

## Reference Project

## Bridge Construction

### 50m Suspension Bridge on the Kawatiri Coastal Trail

**Location** Martins' Creek Tidal Wetlands, Westport

**Date** December 2020

**Client** Kawatiri Coastal Trail

The Kawatiri Coastal Trail runs along the wild Westcoast of NZ joining Westport to Charleston. This 40km trail incorporates wild coastal scenery, native bush and wetlands. Martin's creek is a small tidal estuary and wetland area and will become a popular picnic and rest area on the new trail.

The work included:

- Design and engineering of the bridge with a load capacity of 10 persons
- Width of 1500mm and suitable for cyclist passing both directions and meeting the NZ cycle trail code grade 2.
- Fully corrosion resistant components throughout including 316 stainless steel main cables
- Aesthetic design and integration into the environment.

Abseil Access won the tender to design and build this unique structure working alongside the trail and boardwalk build team Westreef. Access to the site is complicated by the tidal nature of the surroundings and the sensitive wetlands.

Main cable anchors are concrete deadmen buried in the soft ground. Concrete was poured using a helicopter. The 20mm IWRC 316 stainless steel main cables support 10 tons of deck as well as a potential 120kN live load.

All fasteners, plates, dropper cables and wind cables are 316 stainless steel and all timber is H4 treated to meet a design a life of 25 years minimum in a harsh coastal environment.

