

BOSS APPROACH TO ROCK WORK

Waka Kotahi NZ Transport Agency's Northland team has taken a novel approach to road maintenance, using a milling machine to clear hazardous material off rock faces in the Brynderwyns Hills on State Highway 1.

Northland system manager Jacqui Hori-Hoult says the resilience of this stretch of road during bad weather is a year-round problem.

"The problem was how to clear away loose and unstable rock that could easily be dislodged off the rock face by weather events. The risk is that it falls on to passing vehicles or even causes a slip that blocks the road and stops traffic, which we have experienced on SH11 Lemons Hill," she says.

"Usual practice would be to sluice the loose material off with water or send an abseiler down the rock face to knock it down, but both methods have health and safety and environmental issues. To reduce these, our contractors suggested putting a milling machine on the end of a long-reach digger.

"That required some adjustment to the hydraulics on the arm, but they tried it out in a quarry, and it worked pretty well."

"So we used it this month for the first time on two 20-metre sections of SH1 on the south side of the Brynderwyn Hills. While we monitor and carry out regular preventative work this innovative solution will help to

minimise the safety risk from rock frittering and may reduce our maintenance.

"Heavy-duty milling machines are used in new road construction, but we think this is

the first time a lightweight milling machine has been used in this way for maintenance. It was quick, safe, and cost-effective and we'll likely use it again."

The milling operation took place over two nights at two sites with stop/go traffic management in place to keep both the maintenance team and road users safe.

The AQ-3 Antraquip Milling head used for this project was supplied by Boss Attachments NZ Ltd and managing director Paul Herbison was involved at every stage of the successful project.

"To date, Antraquip heads have been used at a wide variety of New Zealand projects, which have successfully cut and milled concrete, greywacke, blue basalt, hard blue sandstone, and stabilised road pavement," he says.

During the last 40 years, Antraquip has been involved with some of the most impressive, challenging, and rewarding rock-cutting projects on the planet with some models able to operate north of 200Mpa in igneous rock. ■

For further information, visit bossattachments.co.nz or contact Paul Herbison on 027 290 8306.



The milling machine in action on the Brynderwyn Hills on SH1 with workers clearing the dislodged rocks from the road



The milling machine on the modified long arm of a digger