Taparahi Bridge (New Zealand)

Project description

State Highway 25A on New Zealand's North Island suffered severe damage during a major storm at the end of January 2023, with a section of length 120 m being completely washed away.

Due to the road's critical function in serving the communities on the Coromandel Peninsula – any detour involving a much longer journey – the highway reinstatement work had to be undertaken as a matter of great urgency.

Following consideration of the options, it was decided that the best and quickest way to reopen the road was to construct a new bridge to span the gap. Site investigation work, including taking and evaluation of core samples, assisted in coming to the conclusion that a three-span, 124 m-long bridge would be the best solution.

mageba scope

The fabrication and construction of the structure was carried out in record time, with work ongoing around the clock. With quick design and construction of the main steel-and-concrete structure, the rapid re-opening of the road connection depended on the accelerated supply of the bearings needed to support the superstructure and of the expansion joints required to bridge the movement gaps at each end.

This is where mageba stepped in. It designed and fabricated these key structural elements and delivered them to site quickly enough to avoid slowing down the construction programme.

While the RESTON®SPHERICAL bearings were fabricated at mageba's factory in Australia, the TENSA®GRIP RS joints were manufactured at the company's facility in Shanghai, requiring the use of air freight to minimise the transport time.

Highlights & facts

mageba products:

Type:	RESTON®SPHERICAL bearings
	TENSA®GRIP RS joints
Installed:	2023

Structure:

Region:	Coromandel Peninsula
Country:	New Zealand
Length:	124 m
Owner:	Waka Kotahi NZ Transport Agency
Contractor:	McConnell Dowell and Fulton Hogan JV
Designer:	BECA

The bridge is located on New Zealand's North Island, on the Coromandel Peninsula

One of the new RESTON®SPHERICAL bearings installed to support the bridge's superstructure

Installation of a TENSA®GRIP RS joint at one end of the new bridge

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