



Lake Coogee Stage 3

Client:
Urban Focus

Location:
Munster WA

Construction Period:
Aug 11 – Apr 12

Project overview

This project was the third and final stage of Urban Focus' development at Lake Coogee. The estate is located between Rockingham Road, Frobisher Road and Hobson Avenue, Munster. The project involved 21,000m³ cut to fill, 30,000m³ of imported fill, 1.3km sewer reticulation, 1km of varying size stormwater drainage, 1.5km of DN100 and DN250 water reticulation, 9,000m² roadworks, 1.7km of limestone retaining walls up to 8 courses high and all underground power.

The subdivision was previously used as a market garden. Existing infrastructure had to be removed and innovative earthworks techniques were implemented to manage ground conditions. The existing bores used by the market gardeners had to be removed and sealed up prior to intensive HIEDYC compaction works by specialist contractor, Infratech. They were commissioned to ensure a Class A finish to the site.

This project allowed the transformation of a site that was no longer required as a market garden to provide additional residential lots for a growing Perth population.

The development was previously used as a market garden, however with the use of deep penetration compaction techniques, the existing ground could be utilised to meet a Class A site. This was a great benefit to the client.

Significant achievements and benefits

Our experienced site personnel successfully installed services in deep cavernous limestone with a high water table. The client was pleased this was achieved to the highest quality necessary and without incident.

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125m of the DN150 SN16 sewer reticulation was installed at a depth of 10m in cavernous limestone which required constant dewatering and meticulous planning. The excavations were multiple benched in accordance with 'Code of Practice' and management of excavated material for dust was completed to reduce disruption to surrounding residents. This ensured the safety of our personnel and resulted in no leaks or damage to the pipe.

A Class A finish had to be achieved to meet the approvals for this subdivision. The area was previously a market garden, with thicker than normal topsoil over loosely compacted and unstable limestone material. To get the required finish, we engaged a specialist compaction company to bring the site up to specification. Their HIEDYC compaction equipment provided a deep penetration compaction, saving considerable time and money by eliminating the need to remove unsuitable material and replace it with new, clean structural fill.

Residents in close proximity to the works were regularly consulted. Compaction techniques were altered where possible to avoid excessive vibration when working alongside their properties. Dust management was also a high priority to reduce the impact on residents.

Lake Coogee Stage 3 demonstrated that an existing site can be transformed to enrich the community. This can be achieved in a cost effective and timely way with good management and alternative construction techniques.

Contact DM Civil to discuss your land development projects.

GUARANTEED PERFORMANCE

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