



Dwellingup DN200 PE Water Main and Transfer Pump Station

Client:
Water Corporation

Location:
Del Park Rd, Dwellingup WA

Construction Period:
Jun 13 – Dec 13

Project overview

The main purpose of this new pipeline was to secure the future supply of drinking water for the people of Dwellingup. This was the first project awarded to DM Civil under the Water Corporation's Mid-Tier Programme. It involved the installation of 10km of DN200 PE and DN150 MSCL pipe. The route extended from the South Dandalup Dam pump station, along Del Park Road, to the Dwellingup Water Treatment Plant situated on the southern side of the town centre.

At the dam pump station we were required to carry out the demolition of a mezzanine structure, install new ventilation louvres and concrete pump plinths, onto which we installed two Principal supplied VSD controlled Grundfos CRN64-4 vertical multi stage pumps. In and around the pump station area we also installed a pressure sustaining valve, associated tie-in pipework, a new control panel and a Principal supplied surge vessel.

At the water treatment plant we installed a duplicate UV steriliser unit, flowmeter, turbidity analyser, VSD's, switchboards and new control panels.

Our trenchless technology capabilities allowed the pipeline to be installed through the heritage-listed Newton Street precinct with minimal impact on surrounding residents and businesses.

Significant achievements and benefits

A key factor in our selection to complete this project was our extensive experience with pipe installation through tight construction corridors and built up areas, such as the Dwellingup Town Centre. Our proven approach to community consultation and communication was imperative to maintaining Water Corporation's reputation amongst local residents.



Although confronted with one of the wettest winters on record, DM Civil successfully finished this project on time and on budget. Prior planning and consultation with the client resulted in a redesign of the pipe alignment. This significantly reduced the clearing area required, which in turn minimised Water Corporation's post contract re-vegetation programme.

The redesign also afforded DM Civil the opportunity to use our Tesmec TRS1475 trencher machine in specific areas. In such wet weather, the trencher machine was able to excavate through hard ground much faster than conventional excavation methods.

DM Civil's traffic management during construction resulted in negligible impact on local traffic.

Trenchless technology methodologies were utilised through the town centre's heritage-listed Newton Street precinct, ensuring little to no inconvenience or loss of trade to shop owners. It also protected the safety of students and teachers at Dwellingup Primary School. Using an auger bore at the popular Hotham Valley Tourist Railway Line, a sleeve was installed under the rail line and the pipe installed through the sleeve. This technique resulted in no disruption to the rail services.

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The successful outcome of this project makes certain that Dwellingup will have quality and sufficient water capacity to sustain future growth.

Contact DM Civil to discuss your pipeline projects.

GUARANTEED PERFORMANCE

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