

Project Profile

Kennedy Highway Reconstruction and Rehabilitation Project

Extensive highway reconstruction and rehabilitation works to repair cyclone damage in Far North Queensland

PROJECT DESCRIPTION

In the wake of Cyclone Yasi in 2011 and Cyclone Oswald in 2013, Highway Construction was engaged to provide rehabilitation and reconstruction works to the Kennedy Highway, located approximately 100 km south-west of Cairns.

Highway Construction was awarded the contract under the Transport Network Reconstruction Program and National Disaster Relief and Recovery Arrangements (NDRRA) – a joint Federal and Queensland Government initiative committed to rebuilding flood-damaged roadways.

The project involved the remediation of approximately 12km of cyclone-damaged embankments and roadways over four sites, along the main arterial road between Ravenshoe and Atherton. It also included the reconstruction of two intersections.

Minimising impact on motorists and the local community required extensive planning and coordination with the client, local authorities, local stakeholders, and specialist subcontractors in the region. Local workers and industry were also engaged as a matter of course throughout the project.

Highway Construction's extensive experience in delivering major rural road projects ensured the successful delivery of the project prior to the funding deadline, and to the high specifications and standards set by the Department of Transport & Main Roads, Queensland.

This was achieved despite experiencing over three metres of rainfall during works.

KEY COMPONENTS

The scope of works included:

- road widening to current 8 metre standards;
- clearing silt and debris;
- extension/replacement of culverts;
- reshaping and rock armouring table drains;
- subgrade treatments;
- insitu stabilised pavements;
- unbound pavements; and
- bitumen sealing and earthworks to correct vertical grades required to meet current design standards.

CONTRACT

PEND-1635, Road
Construction Contract

CLIENT

Department of Transport
and Main Roads, Far North
Queensland Region

LOCATION

Ravenshoe, Queensland

TIMEFRAME

May 2013 – June 2014

PROJECT VALUE

\$15 million



Works also included excavation and geotechnical stabilisation of an earth cutting slope adjacent to the road to remediate the effects of a recent landslide. This was achieved by drilling and grouting soil nails and rock dowels and restraining the surface using high tensile steel netting and erosion control matting. This has also significantly improved safety and driver visibility for oncoming traffic.

SPECIAL FEATURES AND CHALLENGES

- The project represented the first successful tender awarded to Highway Construction by the Department of Transport and Main Roads, Queensland.
- Works were undertaken over a total of 12km of roads in four areas, separated by 20km, which required detailed planning and resourcing of multiple work crews.
- An extensive traffic management plan was a key element of the project. Traffic consisted of heavy vehicles and tourist traffic in an area where the posted speed is 100 km/h. Traffic management included contraflow traffic control and the use of temporary traffic signals overnight in extreme weather conditions. A road closure was successfully implemented to facilitate acceleration of works.
- The project experienced a cyclone during construction.
- Work were undertaken during the wet season in a high rainfall environment. Above average rainfalls were also recorded for most months over the project duration, including over 3m in 12 months.
- Works took place not far from the environmentally sensitive Wet Tropics World Heritage Area, requiring the implementation of best practice environmental management.
- Zero Lost Time Injuries were recorded for the project.

A high level of local content also ensured the project helped toward rebuilding the community, while fixing infrastructure and restoring regional economies.

