

## THE CHALLENGE:

Some 604 metres of water main needed permanent renewal or replacement. It was approaching 40 years old and operated at working pressures of 8 – 10 bar (80m to 100m of head). Bursts had caused obvious community disruption.

The main contained several horizontal and vertical bends up to 45°.

## THE SOLUTION:

Interflow was able to restore the full operating capacity of this main by installing a high strength Primus Liner.

The kevlar-reinforced, polyethylene Primus Liner, with its rated working pressure of 25 bar (250 metres), offered a large factor of safety against the design internal pressures.

Primus Line also offered the benefit of installation by winching into the deteriorated pipeline needing only small pits which could be placed long distances apart.



Primus Liner end cap



Primus Liner end capped for inflation and curing



## THE PROJECT:

The first part of the project was to isolate the defective section of main and ensure continuity of water supply.

Small pits 440 metres and 165 metres apart were excavated to access the main and short sections of pipe were removed.

Cleaning was completed prior to CCTV inspection confirming the main was in a suitable condition for liner installation.

Winching the two sections of Primus Liner into the defective main took less than a day. It was winched continuously through the bends.

Following disinfection, the Primus Liner was connected to the existing main by patented Primus Line fittings, with a new scour valve being installed in the intermediate pit.

## **CONCLUSION:**

With failing underground water mains being primarily located in built-up areas, Primus Line offered an effective, community friendly method of long-term renewal.

The liner has a higher bursting pressure than the pipeline it has renewed, is thin walled to maximise flow capacity, and was installed in a fraction of the time that would have been necessary for excavation and replacement of 604 metres of DN200 water main.

Interflow is committed to offering its customers optimum solutions of the highest value for pipeline rehabilitation.

For more information about Interflow's sewer, stormwater and potable water renewal capabilities, and to find out more about the full range of pipeline services Interflow can provide visit www.interflow.com.au