

Belconnen Trunk Sewer Augmentation

Camouflaged above-ground pipeline to increase water transfer capacity in Canberra



Project Need

Icon Water has identified the Belconnen trunk sewer as a critical part of the Belconnen sewerage network which serves the communities of Belconnen, Gungahlin and Hall. Due to the rising population in Canberra, the demand for increased capacity of water and sewerage infrastructure was required.

The Belconnen Sewer Upgrade will consist of four projects which are expected to be completed in the next few years. Project 1 involves a 2.4km sewer augmentation pipeline that will transport wastewater.

Solution

Steel Mains was selected as the preferred supplier to manufacture and deliver the above-ground section of the pipe which was installed over creek crossings. Steel Mains provided 150m of 1219OD Mild Steel Calcium Aluminate Cement Lined pipes and a custom DN1200 expansion joint to Diona to construct on behalf of Icon Water.

The specified joint for this project was Steel Main's Sintalock Type I. This joint does not require entry to the pipe during construction which eliminated safety issues that are associated with welding. The use of Sintalock I also eliminated the need for internal coating and lining reinstatement. As a result, these advantages significantly reduced the installation duration period. Due to the innovative jointing and coating technology of Steel Mains Sintakote Steel Pipeline System, the client can enjoy cost savings in operation and maintenance costs.

Achievements

The Belconnen Trunk Sewer Augmentation pipeline is a prime example of how Steel Mains can provide bespoke custom solutions to meet project requirements.

Sintakote fusion-bonded polyethylene coating was applied on the exterior of each pipe for corrosion protection of up to 150+ years. Additionally, this project had a unique requirement to add a special application of green paint over the Sintakote coating. This was required so that the above-ground pipeline would blend in with the environment that it was located in.

The above-ground pipeline supplied by Steel Mains is a crucial part of the Belconnen Sewer network upgrade which will achieve greater water transfer capacity and, as a result, will prevent any risk of overflow into local waterways.

Project: Belconnen Trunk Sewer Mains

Principal: Icon Water

Location: ACT

Completion: 2023

Supplied: 150m of 1219OD Sintakote® Steel Pipe , Calcium Aluminate Cement Lined, Sintalock® Type I