



CAPITAL WORKS PROJECT

YANDICOOGINA FIXED PLANT WORKSHOP | RIO TINTO, Yandicoogina (completed August 2013)

The Yandi Fixed Plant Workshop Project was undertaken on behalf of Rio Tinto as a design and construct contract. The site is in a remote location approximately 80km north west of Newman and comprises of a 2275m², 8 bay workshop, tool store, locker room, 1735m² office complex along with all supporting infrastructure.

SCOPE OF WORKS

- Design and documentation of detailed civil earthworks, roads, drainage, structures, buildings, potable water, fire protection, oily water treatment, waste water treatment, compressed air, reticulated oxygen and acetylene, power and communications.
- Preparation and submission of all documentation to state and local government including building licence, crane registration and amendments to dangerous goods licence
- Construction of all detailed civil earthworks, roads, parking and drainage for the FPM workshop facility
- Supply, fabrication, surface treatment, packaging and delivery to site of all steel and components for structures, buildings, piping, mechanical, electrical and communications
- Re-routing of existing mains water supply
- Bulk earthworks of over 60,000m³ cut/fill
- Installation, fit-out and commissioning of; 1600m² fully serviced workshop; 600m² tool store; 1300m² office facility
- Supply and installation of a 50T & 10T gantry crane to the workshop
- Automated vehicle wash-down facility
- Oily water collection and processing facility
- Waste water treatment plant
- 500,000 litre water tanks
- Supply and installation of new high voltage power pole and power lines, electrical transformer and site main switchboard

DESIGN

Design was undertaken through a collaborative approach with the client to best assess and deliver all requirements necessary to meet the expansion needs of their Yandicoogina iron ore operations. The project was designed to a 4 Green Star Environmental rating in order to minimise environmental impact through sustainable construction.

EXECUTION

The project was completed within time and budget constraints with no injuries or accidents to any personnel. As an engineering contractor, Linkforce self-performed a majority of the divisions of

work required to construct this facility. This provided us with a competitive edge in terms of pricing when tendering, and provided flexibility to achieve required scheduling milestones and project targets.

SAFETY

As there are substantial risk elements involved with a project of this nature, a detailed study was conducted on working safely at heights best to minimise potential risk. The analysis resulted in much of the assembly work being performed on the ground and then lifted into place when ready. This process effectively minimised working at heights requirements and

removed a great degree of potential risk from the project.

QUALITY

The project was executed at the highest level of quality utilising Linkforce quality management systems. All stages of works are verified by way of Inspection Test Plans (ITP's) and did not proceed until Construction Manager and Client approval had been given. As part of standard procedure, processes were monitored via the reporting of Quality Performance Indicators (QPI's) and internal and external audits also supplemented this approach.