



engenium

smart project delivery

Demonstrated Capabilities

- Intersection design
- Sealed and unsealed road design.
- Civil engineering
- Drainage design

GNH Intersection and Wodgina Access Road Design Drafting

Client Pilbara Minerals

Project Location

Indee, Pilbara region of Western Australia.

Scope

Engenium was engaged to design the GNH/Wodgina intersection and Wodgina access road for RAV 7 vehicles which is approximately 9 km's long. The access road crossed Fortescue's and BHP's rail lines.

The Fortescue level crossing had to be upgraded to active level crossing and meet the design criteria for RAV 7 Vehicles. Similarly, BHP's level crossing was also upgraded.

Business Objective

The client wanted to upgrade the existing Wodgina access road to haul iron ore from their mine site to Port Hedland for export.

Challenges to Overcome

To upgrade the existing access road, the GNH/Wodgina intersection had to be upgraded due to the increased traffic numbers. The Wodgina access road upgrade is approximately 9 km in length and crosses a number of major water courses which required floodways. The design criteria for the floodways was based on the average length of time the floodways were impassable

due to annual flood events. The road was designed to minimise earthworks haulage distances. In order to do this, floodway lengths were increased and drains were widened and deepened to generate cut material to be used for fill areas.

Smarts

To meet the design schedule Engenium supplied digital models and IFC drawings for construction. The hydrology works were undertaken by our sub-consultant RPS Group.

Project Outcome

The project was delivered under budget and on schedule and met the clients bulk earthworks haulage requirements.

Delivering Value. Delivering Results.