St Marys Wastewater System

OIL/GAS | **SEWER** | STORMWATER | POWER | WATER | TELCO

PROJECT OVERVIEW

Sydney Water committed to servicing two major growth areas within the St Marys Wastewater System catchment by mid-2015. These areas were part of the existing rezoned Western Sydney Employment Area (WSEA) to the south and the Jordan Springs Residential Village to the north of the St Marys Water Recycling Plant (WRP).

LOCATION
St Marys, NSW

CLIENT
Abergeldie

PIPE
225mm PN25

GEOLOGY
Sandstone & Shale

LENGTH
1,080 metres

TECHNIQUE
HDD

CONSTRUCTION TECHNIQUE

To meet the growing demand, Sydney Water provided a new pumping station (SP1184) and a 1,080m pressure main to service the Jordan Springs North sub-catchment. The pumping station was designed to have an ultimate capacity to service up to 940 residential dwellings, in addition to flows from Xavier College. Jordan Springs, a major new residential housing development being implemented by Lend Lease in the City of Penrith, was planned to include 2,500 new properties.

The 225mm PN25 HDPE pressure main was installed from SP1184, running through the Wianamatta Regional Park to a new maintenance hole and connecting gravity main of the new Werrington Carrier Extension. The pressure main was directionally drilled on grade using UEA's Vermeer D300x500 maxi rig to minimize any potential impact to the regional park during construction.

CHALLENGES

The primary challenge of the project involved minimizing the environmental impact on the Wianamatta Regional Park during the installation of the pressure main. This was addressed by using directional drilling techniques, which allowed for minimal disruption to the park's landscape.

COMPLETION

The project successfully contributed to servicing the growing population in the Jordan Springs area, with the pressure main and pumping station expected to support the development of 2,500 new residential properties. It also ensured that wastewater services would be delivered efficiently to these new developments, while maintaining the integrity of the surrounding natural environment.