

WESTCONNEX ROZELLE INTERCHANGE MIXED UTILITY INSTALLATION

CLIENT: JOHN HOLLAND CPB CONTRACTORS JV

LOCATION: ROZELLE NSW

DURATION: 15 MONTHS

PROJECT VALUE: \$3.9 BILLION

VALUE OF ENGAGEMENT: \$15 MILLION

Ferrycarrig was engaged by principal contractor, JHCPB JV, to carry out the installation and relocation of mixed utilities including gas, water, sewer, stormwater, high voltage and low voltage power, rail infrastructure assets, and various telecommunications assets.

Ferrycarrig played a substantial role in the utility relocation component of the project, with up to 18 crews around the clock during the project's peak, working across James Craig Road, Victoria Road, The Crescent, and the Iron Cove Precinct. Works included the following:

- Boring over 300m for Watermain, Gasmain, Sewer, and Electrical services including 2 bores under Victoria Road, 3 bores across The Crescent and 1 bore in Manning Street
- Installation of 4 HVCs
- Installation of 2 km of 11kV feeders including 4 pad mount kiosks
- Installation of 4 km of gas sleeve for gas main installation and assisting Jemena with the installation of the gas main
- ASP 1 construction works extending the Ausgrid network by 3km of underground and overhead wiring

The project involved the construction of 7 separate crossings under the 6 lane Victoria Road, which supports 12,000 cars per day and is heavily congested with existing services. Throughout the delivery of the project, the project team faced difficult ground conditions, primarily hard rock, heavily congested with existing services.

One of the most significant challenges associated with the project was contending with an enormity of existing known and unknown services along the various alignments. The Ferrycarrig project team utilised their previous experience and learnings from working under these conditions on other previous major urban utility projects.

Amongst the most complex, high-risk, and technically challenging works that Ferrycarrig completed on this project was the installation of a 600mm diameter, concrete encased water main, 2.5 m deep across Victoria Road, and completing a connection in the middle Northbound lane of Victoria Road.

This involved a 1500mm excavation for the concrete encasement of the main with over 150m³ of rock excavated and the installation of over 30m of 600 diameter Steel Cement Lined Pipe with 3 bends and a 45 Degree bend at the connection point. Works included 15 tonnes of steel tied in place and 120m³ of concrete poured.

All works were completed at night as no daytime road occupancy licences were possible. All excavations were restored at the end of each shift, and the high traffic road reopened every morning.

The project team developed a bespoke temporary works design that included two separate shoring systems with road plates. Each shift was carefully planned with redundancies, so that works could be completed, in time or the road to be handed back to the public at the end of each shift.

The project was shortlisted as a Finalist at the 2021 Civil Contractors Federation Earth Awards in the Excellence in Civil Construction \$10M-30M category.



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