OCEAN OUTFALL HDD FOR A MAJOR AUSTRALIAN TELECOMMUNICATIONS COMPANY

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

Two major Australian telecommunications companies, along with Spark New Zealand, formed a joint venture partnership to deploy an undersea telecommunications cable system between New Zealand and Australia, known as the Tasman Global Access (TGA). The cable provides a 2,300 kilometre link between Raglan, in New Zealand, and the Northern Beaches, in Australia. The system will provide an alternative route for trans-Tasman communication traffic, significantly improving New Zealand's international connectivity, as well as strengthening links into fast-growing Asian markets.

LOCATION
Narrabeen NSW

CLIENT
Major Australian Telco

PIPE
Steel

GEOLOGY
Sandstone & sand

LENGTH
800 metres

TECHNIQUE
HDD & ocean outfall

SCOPE OF WORKS

During the course of the project, UEA was tasked with the following work:

- Erect a sound proofing compound around the work site. UEA erected a scaffold system 4 metres high, enclosed the entire site and installed a sound attenuation system (from Echo Barriers) over the scaffolding –providing up to 50% reduction of noise.
- Use UEA's Vermeer D300 HDD rig to complete the 800 metre ocean outfall bore installing a 5-1/2 FH drill pipe. This was left in situ as the telecom company's required conduit.
- Employ and manage a suitable qualified diving company to remove UEA's tooling equipment from the ocean and install a termination piece on the end of the drill string. This was finished when the bore was complete for the company to link up to when installing their cable.
- Construct a reinforced concrete pit within the street as the access chamber to pull the TGA cable into at a later date.

CHALLENGES

- Closing off the street and erecting the compound
- Drilling down the street and maintaining a safe distance from the existing previously installed conduit

- Drilling from sand ground conditions entering into rock ground conditions, while maintaining steer and grade, to achieve the agreed exit point location (the most technical challenge)

The scaffold and sound attenuation system were erected in three days, fully enclosing the site, and the steel case was installed in two days. 800 metres of 5-1/2 FH drill pipe was installed in six days and UEA managed to complete this by working 14-hour shifts, satisfying all concerned and avoiding the need to disturb residents at night.

COMPLETION

The client was delighted with UEA's capabilities, the completed works and the accuracy of the installation. The site set up was professionally managed with very little impact on residents, and very few concerns or complaints were received. From inception to completion, UEA successfully completed the project in 23 days.