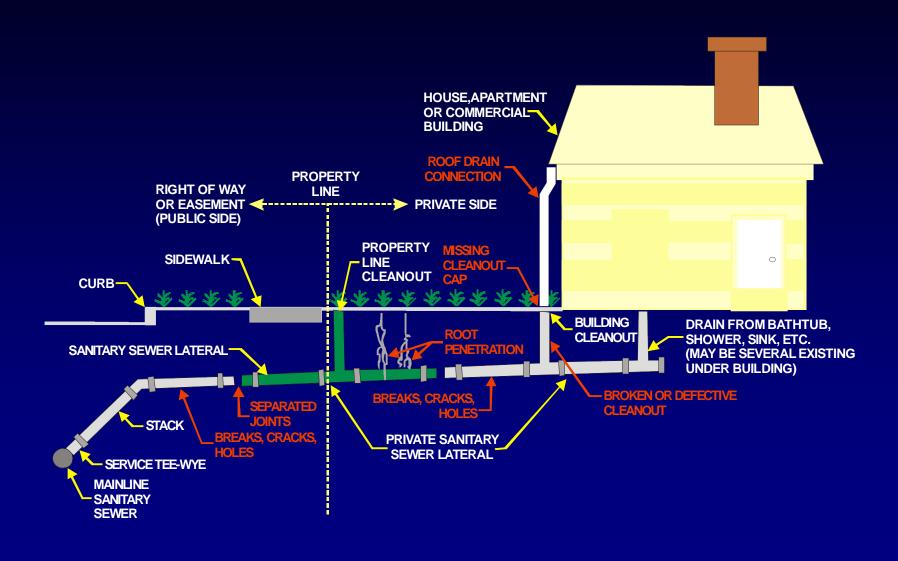
Sewer System Overview



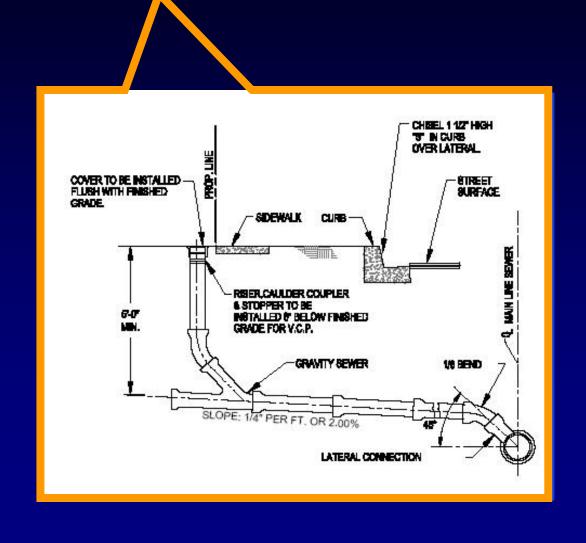
Typical Private Lateral



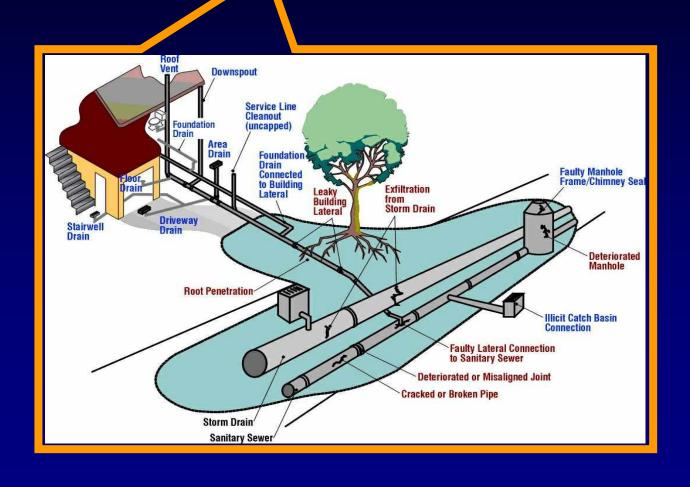
Sewer Lateral Problems



Typical Lateral Connection



Typical Causes of I/I Problems



I/I Issues

- u How do I inspect?
- u Quantifying problems?
- u How to communicate?
- u Capacity issues?

- Effect on peak flows
- U Dirt pipes
- u Fix the problem, not the blame
- No programs
- No record keeping

Maintenance Issues

- No plumbing access Where's my cleanout?
- Reactive maintenance only
- u Roots, Roots, Roots
- Broken joints

- The drain is not a dump
- Orangeburg pipe
- Broken connections
- No accountability
- No record keeping

Construction Standards

- Bedding Failure at installation?
- u Cleanouts?
- Acceptable pipe materials?
- Acceptable rehab methods?
- Sliplining not approved?
- u Testing and inspection?
- u New/Repairs/Rehabs/Replacement?

Ownership - Collection System?

- Upper/lower and connection to main
- Lower and connection to main
- u Connection to main only
- We don't own any part of the lateral

Ownership - Property Owner?

- Upper lateral only
- Upper and lower lateral, and connection to main

Ownership – Undetermined?

- Laterals in right-of-way, easement, or encroachment (It's not my lateral!)
- u Privately owned satellite systems
- Mobile home parks
- u Senior citizen communities
- u Other

Discussion Topics

- Private ownership of laterals from the building to the sewer main
- Residents unaware of policies or problems
- u City record keeping is incomplete, unavailable (where's my lateral)?
- Many laterals reaching end of design life
- Most sewer fees only cover local sewer system O&M, not private lateral repairs

What's Being Done?

- Lateral insurance programs
- Sewer fees fund repairs
- City lateral maintenance programs to remove roots from city trees
- Mandatory replacement/rehab during major remodeling
- Rethinking the issue of private vs. public ownership

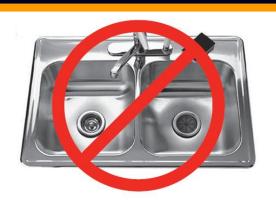
The "Rest of the Story"

- Some Orangeburg pipe still in the ground
- Mortar joints failing in old VCP
- Lateral inspection not required at time of sale
- Status of I/I problem undocumented
- Incentives lacking for cities to assist residents in lateral repair
- u "Orphan child" of collection systems

Some Final Comments

- Should regional agencies assist in private lateral repair programs?
- u It's not just an engineering problem
- Will fixing the "lower lateral" fix the I/I problem?
- Residents ask, "Why should I have to pay for a problem under the city street?"
- Where's my property line?

A Sign of Our Times



The drain is not a dump.



Put fats, oils and grease where they belong.

The Final Solution?



Questions?

Patrick McNelly

Principal Staff Analyst
Collections Facilities O&M and Services
(714) 593-7163
pmcnelly@ocsd.com



Orange County Sanitation District www.ocsd.com