

Interflow delivers a “Merri” project for Yarra Valley Water

Interflow has successfully rehabilitated the Merri Creek Main (MCM) Sewer, an important component of Yarra Valley Water's (YVW) sewer network that is also located in an environmentally sensitive area.

The MCM was in a critically poor structural condition and in need of renewal. Rehabilitation works consisted of renewing, in total, over 2,200 metres of DN525mm and over 1,150 metres of DN600mm sewer. For this project Interflow used Expanda®, a structural close-fit, spirally wound liner developed by Sekisui Rib Loc Australia.

The project was completed as part of Yarra Valley Water's Sewer Main and Reticulation Renewals Program, a three year contract which was recently awarded to Interflow.

The project presented major challenges. The first of which was managing the large number of stakeholder groups that were affected by the works. Merri Creek is a popular recreational site located next to residential neighbourhoods and features established walking and biking trails. The affected stakeholder's included local residents, trail users, two local Councils (Moreland and Darebin), the Merri Creek Management Committee, Melbourne Water, and Yarra Valley Water. Interflow developed Community Management Plans and worked closely with YVW as part of the community consultation process whilst the works were carried out.

Another challenge was that the sewer runs in close proximity to, and along, the banks of Merri Creek, as a result some of the existing manholes had originally been constructed as raised structures 2m above ground level.

To access the sewer it was necessary to construct scaffolding and work platforms around these manholes, most of which were located in difficult terrain. A benefit of Expanda is that the installation equipment is small and mobile which made installation possible.



Erection of scaffolding and work platforms above raised manholes was necessary

A major challenge was that the sewer is high flowing with significant upstream catchments including major industrial discharges. Interflow created a detailed Flow Management Plan to address these flow issues.

For the majority of the works Interflow devised an innovative method of flow control which avoided the need for setting up a complete bypass system around the work site. This involved diverting the flow to another nearby sewer main and using weir boards to store and control flows. Using this system the flow could be stored and released back into the MCM as required and so the potential environmental risk and the disruption to local community was significantly reduced. Interflow was able to do this because the Expanda system can be installed in live flow and the liner is of rigid PVC construction so there is no curing required.

The majority of works were also carried out at night when flows were at their lowest.



Pre lining CCTV shot inside the MCM sewer; the pipe is in poor condition and sections of the original pipe wall are missing.



Post lining CCTV shot. Expanda can be installed in pipes with missing wall sections and the new pipe is circular in cross-section.

Despite these challenges Interflow successfully completed the sewer rehabilitation work. This consisted of sewer cleaning, relining, junction reinstatement, liner grouting in the DN600 lines and performing a final CCTV inspection.

Throughout the project both Interflow and Yarra Valley Water worked together to accommodate the needs of all stakeholders involved and to deliver the project without incident. This project is an example of client and contractor working together to achieve the best possible outcome for all stakeholders.

As a result of the rehabilitation works Interflow has effectively extended the service life of Merri Creek Main for many more decades to come and in turn has delivered a “Merri” Project for Yarra Valley Water.