

# CASE STUDY

## SH6 DELLOW BLUFF

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## INTRODUCTION

The project took place on SH6 Murchison between June 2022 and March 2023, with Abseil Access engaged by the client and working alongside consultant WSP. Following a rockfall event during heavy rain, Abseil Access was tasked with carrying out initial investigation works and collaborating with WSP to develop a mitigation strategy for the bluff.

## PROCESS

The scope of work included geotechnical investigation of sandstone features above a mudstone cliff, scaling of loose material, and removal of 188m<sup>3</sup> of rock through drilling and blasting to reprofile overhanging features and reduce the number of rock bolts required. "Pull out" testing was conducted to confirm rock capacity up to 660kN, after which 280 six-metre rock bolts were installed to secure two sandstone bands, with 10% of production anchors acceptance tested.

During the scaling phase, Abseil Access developed blast plans to minimise back break in the sandstone while reducing disruption to road users by conducting blasting during two-hour closures from 6–8pm. Due to rockfall hazards at road level, all materials were heli-lifted above the site. To maintain production rates, two suspended drill rigs were utilised to drill a total of 1680m for anchoring.

## OUTCOME

The works were successfully completed in line with the engineer's design and safety requirements. The mitigation measures significantly reduced the risk of further rockfall, ensuring the long-term stability of the bluff and improved safety for road users along SH6.

