



engenium
smart project delivery

Flood Rectification Rail Project Design, Procurement and Construction Management

Client

Rio Tinto Iron Ore

Project Location

Pilbara Region, Western Australia.

Project Summary

In February 2009 the Western Pilbara received record rainfall from a tropical low. As a result there was extensive damage to Bridge 11 at 126 kp on Rio Tinto's Deepdale Railway. Engenium, through its Rail Project Delivery vehicle Calibre Engenium Joint Venture, was engaged to mobilise a team to temporarily make the railway safe for passage of iron ore trains as well as the Design, Procurement and Construction Management of a permanent solution.

A temporary track diversion was quickly installed, so that trains could continue to operate albeit on speed restrictions, whilst the permanent solution was engineered. This task was made more challenging because of Aboriginal heritage requirements to preserve an existing pool and to maintain an open waterway.

The solution chosen was to replace the bridge with dual 20m span corrugated steel arches, which became the largest buried corrugated arch structures installed in Australia. The solution had a significant advantage over bridges in that the installation period would have a significant time advantage and met the heritage requirements. The new structure had to be in service prior to the 2009/10 flood season.

From the time the type of structure was selected to completion and reopening of the permanent railway was eight months, and the team performed extremely well in challenging circumstances.

Engenium divested its interest in Calibre Engenium in 2010.

Want To Know More?

For more information please contact our Perth office on +61 (0)8 6460 0300, email info@engenium.com.au, or visit our website engenium.com.au.

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