

AGNES WATERS / 1770

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

LOCATION	Agnes Waters / 1770 QLD	
CLIENT	TRILITY	
PIPE	630mm PN 16 PE100 polyethylene	
GEOLOGY	Rock	
LENGTH	610 metres	
TECHNIQUE	HDD ocean outfall	

PROJECT OVERVIEW

UEA was contracted by TRILITY to install a 600 metre section of 630mm PE pipe via horizontal directional drilling (HDD) for the raw sea water intake of the new desalination plant being constructed for Agnes Waters/Seventeen Seventy.

SCOPE OF WORKS

The project included the design, construction, operation and maintenance of a new RO seawater desalination plant, with associated infrastructure. The desalination plant was built to have a capacity of 1.5 ML/day with the potential of being upgraded to 7.5 ML/day. Also involved was the operation and maintenance of existing facilities, including two water treatment plants that are bore water supplied and a lagoon sewage treatment system and irrigation system. The installation of the last ocean outfall pipeline for the raw seawater intake needed to be completed before turtle season – within a short timeframe UEA mobilised a 1.1 million pound directional drill, cleaning systems and pumps to undertake the remaining scope.

UEA and TRILITY agreed to use the abandoned bore which had to be re-surveyed during the pilot hole installation. The bore was deemed usable as long as the exit could be plugged and professionally grouted for a safe exit angle through the rock formation. Trican Pty was engaged to plug and grout a 150 metre section at the exit point 550 metres out, and once set UEA re-piloted the borehole and exited into the ocean floor at CH 610. Two reaming passes were completed out to 32 inches before a cleaning pass, and then the pipe was pulled back during a 12 hour pull back.

COMPLETION

Many challenges had to be managed for this project to be successful, including: short timeframe, isolated location, tooling requirements from overseas, co-ordination of numerous highly skilled contractors, complicated diving works for underwater tooling connections, and environmental impacts. UEA's experience ensured that challenges were managed efficiently and the project was successfully delivered.