

# Flood Damage Rectification Rail Project (FDRR) Fact Sheet

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### PROJECT LOCATION

WEST PILBARA REGION,  
NORTH WESTERN AUSTRALIA



### PROJECT CLIENT

RIO TINTO EXPANSION PROJECTS

### PROJECT SUMMARY

Following the extensive damage to the existing bridge 11 at 126kP on the Deepdale Line during the February 2009 floods, the decision was taken to replace the bridge with two 20m span corrugated steel arch structures. As part of Aboriginal heritage, the requirements were to preserve an existing pool and maintain an open waterway.



The arches are the largest buried corrugated steel arches installed to date in Australia and have the capacity to sustain a flood of similar magnitude that damaged the original bridge.

The upstream and downstream facing the arches are cobble stones contained in galvanised wire frames as part of the mechanically stabilised earth retaining wall system.

The total on site time was 120 days, which included tracklaying and the arches were in position to enable the temporary bypass rail embankment to be removed before the onset of the 2009/2010 wet season.

The project was completed within eight months of deciding the design solution to rectifying the damaged bridge.

The Calibre site team performed well under difficult circumstances adapting to challenges as the job progressed, while still achieving the specified end date.

### ABOUT CALIBRE RAIL

Calibre Rail is a specialist engineering and project management consultancy providing rail transport solutions to the resources and transport industry.

For further information contact Victoria Cairns on +61 8 9488 7375 or [victoria.cairns@calibrerail.com.au](mailto:victoria.cairns@calibrerail.com.au)



### CALIBRE RAIL PTY LTD

ABN 66 112 398 857

[www.calibrerail.com.au](http://www.calibrerail.com.au)

Perth +61 8 9488 7375

Brisbane +61 7 3001

6000

### Head Office

Level 11, 140 St Georges  
Terrace

Perth, Western Australia,  
6000 Australia