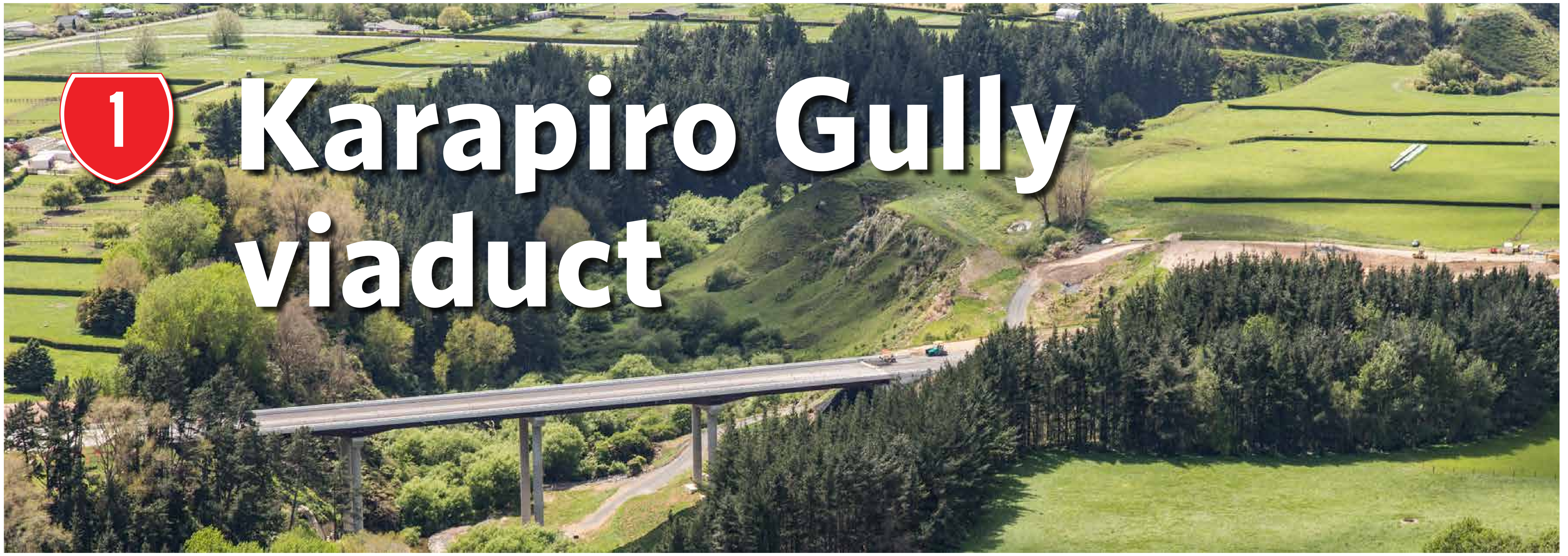


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Karapiro Gully viaduct



The facts

- 200m long, 40m high and 23m wide
- 3 piers and 4 spans
- 1100 tonnes of structural steel
- 1,185 cubic metres of concrete
- Total weight of concrete deck is approximately 2,960 tonne
- 23,000 bolts used for this bridge
- Only weathering steel bridge on the project - weathering steel reduces the need for maintenance or need to paint the bridge every 40 years

Precast deck panels were then placed on the beams, steel reinforcing put down and 150mm of concrete poured on top of this.

Steel beams ranging from 10m to 30m long were lifted onto the columns using 280 tonne crane with assistance from a 150 tonne crane for the more difficult lifts.

Columns were constructed on top of the piles using steel tubes, filled with reinforcing and concrete.

Sept 2013. A heavy duty access track was built to gain access to the bottom of the gully.



To complete the bridge, the road surface (pavement) was laid, bridge barriers attached, wire rope barrier installed and road marking painted.

Special working platforms were built and hung from the beams to allow men to bolt the beams in place.

A truck and jinker transported the steel beams to site. Note the size of this beam in comparison to the vehicle in the middle.

Piling work started. 64 piles were driven into the ground, the deepest being 63m.

FROM THE GROUND UP

