



MANAWATU GORGE SLIP REMEDIATION REMEDICATION OF MAMMOTH SLIP CLOSING HIGHWAY FOR OVER A YEAR

MANAWATU, NEW ZEALAND



A VERY DIVERSE AMOUNT OF GROUND ENGINEERING TECHNIQUES WERE APPLIED

PROJECT OVERVIEW:

A very large landslide affected the Manawatu Gorge with the first failure and subsequent road closures occurring in August 2011. The initial failure measured approximately 50m high by 100m wide.

A much larger failure occurred in late September which measured approximately 200m wide and 300m high. The final volume of material removed from the site was approximately 370,000m³.

Numerous contractors including Geovert Ltd, HEBs, Higgins Contractors, Richardson's Drilling, Morris and Baileys, McIntosh Bros and Goodman Contractors worked under the expert guidance of MWH Ltd and BBO to reinstate the highway and make the route safe.

SOLUTION:

Geovert were commissioned directly by NZTA under the management of MWH for all slope stabilisation and drilling work completed on site. The work included installation of a Geobrugg Deltax mesh drape, installation of horizontal inclined drainage holes, stabilisation of the western colluvium slope and installation of a 500 kJ Geobrugg attenuator, 140m long, 4m high, 30m above road level which is that largest in the southern hemisphere.

Slope stabilisation works included over 2200 lm of drilling. Geovert's contribution to the reconstruction of the highway included over 1200 lm of drilling including installation of anchors on the abutment of Bridge 8 (complete new build), stabilisation of the Bridge 8

Abutment D potential/slow moving wedge failure, and installation of seismic strengthening anchors for Half Bridge 7 and Half Bridge 9.

Services related to this project

- Micropiling
- Injection Grouting
- Rockfall Drape Mesh
- Rockfall Protection Barriers
- Post Tensioned Ground Anchors
- Soil Nailing
- Drill & Blast
- Drainage Drilling
- Active Slope Stabilisation
- Geotechnical Investigation

More information is available online at www.geovert.com