

Reference Project

Refurbishment

BR223 Historic Bridge Refurbishment: Hardwood corbell replacement and new walkways

Location NIMT 3km South East of Te Kuiti

Date Oct 2018 - March 2019

Client KiwiRail

Built in 1888 of wrought iron, 4 spans 106ft (32 m) lattice deck truss hot riveted together. The structure was modified in 1926 to cope with the increased rail traffic.

Abseil Access won the tender to design and strengthen the King pins in the lattice trusses then assist Kiwirail to change the wooden corbels that sit between the truss and the piers. The project also included design and build of new walkways and handrails through the 5 truss sections up to standard for modern work safe requirements.

The viaduct spanned 35m above the valley floor. The renewal and strengthening of existing structures and bridges without interruption to traffic, proves an interesting challenge. Abseil Access came up with accessing the site from a Scaffold tower up the central pier to minimize disruptions to work and train services.

Abseil Access bolted new members to the king pins and fixed temporary structural steelwork to the trusses and to the piers to allow the lattice truss to be simultaneously jacked up with four 40-ton hydraulic jacks giving sufficient clearance to replace the 250kg hard-wood corbels.

KiwiRail were particularly impressed with Abseil Access's H&S procedures and how integrated our team was with the KiwiRail staff and scaffolders.

The core project was over a 3-month period with some additional work carried out after Kiwirail completed other maintenance work.

