

# SOUTH ENGLEWOOD

## SANITATION DISTRICT

TO: Customers  
South Englewood Sanitation District

FROM: Jamie Overgaard, P.E., District Engineer  
Kennedy Jenks Consultants

SUBJECT: Sewer Service Rehabilitation and Maintenance

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As the consulting engineer for South Englewood Sanitation District (SESD), Kennedy Jenks Consultants is familiar with the various problems related to sanitary sewer service lines. These problems can include root intrusion, grease, holes and cracks in the pipe, separated or offset joints, and sags due to ground settlement.

Although the maintenance and repair of sewer services in SESD are the sole responsibility of the property owner, the District has put together this informative memo so that you may be more familiar with the types of problems that can occur in your service, and what you can do to fix them or try to prevent them.

The most common problem that is reported to the District from its customers is tree **roots** growing into the service line. Of the 24 miles of pipe in SESD, about two-thirds are made up of clay or concrete, which is highly susceptible to root intrusion (newer areas have plastic pipe for sewer services). If a customer is having problems with their sewer service, i.e. sewer backups, this could be due to root intrusion. If you feel that you have root intrusion, you may want to take the following steps:

### **Line Maintenance and Inspection**

Root Sawing and Treatment - The first step would be to have your line root sawed and, if you wish, chemically treated. Sawing is a mechanical process that involves a spiral shaped saw blade that conforms to the inside diameter of the pipe to cut the tree roots. Since these roots are similar to other deciduous plants or tree forms, the roots typically multiply, or grow back in a larger volume. Another option, therefore, is to treat the roots with an herbicide. Generally, these chemicals do not damage the tree, but rather retard root growth. These products, which are sold at hardware stores, are generally effective for a one-year period and must be reapplied on an annual basis.

TV/Video – If problems still exist after root sawing your service line, then the second step would be to have your service line visually inspected. Visual inspection of service lines is available through current technology to locate problems within the lines. This process involves the insertion of a mini camera through a floor drain or cleanout to visually inspect service lines between the residence and the main line. Visual inspection of your service line may identify **broken pipe, sags due to settlement, separated joints, or deterioration.**

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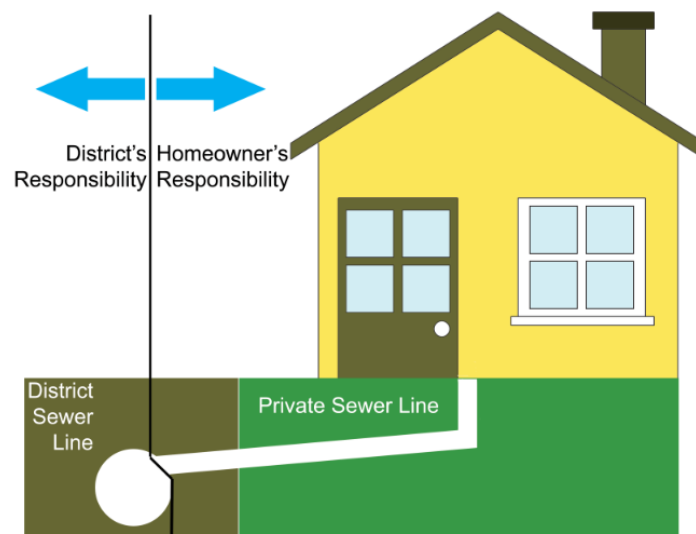
## Line Rehabilitation

Line Replacement – Upon investigation of your service by visual inspection, you may find that your problem is from sags due to settlement, broken pipe, separated joints, or deterioration. In this case, you may need to replace portions or all of your service line. Plastic pipe is now generally used in all new construction of sewer services. This pipe is manufactured in longer lengths than the older clay or concrete pipe. Fewer joints mean fewer potential points of root entry.

Pipe Bursting – This minimal excavation method may be an option for line replacement if the problem is roots, cracked pipe, broken pipe, or a minimal sag. This method involves digging an access pit at each end of the damaged pipe and running a pipe-bursting tool through the existing pipe which then pulls the new pipe into place.

Pipe Lining – This lining technique may be an option if there are no sags in the damaged pipe and if any breaks or separated joints are not too severe. This rehabilitation method usually requires minimal digging. A resin-saturated felt tube is inverted or pulled into the damaged pipe. Then hot water or steam is used to cure the resin and form a tight-fitting jointless replacement pipe. This technique does slightly reduce the diameter of the pipe. However, it can be less expensive than traditional line replacement due to minimal or no excavation.

Tap Connection – Some private sanitary sewer line issues are specifically located at the connection point to SESD's main sanitary sewer line. These issues may include an offset connection, broken pipe, holes, and/or root intrusion. These issues may result in the exfiltration of your sanitary sewer flows into the surrounding soils and not into SESD's main line. Exfiltrating sewer flows can undermine the pipes and potentially cause the pipes to collapse. Another issue is when a private sanitary sewer line intrudes into SESD's main line. Intruding pipes can prevent the District from televising or cleaning the main sanitary sewer line or possibly causing a main line backup. Also, roots that extend from the service tap into the main line can potentially cause a mainline backup. If any of these issues are identified with your sanitary sewer line you will be required to get the issue repaired (reference Rules and Regulations, Articles 3-5, Cure of Violation, and Article 9A-1-2, Maintenance of Sewer Service). Repair methods may require excavation, but often a trenchless repair can be done at a much lower cost.



**Contractors**

The following contractors have performed some, or all, of the services described above in SESD. This list of contractors is not intended to be an endorsement or recommendation on the part of Kennedy/Jenks or the District, but only suggestions for consideration. Contractors must notify Kennedy/Jenks at 303-985-3636 at least **48 hours prior to line rehabilitation** and request a sanitary sewer service observation. This observation is performed at no cost to the homeowner or the contractor, this observation is performed to verify that the District's main sanitary sewer line is not damaged.

Contractor	Phone Number	Root Sawing and Treatment	TV / Video	Line Replacement	Pipe Bursting	Pipe Lining	Tap Connection Rehab
Anthony's Plumbing	303-973-7893	X	X	X	X	X	
Apex Plumbing	303-215-1348		X	X	X	X	
ARS Rescue Rooter	720-278-2141	X	X	X	X	X	
C&L Water Solutions	303-791-2521						X
Elite Pipe MD	720-351-8883	X	X	X	X	X	
Levi Contractors	303-919-3126			X			X
Plumblines Services	303-436-2525	X	X	X	X	X	
Premier Excavating	303-210-9745	X	X	X	X	X	
Pro Pipe	800-574-4445						X
Stone and Concrete	303-287-0889	X	X	X	X	X	

Please note that most homeowners' insurance policies do not cover damage related to service line or main line sewage backups. It is recommended that you check with your insurance carrier to find out the details of any coverage included with your policy.

If you have any questions regarding your sanitary sewer service, or South Englewood Sanitation District, please feel free to call Kennedy Jenks at 303-985-3636.