



engenium

smart project delivery

Demonstrated Capabilities

- Detailed structural design
- Shop detailing
- Project scoping and concept development
- 3D modelling.

Maintenance Platforms Detailed Design, Documentation & Shop Detailing

Project Location

Port Hedland, Pilbara, Western Australia.

Scope

Engenium was engaged to develop, design, document and shop detail permanent maintenance access platforms to replace temporary scaffolding at a number of locations in Port Hedland.

The plant and equipment requiring maintenance access varied from transfer chutes to bucket wheel reclaimer slew pinions, car dumper bins, stacker hose reelers, ship loader hose reelers and shuttle return idlers.

Engenium helped the client scope the platforms, developed concepts for all packages and worked closely with the company representative and stakeholders to ensure the design provided the best possible outcome for the client prior to commencing detailed design. Engenium then followed on with the detailed design, documentation and shop detailing.

Business Objective

These maintenance platforms will provide improved safety for maintenance crews and significantly reduce the shutdown time required to set up and remove temporary scaffolding.

Challenges to Overcome

Given the brownfields nature of this project, fitting new platforms in and around existing infrastructure provided many challenges. Understanding current operations and maintenance activities was critical to ensure the new platforms did not have any detrimental effect on the surrounding plant.

Smarts

3D laser scans were used at all platform locations to verify the current plant layout against the old drawings. This data was critical for the design and helped identify a number of issues as the concepts were developed.

Project Outcome

With the aid of the 3D laser scans during the shop detailing process, the platforms were fabricated and installed without complication and further maintenance access platforms are being considered due to the improved safety and efficiency that these platforms provided.

Delivering Value. Delivering Results.