



CUSTOMER
Icon Water

PROJECT NAME
Molonglo Valley Interceptor
Sewer

LOCATION
Coombs, Canberra

DELIVERED
October 2017

REFERENCE NO.
26-WAS-ACT001-001



**PUSHING NEW FRONTIERS FOR
CANBERRA SEWER**

Innovative sewerage rehabilitation to cater for future pressure.

THE CHALLENGE:

This project involved installing a large structural lining to rehabilitate one of Canberra's key sewers. Due to the volume of material the sewer carries – about two thirds of Canberra's wastewater – it was not possible to divert the flow during the works; it had to remain operational. Even at its lowest flow conditions, the sewer depth in the pipeline was 400mm and was very fast flowing.

THE SOLUTION:

HD Profiling was used to prepare a full pipe survey, which Interflow used to plan the project. This avoided the need for personnel to enter the sewer and provided a safer and faster method.

Interflow then adapted its methodology so the project could be carried out without disrupting the sewer, and staff drew on their technical expertise and innovation to stabilise and modify the SPR™ RO - Rotaloc winding machine in order to complete the installation.



Setting up the Rotaloc winding machine



INTERFLOW DEVELOPED A NUMBER OF NEW WORK METHODS TO COMPLETE THIS PROJECT.

THE PROJECT:

Routine checks revealed that the precast reinforced concrete pipes of the Molonglo Valley Interceptor Sewer in Canberra, which was built in the 1970s, were being corroded by sulphuric acid. Interflow was contracted to rehabilitate a 850m section of the sewer, which had several bends along its length, and repair and maintain maintenance holes, to ensure it is capable of servicing the increasing population of Canberra for the next 50 years.

Interflow cleaned the inside of the sewer using high-pressure cleaning and then used the Australian-developed Rib Loc SPR™ RO - Rotaloc PVC spiral wound lining system to rehabilitate it. This system uses a SPR™ RO - Rotaloc winding machine to traverse along the inside of the pipeline, spirally winding a ribbed strip of uPVC, locking the edges together to form a pipe-within-a-pipe. It was necessary to stabilise the machine and carry out reconfigurations so it would work in the pipe's large diameter – almost two metres – and in the high-flow conditions. Getting it in to the sewer relied on it being disassembled and then passed down through the top of the manhole and reassembled once inside.

Interflow also applied a thick coating of calcium aluminate cement (CAC) – an acid-resistant cementitious product – to the bends and repaired the man holes.

CONCLUSION:

Interflow developed a number of new work methods to complete this project on time and on budget and without any interruptions to service, or safety or environmental incidents. The solution has been engineered to take all loads, including soil, traffic and groundwater. This project has extended the known capabilities of spiral-wound lining and has pioneered methods that can be applied to other projects in the future.

Interflow is committed to offering customers optimum solutions of the highest value for infrastructure within the water sector.

To find out more about Interflow's full suite of water network solutions, scan the QR Code or visit: www.interflow.com.au.

