

REFERENCE PROJECT

Design & Build: Two suspension bridges Twin Coast Cycle Trail Far North

Location Disused rail corridor crossing the Orauta Stream nr Moerewa
Date December 2016
Client Far North District Council(FNDC)

The Twin Coast Cycle Trail is the latest in cycle trails utilising a disused rail corridor. At the Orauta stream it passes through native bush and a scenic gorge requiring two bridges. The FNDC put out a ROI for design/build of two structures to meet the cycleway requirements, Abseil Access Ltd won the tender.

The original hardwood truss structures were not able to be certified for use but could be engineered and improved to remain in position for historic interest. The cycle way crosses over the structures on a new deck independently suspended inside the truss above the rail deck. The suspension bridges have a 1.5m wide deck and are 25m and 76m long. A load capacity of 10 persons makes them suitable for groups of cyclist and walkers.

Project scope:

- Full clean of the hardwood trusses
- Inspection and engineering survey
- Removal of 30 tons of sleepers and beams
- Construction of 2 bridges using drilled anchors
- Load testing bridges for 10 person capacity
- Coating of historic hardwood with CN emulsion

The project had a tight time frame for completion before the holiday period.

The bridges are one of the highlights of the 84km cycle way that links East Coast Opua to West Coast Horeke through Kawakawa and Kaikohe.

