

6x Council Bridges Great Lakes Council



Client: Great Lakes Council
Value: \$880K
Completed: August 2015

BOORAL ROAD BRIDGE AND MONKERAI ROAD BRIDGES (x2), BOMBAH POINT ROAD BRIDGE AND MANNING HILL ROAD BRIDGES (x2). THIS PROJECT IS A TOTAL OF 6 BRIDGES: 2X SINGLE LANE T-BEAM BRIDGES; 1X DUAL LANE T-BEAM BRIDGE; 2X SINGLE LANE PLANK BRIDGES; AND 1 DUAL LANE PLANK BRIDGE.

THE PROJECT

VEC excels in providing cost efficient design solutions and rapid on site construction, with minimal disruption to road users. This project was a classic example of how this can be executed.

The structures were designed so that they require minimal maintenance throughout the design life. The site surrounds at each bridge were examined to ensure the most economical solution was determined.

Pre-casting of the substructure panels and pre-cast deck planks were completed at VEC's head office pre-cast facility located in Ulverstone, on the north coast of Tasmania, in accordance with RMS Specifications. Pre-cast units were then shipped on semi-trailer to Melbourne, where they then continue by road to the sites in New South Wales.

Subsequent to approval of VEC's Contract Management Plan including HSEQ plans, the site was established using the approved Traffic Management plans.

Pile driving was conducted with VEC's 30 tonne excavator mounted hydraulic pile driving attachments, driving steel piles to the required load. Following pile driving, the existing structure was removed and new abutments constructed over the driven piles.

Succeeding abutment construction, the new deck planks were lifted into position and secured down to the substructure. The deck planks had armco barrier posts pre-fitted, to allow

subsequent installation of the safety barrier railing once the planks were position.

Once the planks were in position, the abutments were backfilled with a free draining aggregate to the subgrade level. The bridge approaches were then completed by Council.

The VEC team faced many challenges on this project, including the incredible storms and floods that occurred throughout New South Wales in the duration of construction. This has made it challenging to complete the scheduled program, with multiple changes and the crew often needing to relocate to another construction site last minute. The floods not only caused headaches for the replacement of these bridges, but it had a huge impact on the local community.

The bridges were replaced with limited disruption to the local stakeholders.

