

## REFERENCE PROJECT

### Geotechnical - Rockfall Protection

Location: Mt Victoria Tunnel, Wellington  
Date: April-August 2015  
Client: Wellington City Council and NZTA  
Consultant: Memorial Park Alliance (MPA)

The Mt Victoria Tunnel, opened in 1931, required major upgrade work including seismic strengthening to increase its operational life. Memorial Park Alliance, who completed the construction of the Pukeahu National War Memorial Park, oversaw the upgrade work. Abseil Access was awarded the slope stabilisation work required at both tunnel portals. Value of the contract was \$680k.

In order to keep the tunnel open for the 45,000 vehicles that use it every day, most work had to be completed at night, and often working on both portals simultaneously. Due to noise restrictions in the urban area drilling had to be completed in daylight hours.

#### Works required:

- Excavation above the tunnel apex with new drainage system installed.
- Installation of electrical conduit for future traffic signals.
- Removal of all loose concrete and vegetation from the existing shotcrete surface.
- Installation of over 200 rock bolts in critical areas.
- Waterblasting clean all existing shotcrete.
- Application of 3000sqm of new synthetic fibre and steel fibre re-enforced shotcrete with a dark tint up to 250mm thick.
- Drilling of drainage holes.

All aspects of the project were closely monitored by the MPA team who ensured the highest quality was achieved with minimal disruption to the traffic and local residents.

The work was completed within the allocated time and under budget.

