

# Interflow<sup>®</sup>

## Elizabeth Street Drainage Reline



**\$500k**   
project value

**Ipswich City Council**   
customer

**QLD**   
Ipswich

**2020**   
year completed

**20m**   
stormwater chamber

## Protecting beloved community assets through innovative solutions

# The project

**With the safety of the community at risk, Interflow needed to secure a deteriorating stormwater structure.**

**Not dissuaded by a myriad of access challenges, Interflow found a way to adapt the conventional Rotaloc process and get the job done. The creative response prolonged the life of the asset and ensured the safe enjoyment of a beloved local park for generations to come.**

During a stormwater condition assessment program, Ipswich City Council was surprised by the discovery of a deteriorating brick chamber buried beneath a popular local sports field. Once a functioning road culvert, the 20-metre chamber was later sealed at each end and joined by pipes to form part of the local underground stormwater system.

The poor condition of the chamber raised concerns that its possible collapse could cause a sink hole in the park above, threatening the safety of the community. Interflow was engaged to secure the structure and prolong the life of the ageing stormwater asset.

Previously a recognised landfill site, the earth above the chamber had the potential to contain hazardous material, and any renewal solution that relied upon open excavation was deemed costly and undesirable. After considering all possible alternatives, Rotaloc, a spiral-wound structural liner, was the stand-out option.

With a trenchless solution identified, the next challenge was getting the Rotaloc machine in place to perform the lining works. The nearest practical access point was a manhole located 100m away, so crews devised a way to disassemble the machine and transport it through the connecting pipeline to the chamber site. The machine was then reassembled in the confined space and ready to use. With a structural liner in place, the void was backfilled with grout and sand to secure the structure.





## The challenge

While access constraints are not uncommon in the water industry, this project brought with it a unique range of challenges. Interflow needed to think outside the box and find a way to secure a deteriorating chamber that posed a threat to the safety of the community above it.

With 10 metres of earth and potentially hazardous landfill above the chamber, excavation was not an option. This meant the only access point for crews – and the Rotaloc machine – was a manhole 100 metres away. To further complicate things, the chamber itself had deteriorated to the point where it was unsafe to work in.

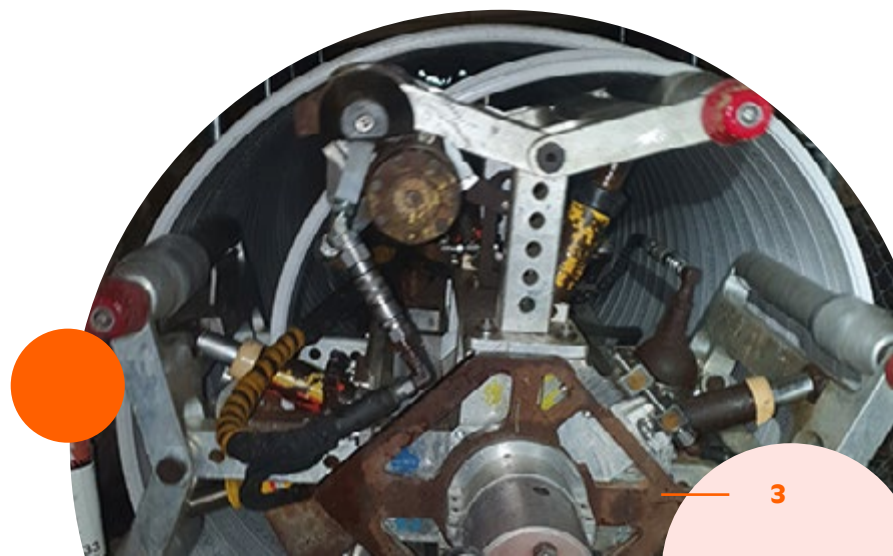
## The solution

To secure this ageing asset, Interflow first needed to overcome the immediate threat the structure posed to workers inside it. Taking a collaborative approach, Interflow worked with local engineers and a trusted building contractor to devise a timber truss system that could be installed in the confined space and safely support the chamber structure during works.

Once the work site was secured, the crews turned their creativity to the next challenge: getting the Rotaloc machine in place to perform the lining works. Challenging the conventional application of the process, the crews on the ground devised a way to disassemble the Rotaloc machine and transport it up the pipe using a bespoke set of trolleys. Once it had completed its 100-metre journey up the pipe, the machine was assembled again at the chamber entrance ready for use.

**Interflow responded to the challenge of securing a deteriorating chamber discovered under a busy local sports field. The aging stormwater asset posed a threat to the safety of the community enjoying the park above.**

**Access constraints and safety concerns threatened the outcome of this critical project. By challenging the conventional application of Rotaloc technology, and working collaboratively with local partners, Interflow was able to solve its customers problems. By sharing our customer's commitment to the community, Interflow ensured the community was able to enjoy and use their beloved park for years to come.**



# How we help

Our 4 Waters



**Water**



**Stormwater**



**Wastewater**



**Culverts**

***Interflow***<sup>®</sup>

Creating the Future of Water

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