



TOTAL PROJECT SOLUTIONS FOR WASTEWATER PUMP STATIONS

In addition to more than 20 years' experience in the delivery of a range of pump station types, Rob Carr also provides total project solutions that increase efficiencies for clients.

We have extensive experience in pump station delivery. Rob Carr has experience installing simple pre-fabricated pump stations through to complex engineered bespoke structures and caisson pump stations. Sizes, types and depths have varied with the deepest being 14m and the largest 11.5m in diameter in a twin caisson setup. The majority of installations have involved sophisticated SCADA automation and electrical services. In many cases, we self-performed complex mechanical arrangements.

We work with clients in all forms of delivery such as early contractor involvement, design, design and construct, or construct only. Regardless of the contract type or structure, we take a collaborative approach with clients and provide creative and cost effective solutions to project challenges.

We can project manage and self-perform the entire pump station construction process and also oversee the electrical fabrication and installation components. Our clients benefit from our self-perform capability to undertake all detailed excavation, formwork, pre-cast concrete installation and mechanical fitout required to construct pump stations, simply leaving the management of electrical and telemetry fitout as a lone subcontract item.

In particular, we have wide-ranging and in depth experience in product selection and supply, installation of pumps, valves and pipework, monitoring, testing, restoration and maintenance, as well as decommissioning existing stations. We have constructed many deep pump stations, often in difficult ground conditions that have typically included wet alluvial soils, sometimes heavily contaminated, soft or highly plasticised clays and rock.

We have the capability and experience to adapt to any site condition by utilising a range of construction methodologies including traditional shoring such as shoring boxes or sheet piles, through to cast in-situ or underpinned precast caisson systems.



Deebing Creek Sewerage Upgrade

YAMANTO 

CLIENT Queensland Urban Utilities

WORKS COMPLETED A design and construct project that involved the consultation, design, management, construction and ultimately, delivery of the of a new trunk sewer main and pump station in Yamanto. The original client concept design included a new pump station, 11 new manholes and 14 new pipelines totalling 676m.

Rob Carr provided the client with a \$700,000 cost saving for the project by amending the original design and alignment and building only seven new manholes and eight new pipelines totalling 583m along with the pump station whilst maintaining the required functionality. We self-performed all microtunnelling works including two major DN1000 pipelines and the construction of the new 13m deep pump station which included two cast in-situ concrete caissons for the grit collector and wet well of the pump station. We also managed the mechanical and electrical fitout of the pump station and installed a wedge gate valve within the grit collector.



Mount Isa Sewerage Augmentation – Stage 1

MOUNT ISA 

CLIENT Mount Isa City Council

WORKS COMPLETED Rob Carr was engaged to manage, construct and deliver the upgrade to Mount Isa City Council's sewerage infrastructure. Rob Carr self-performed all the major portions of work, which involved the construction of 9km of trunk gravity and pressure mains, the construction of two new sewage pumping stations at PS01 and PS18 including all mechanical and electrical fitout works and modifications to another existing pumping station at PS04. Further works on the project included construction of an emergency storage tank. As Head Contractor, we undertook a collaborative and coordinated approach to achieve project delivery five months ahead of schedule.

Dawesville 1B, 4A, 5A Infill Sewerage Program

DAWESVILLE 

CLIENT Water Corporation

WORKS COMPLETED This project was part of the Infill Sewerage Program, one of WA's biggest single capital works projects to connect more than 100,000 households that previously relied on septic tanks to deep sewerage.

Rob Carr's scope of works to connect 444 residential lots included gravity and pressure sewer main construction, pilot and slurry microtunnelling, caisson construction and pump station works.

Specifically, the pump station works included:

- the construction of one Type 10 Pump Station 7m deep via cast in-situ caisson technique (4.3m ID), mechanical, electrical fitout and telemetry, commissioning and testing for same
- the construction of one Type 40 Pump Station 12m deep via cast in-situ caisson technique (4.3m ID), mechanical, electrical fitout and telemetry, commissioning and testing for same
- the decommissioning of three existing pump stations including removal of all pumps, motors, cabinets, cabling and pits, removal and disposal of the existing precast wet well, valve pit, overflow storage tanks, and the restoration of the affected area and revegetation of the site with more than 200 native plants.



Rob Carr's efforts on this project were recognised at the 2016 WA Civil Contractors Federation Earth Awards—we won the category for projects between \$10M–\$30M

For more information please visit rob carr.com.au or call 1300 883 602

