

Reference Project

Bridge Construction

Build & Design: Two Suspension Bridges at the Twin Coast Cycle Trail

Location Disused rail corridor crossing the Oruata Stream
North 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 Oruata stream, it passes through native bush and a scenic gorge requiring two bridges. The FNDC put out an ROI for the 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 cycleway 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 cyclists 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 cycleway that links East Coast Opua to West Coast Horeke through Kawakawa and Kaikohe.

