

INTERFLOW DELIVERS ON SENSITIVE COASTAL PROJECT

When Unitywater identified a sewer asset that required rehabilitation in a sensitive Queensland coastal location, the utility engaged Interflow to deliver a complete solution for the renewal, minimising the impacts to residents and the environment, while overcoming the challenges of its location.

Alexandra Headland is a prominent tourist destination on Queensland's Sunshine Coast, with the area's rocky headland known for some of the best surf conditions on the coast. With the sewerage main that services the area running parallel to the waterline between the beach and parkland, upgrading the coastal pipeline was essential to protecting the environment and ensuring consistent high quality service to residents.

As the foreshore is popular with both locals and tourists, and the coastline is environmentally sensitive, Unitywater knew that maintenance works to protect the area from sewage overflows during extreme weather were crucial. Over the course of a month-long project, the maintenance holes were renewed and the ageing sewer was relined by contractor Interflow using an SPR™ EX Expanda spiral wound liner.

Access to the asset was limited as the pipelines were routed through steep inaccessible bushland. Adding to the challenge was the park's large area, requiring multiple site setups. The parklands are subject to a high volume of foot traffic by locals and visitors accessing the beach and park daily, so stakeholder engagement was also an essential part of the project.

EQUIPPED FOR SUCCESS

The project involved relining six DN 450 pipelines, including a 160 m run through a bend and buried maintenance hole. Interflow was also tasked with raising one maintenance hole, as well as cleaning and recoating eight maintenance holes.

To prepare the pipes for lining, Interflow used a recycler pipeline cleaning unit, a specialised combination cleaning unit equipped with vacuum cleaning technology.

The recycler draws water from the wastewater line using a vacuum pump and continuously recycles it through the unit's five treatment tanks. The debris and silt are collected in a separate silt tank and an onboard pump returns recycled water to be used during high pressure jetting to clean the pipe. After cleaning, the SPR EX Expanda spiral liner was installed along the length of the asset.

Given the pipeline's proximity to the shoreline and its incline, crews accessed the sewer and maintenance holes on foot. The project management team ensured maintenance holes were well supported and had equipment delivered directly to each maintenance hole using a crane.

The recycler unit was also used to clean the maintenance holes, with additional machinery allowing a jetting distance of almost 350 m. A four-stage process – comprising blasting, prime coating, rendering and an epoxy top

coating – was then used to recoat the maintenance holes, maintaining their health and extending their operating life.

In order to make the most use of any arranged closures and permits, coating works and sewer relining took place in tandem, minimising the disruption to the local community.

ENGAGING ON ALL FRONTS

As the project had to meet a number of environmental requirements identified by Unitywater and the Sunshine Coast Council, planning, consultation and communication with multiple stakeholders was an essential step in the process of delivering the project.

Extensive risk assessment between the client and contractor took place to choose the most suitable relining method. In addition to species and habitat management, the risk assessment also considered the impact to the public, potential site hazards, suitable safety controls and the impact on service to Unitywater's customers.

Recent rain created some ground softness, so bog mats were used to protect concrete footpaths from the weight of the equipment

as well as to minimise the impacts on vegetation. Flexible traffic and environmental controls were used to manage pedestrian traffic, which affected public footpaths and high profile tourist areas.

"As well as tourists, large numbers of locals use the park, so it was important that its environmental and recreational importance were kept front-of-mind," says Unitywater Executive Manager Sustainable Infrastructure Solutions Scott Barnes.

"We used a broad range of communications channels to tell everyone what was happening and why. Social media, signs in the park and

the local newspaper explained what we were doing and why we had to close some footpaths.

"We worked hard to keep the inconvenience to a minimum. Completing this project makes sure the coastal strip is safe from sewage overflows when any extreme wet weather hits. Collaboration between Unitywater, Sunshine Coast Council and Interflow made sure the community and the coastline are looked after."

Interflow completed the project on time and within budget, without impacting Unitywater's network. **T**

ABOUT INTERFLOW

Interflow is an Australian-owned company that services major water authorities and local and regional councils across Australia and New Zealand. It operates as an infrastructure renewals delivery partner, working in collaboration with its customers, offering early contract involvement, design/construct management, a life-cycle approach to investigation and rehabilitation, construction services including trenchless technology and reactive and proactive maintenance services in the potable water, wastewater, stormwater, rail and road sectors.

For more information visit www.interflow.com.au



The site setup prior to relining.



The crane delivering equipment to the crew who were on foot.



Delivering infrastructure renewal through world leading innovations
Your local delivery partner

Follow us



interflow.com.au
mail@interflow.com.au



Locations throughout Australia and New Zealand