



Emerald Park Stage 6

Client:
Cedar Woods

Location:
Wellard WA

Construction Period:
Mar 15 – Nov 15

Project overview

This was the final stage of the Emerald Park development of which DM Civil had previously completed several stages. This previous work, together with our performance on the Carine Rise project with Cedar Woods and TABEC, were key factors in the decision to award the works to DM Civil.

To ensure the timely delivery of the project the works were split into three separate sections; the earthworks for the subdivision and adjacent future school site, the subdivisional works for 129 lots and the upgrade of a 350 metre section of Johnson Road in open traffic conditions as well as the construction of a new roundabout.

The scope included approximately 125,000 cubic metres of earthworks, 14,600 square metres of road pavement, 4,400 square metres of footpaths, 2 kilometres of stormwater drainage and 2.7 kilometres of sewer and water reticulation. With 2.1 kilometres of retaining walls and over 300 metres of decorative fencing and piers, as well as installation of gas, power and communications, this was a large contract. Another challenge was that trenching below groundwater level required extensive treatment of dewatering effluent and acid sulphate soil remediation.

DM Civil completed a 129 lot subdivision 5 weeks ahead of schedule while maintaining a high standard of construction.

Significant achievements and benefits

This final stage earthworks required topsoil stockpiled from previous stages to be screened and blended at different ratios with clean sand fill under the direction of the project geotechnical engineer. This blending process saved the client considerable cost by eliminating the need for imported sand, and minimised offsite topsoil material disposal.

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It was identified early that the upgrade works on existing Johnson Road would have to be undertaken under “live” traffic conditions. Working in an open traffic environment complicates the road construction process considerably; however, the DM Civil site team, together with the traffic management subcontractor in ATM, was able to carry out the works without any issues by the use of sidetracks. This attracted praise from the local government authority (City of Kwinana) who closely monitored the worksite throughout construction.

Considerable lengths of sewer, water, power and communications were previously installed throughout. Due to revised lot layouts, many of the lot connections needed to be relocated with the most extensive changes being the live sewer and water mains owned by Water Corporation. Upgrades and adjustments required for the sewers included changing and adjusting the level of 6 access chamber lids, reconstruction of 2 manhole chases and the cut in of 23 new property connections, all on live mains.

The upgrades required for the water main were equally complex and required a total of 7 connections between the existing and new mains, repositioning of a section of existing main to suit revised boundary layouts and the cut-in of 25 new property connections.

The DM Civil project team was able to coordinate a sprawling and complex site by re-sequencing previously overlapping tasks to create efficiencies which resulted in the completion of the project five weeks ahead of programme.

Contact DM Civil to discuss your land development projects.

GUARANTEED PERFORMANCE

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