
Essential Sewer Re-lining for Korumburra & Leongatha Pipes

After Closed Circuit TV (CCTV) inspections of sewer mains in Leongatha and Korumburra during 2019, a number of pipelines have been identified as needing rehabilitation and repair.

Regularly identified issues in sewer pipes are root infestation of old earthenware pipes, usually at the pipe joints, causing blockages.

South Gippsland Water's Managing Director, Philippe du Plessis, said the corporation operates a program of sewer re-lining for deteriorating and ageing sewer infrastructure.

"Infiltration hot-spots due to broken pipes are identified through CCTV monitoring of the sewer systems," he said.

"These hot-spots allow groundwater and tree root infiltration of the sewer network.

"Re-lining the pipes is a cost efficient way of repairing sewer mains without needing to excavate, which is difficult, disruptive and expensive.

"The cured in place liners used are a structural liner (pipe in pipe) which restore functionality and add an extra 50 year life span to the asset".

The essential repairs won't impact customers. Works will focus on transfer and trunk mains that do not have customer junctions.

Using specialised contractors, South Gippsland Water is able to install new PVC liners into the existing reticulation pipe work system. Over two weeks, commencing on 11 May 2020, contractors will install 2,500 meters of liners to sewer pipes in Korumburra and Leongatha.

How does the re-lining process work?

The sewer pipe in question is cleaned (jetted with high pressure water) and inspected with a CCTV camera which determines the condition and extent of infiltration. A long continuous PVC pipe liner is made to length.

The next stage is to prepare the liner for installation by heating it using steam, to make it pliable. Once the liner is hot and flexible it is inserted into the existing sewer pipe.

Following installation, it is pressurised with hot steam, expanding it against the wall of the existing pipe. This pressure is maintained for approximately 30 minutes. Pressure is reduced slowly, allowing the PVC liner to cool. When cooled, the plastic returns to a ridged pipe and fully seals the sewer.

As a continuous piece of PVC liner is used in the process, there are no joins which may break in the future, meaning that the expected lifespan of the repaired sewer is extended.

[Image] Before: Approximately 35 litres per minute of groundwater entering the sewer through a break in the pipe



[Image] After: A fully sealed sewer pipe



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