



engenium

smart project delivery

Demonstrated Capabilities

- Sound development of scope definition working closely with the stakeholders.
- Value engineering in a difficult brownfield environment.
- Use of one way traffic flows to minimise vehicle conflicts.

Belt Workshop Relocation

Project Location

Pilbara, Western Australia.

Scope

Engenium was engaged by a blue-chip mining company in the Pilbara to prepare a tender package to support a design and construct tender to clear out and demolish an existing belt splicing facility workshop, relocating the belt splicing equipment to the main workshop 600 metres north.

Business Objective

The existing belt splicing facility workshop was not designed for cyclonic conditions and had suffered wind damage previously therefore posing a hazard to operations. With the existing main workshop not in use there was an opportunity to utilise existing infrastructure to provide for a predominantly undercover belt splicing and crane operation. The initial aim was to have the works completed prior to the 2020 cyclone season.

Challenges to Overcome

Providing for a 55 tonne crane solution proved difficult. The existing gantry crane was not able to be modified due to inadequacy of member sizes and the large amount of non-associated infrastructure attached to it - built around three of the eastern columns and the runway beam.

Smarts

Limiting the scope of work to the demolition of the gantry crane superstructure meant the columns and runway beam on the east side of the existing non-associated infrastructure was able to be left undisturbed.

Project Outcome

A short study of options for a 55 tonne crane solution with a well developed lifting zone definition, and maximum lift load that did not take the lift into the "critical lift" protocols, provided the most cost effective solution of a 55 tonne portal frame crane.

Delivering Value. Delivering Results.