

3.3 BLUFF ROAD UPDATE



TO:	Mercury Bay Community Board
FROM:	Lorenzo Canal, Programme Manager
REPORT DATE:	4/04/2024
MEETING DATE:	17/04/2024
RECOMMENDED ACTIONS:	Receive (information only)

1 PURPOSE | TE TAKE MŌ TE PŪRONGO

The purpose of this report is to update the Mercury Bay Community Board on the Bluff Road, Kūaotunu West closure with a geotechnical assessment and remediation concept report prepared by ENGEO (**Attachment A**) and an associated budget cost estimate.

2 EXECUTIVE SUMMARY | WHAKARĀPOPOTOTANGA

Bluff Road is a coastal road that connects Rings Beach and Matarangi on the Coromandel Peninsula, but it has been closed to vehicle traffic since 2016 due to the risk of rockfalls and erosion.

As an outcome of a Community Board Workshop (26 July 2023) discussing the potential options, it was agreed to undertake a geotechnical assessment and a costed remedial design to address the slip hazards that would allow reopening of the road as a shared path for pedestrians and cyclists.

The project currently has no identified funding in the annual plan or Long Term Plan (LTP), however during the July 23 workshop, the Matarangi Residents and Ratepayers Chairperson expressed interest in potential project funding, management and construction with the primary objective of safety re-opening the road for cycling and walking. Staff intend to send the report immediately after the meeting for information to both the Kūaotunu and Matarangi Residents and Ratepayers Associations.

The ENGEO's geotechnical assessment and remediation concept for Bluff Road report provides a summary of the site conditions, geology, landslide hazards, and proposed remediation measures for a portion of Bluff Road, Kūaotunu West, that is currently closed due to rockfall risk.

The report describes the results of a desktop study and site observations carried out in December 2024, which identified the site geology, and the main failure mechanisms of slip 2 as planar sliding, toppling, and wedge failure. The report also reviewed previous publications and reports on the site and its history of landslides.

The report outlines the concept design methodology and assumptions for the proposed anchor and mesh system to reduce the likelihood of large-scale rockfall at 'Slip 2'. The design is based on stabilising a large block that poses a significant hazard with rock anchors and mesh. A concept design drawing is provided in the appendix of the report. The report also lists the indicative hold points and maintenance requirements for the system.

The report provides a preliminary risk assessment for the other identified slips along the trail, using

the Department of Conservation / Geological and Nuclear Sciences risk assessment guide. The report also suggests some risk reduction measures, such as scaling, sluicing, signage, and monitoring. The report recommends further work for the detailed design and construction of the 'Slip 2' improvements, and the consideration of risk reduction measures at 'Slip 1a' and elsewhere along the trail.

The report and concept design has been provided to an experienced contractor to provide indicative pricing for budget purposes. The estimate for the physical works is around the \$1.8m - \$2m excl. GST mark. This is dependent on the detail design and extent of the scaling involved and how far it is necessary to go with making the track safe outside of Slip 2 and Slip 1B. The works rough order of cost estimate is summarised as follows:

Mobilise to site and temporary works to enable rope access set-up	\$90,000
Trial anchors	\$25,000
Supply and install anchors	\$1,375,000
Acceptance testing	\$10,000
Supply and install G65/4 TECCO Mesh	\$150,000
Scaling (rough budget, dependent on extent)	\$250,000

For fund raising purposes, in addition to the works costs above, an allowance of 10% for engineering and consent fees and a 15% contingency would be prudent. Therefore, a rough order cost estimate of \$2,262,500 excl GST is suggested based on the geotechnical assessment and concept design.

3 RECOMMENDATIONS | TE WHAIKUPU

That the Mercury Bay Community Board:

1. Receives the 'Bluff Road Update' report dated 4 April 2024.

ATTACHMENTS

1. Attachment A - ENGEO - Geotechnical Assessment and Concept Report