

SYLWRAP Case Study

Stone Damaged Water Main Pipe Repair

A homeowner repairs the water main supply pipe leaking underneath their driveway because of corrosion and surface damage caused by stones



Excavation of the water supply pipe revealed it to be heavily corroded across a 2-metre section



Stones were imbedded in the pipe, leaving craters when removed in addition to existing leak points



After surface damage was repaired with Superfast Aqua PW, the line was refurbished with Liquid Metal



SylWrap HD provided an impact resistant sleeve to prevent stones damaging the pipe after reburial

Defect

Abnormal levels of water use alerted the homeowner to a leak in their supply system. The problem was identified to be the water main pipe running underneath the front driveway of the house.

Excavation revealed a 2-metre section of metal pipe heavily corroded and with stones deeply imbedded at various points. The surface damage was severe enough to have left leaks in multiple places.

Solution

Water supply was turned off and as much dirt and corrosion cleaned from the pipe as possible. Stones were then removed, some of which were imbedded so deep as to effectively be welded to the metal.

Many of the stones therefore left craters in the pipe. These were filled with **Superfast Aqua PW Epoxy Putty**, which was also used to seal other leak areas.

Liquid Metal Epoxy Coating was painted onto the pipe to create a new metallic, hard-wearing outer surface resistant to corrosion over the brittle metal.

Final reinforcement came using **SylWrap HD Pipe Repair Bandage**. Three SYL309HD were applied and once set, formed an impact resistant sleeve around the pipe, preventing future surface damage.

Result

The repair was completed by the homeowner over a weekend. Day one for cleaning the pipe, removing debris and sealing holes. Day two for the application of Liquid Metal and SylWrap HD.

When water supply was turned back on following the repair, all leaks were found to have been successfully sealed. The refurbished pipe was then reburied.