



Matakohe Bridges Replacement Project



Three kilometres of State Highway 12 and two single-lane bridges (Anderson and Hardies) have been replaced by a 2.5km road and two new two-lane bridges.

This project has been delivered on behalf of the government by the NZ Transport Agency, WSP Opus and the contractor, Fulton Hogan at a cost of \$26 million.

Over 500 people have been inducted onto this project since it began. To be inducted means you have completed the health and safety training necessary before you can go out onto the site.

Construction began in January 2018 and the full length of the new road will be open to vehicles by May 2019. Landscaping and other minor works will continue through the 2019 winter.

Bridge No. 1 Te Ao Marama Hou facts

- Replaces single lane Anderson Bridge and is two lanes.
- Spans Parerau Stream and is 54.8m in length.
- At its highest point, it is approximately 6m above the stream
- Two spans each made up of four concrete, supertee beams.
- Is designed to support 48 tonne overweight vehicles.
- Each beam weighs 55 tonnes and is 27 metres long, with a total beam weight of 440 tonnes.
- The piles which support the abutments go up to 31 metres underground.
- Matakohe Bridge No.1 is designed to resist up to 300 mm ground movement from the Parerau Creek landslide during a major earthquake.
- The total weight of steel is 134 tonnes and concrete is 1152 tonnes.

Bridge No. 2 facts

- Replaces single lane Hardies Bridge and is two lanes.
- Spans Matakohe River and is 191 metres long.
- At its highest point, it is approximately 15 metres above the river.
- Six spans, each made up of five concrete, supertee beams.
- Each beam weighs 55 tonnes and range between 29.5 and 31.5 metres long, with a total beam weight of 1650 tonnes.
- The piles and columns supporting the piers and abutments are up to 30 metres long, including up to 12 metres into limestone rock.
- Is designed to support 48 tonne overweight vehicles.
- The Western Causeway was built up, undercut by two metres and then built up 15 metres using limestone from the local quarry as structural fill.
- The total weight of steel is 369 tonnes and concrete is 3670 tonnes.
- Matakohe Bridge No. 2 is the longest supertee bridge in Northland, consisting of 30 supertee beams.

Earthworks facts

- 2.5km realignment made up of 34,000 tonnes of aggregate rock.
- 3000m² rock revetment (armour)/coastal rock protection.
- 200,000+m³ (35,000 trucks loads) of material cut (excavated) to maximum cut of 12 metres deep. All cut to waste material is being used on site.
- 95,000 m³ (16,500 truck loads) of limestone fill (building up from existing ground level) to maximum height of 15 metres, and 10,000m³ of imported aggregate from the local Hukatere Quarry used for CMA granular fill.
- New alignment cuts through two existing landslides which have been stabilised by excavating and backfilling with shear keys – a soil strengthening solution.
- 175 metres of culverts, over 6000 metres of subsoil drains and over 2000 metres of horizontal bored drains will be installed.
- 90,000 m² of topsoil has been stripped and re-spread.
- 25,000 plants to be planted on batters as part of landscaping.