

# SEWER EASEMENT REHABILITATION

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SCAN ME

## WHAT?

Easements provide the Town access, on private property, to inspect, maintain, & repair public utilities.

Easements must be maintained to be free from obstructions that would limit access & complicate repairs. The standard easement is 20' wide, but may vary.

## When?

The Town has an annual program to rehabilitate the easements and the sewers.

Conditions that tend to trigger the need for rehabilitation includes clogs, overgrowth, limited access, or an older pipe. Serious failures may accelerate this schedule.

## WHERE?

This project can take place anywhere there is a sewer easement. Priority is given to overgrown areas with clay piping and/or groundwater infiltration, which is typically the older areas of Town.

## WHY?

It is essential that we maintain & rehabilitate sewer mains & manholes in order to remove blockages and prevent overflows.

Overflows disrupt service, pose health & environmental risks, and can result in punitive financial penalties for the Town and our operators.

## Who?

Easement clearing is performed by staff or contractor. A contractor then lines the sewer main. A separate contractor will rehabilitate the manholes. Staff will then return periodically to clean the mains with a jet truck and ensure the easement is mowed.

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Annual costs vary depending on the needed work. It is funded by the Town's operational and capital funds. We take advantage of grants and low interest loans as we are approved and it makes sense.



# MORE DETAILS ABOUT OUR PROCESS...

We'd like to further explain the crucial maintenance and rehabilitation work we do to prevent sanitary sewer overflows (SSO) and maintain a reliable and efficient sewer system that will last for generations to come.

One of the leading causes of SSO is tree roots that have infiltrated and damaged sewer mains and manholes. When these vital components of our sewer system are compromised, it can lead to obstructions and groundwater infiltration, posing environmental and health risks and potentially impacting water and sewer service.

The first step is to assess the current condition of the pipes, considering factors such as repeated or emergency obstructions, overgrowth, age, and material of piping, among others. We use technology such as robotic cameras to explore areas we can't physically see or access.

Once we understand the current conditions, we prioritize the projects based on urgency and the type of work needed, typically beginning with the oldest sections of town as there are some pipes there installed more than a century ago! Once we have confirmed the areas we will be working in, we notify residents before any work begins to provide an estimated timeline and explain the work that will take place.

The first step of the physical work is to remove trees within the easements. We will either perform this work ourselves or enlist the help of trusted contractors.

For the areas that show signs of damage, we begin the essential repairs, including main point repairs, manhole rehabilitation, and service renewals. We use innovative techniques, such as slip-lining the old mains with a durable resin-impregnated fiber material, which greatly extends their service life and is far more cost-effective than installing new mains.

The manhole rehabilitation process is equally important, as we rebuild any defects with mortar and apply a specialized cured-in-place liner, reinforced with a polyurea material that resists corrosion and degradation from sewer gases. This work typically extends the life of the manholes another 50-75 years, making it a cost-effective and less intrusive solution compared to full replacements.

Please know, these stages may not occur all at one time, as we typically have different contractors completing the necessary work. As an example, the tree removal contractor will clear all easements before we proceed with beginning the repair stage.

In easements that do not require full rehabilitation and lining, we have a proactive maintenance schedule that includes regular inspections, mowing or clearing the easements, and then flushing the mains with a jet vac truck. With our current schedule, we jet each main in Town every six years, returning more frequently if a blockage occurs.

By completing these types of projects, we can effectively prevent tree roots from causing further damage and, ultimately, reduce the risk of sanitary sewer overflows in our town. This ensures that we keep the system running smoothly and can promptly address any potential issues. We understand the inconvenience this work may cause and to try to minimize our impact to you and your property.

We greatly appreciate your support and understanding during this essential work. We hope this information demonstrates how vital these projects are to safeguarding our environment and ensuring the well-being of everyone in Southern Pines. If you have any questions or concerns about the process or the schedule, please do not hesitate to reach out to our team.