

22 April 1999

Laurie Richards
Rock Engineering Consultant

s 7(2)(a) - Privacy

Dear Laurie

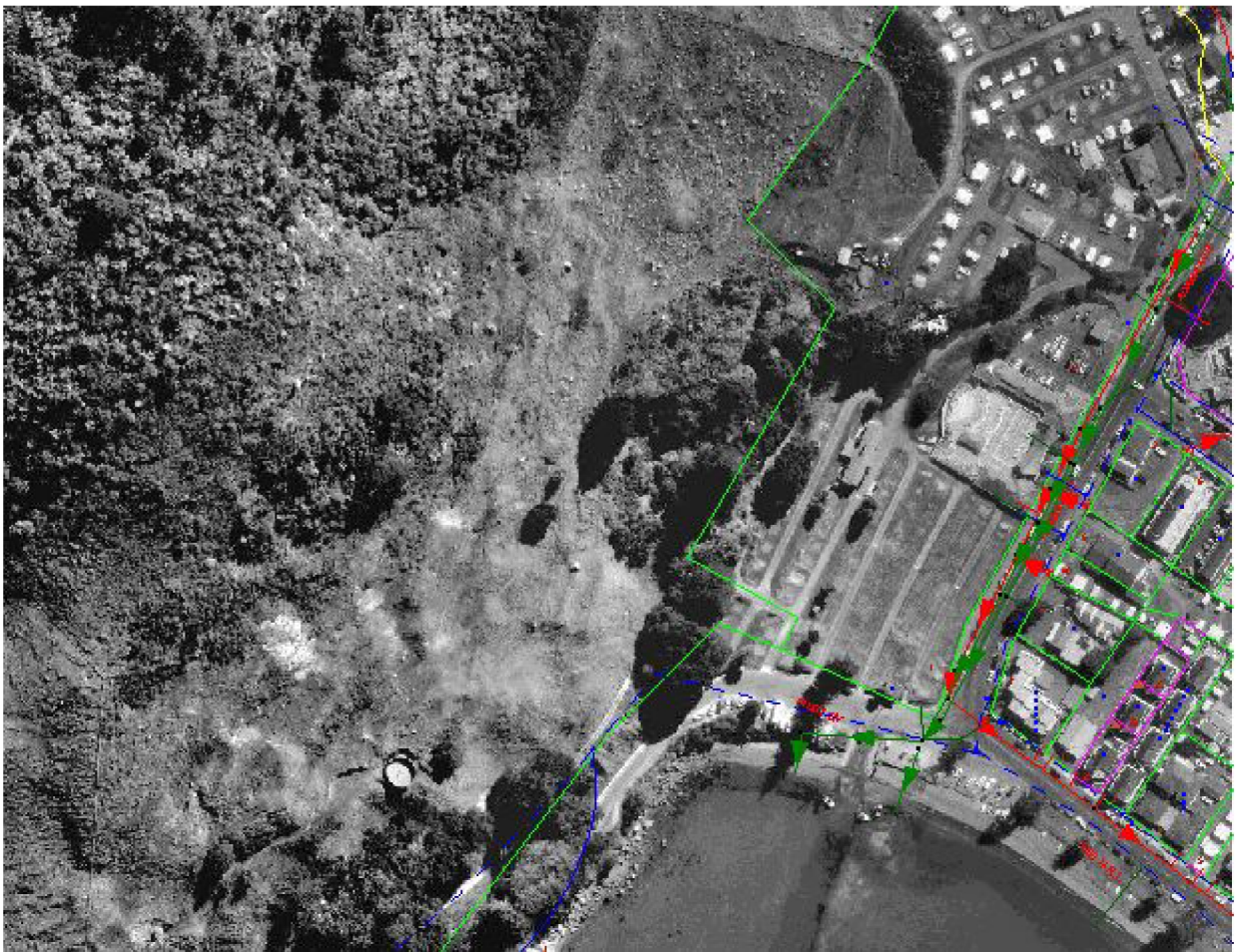
MAUAO STABILITY ASSESSMENT

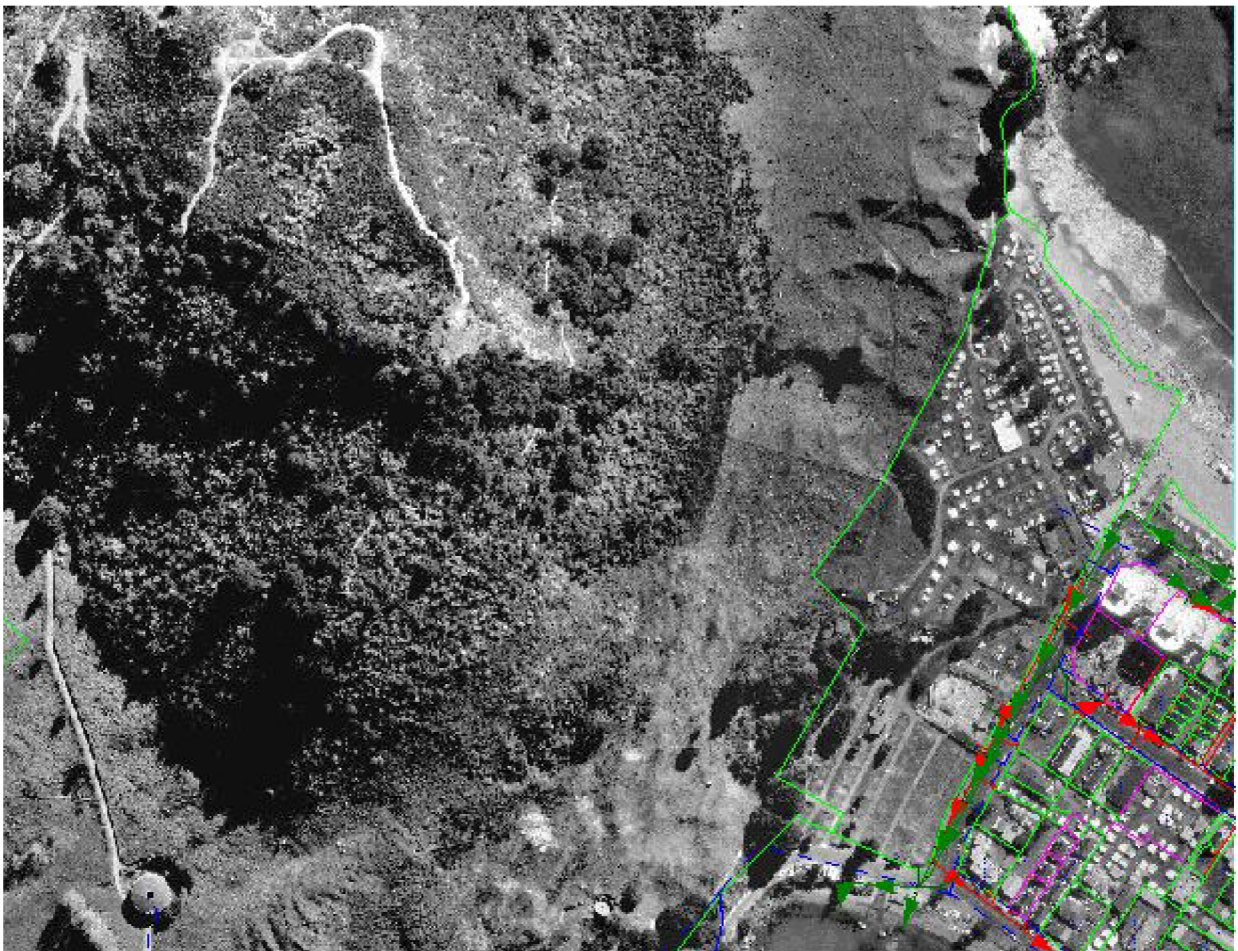
Find attached copies of comments from s 7(2)(a) - Privacy regarding the draft report on the above study.

My comments for you information are as follows.

- Page 1, the Council Contract # is 1880-10-99.
- Page 2, see comments from s 7(2)(a) - Privacy as related to Sea Level changes over the last 6,500 years and the possibility of mapping the positions of the springs mentioned in the text to show any correlation to the spring level and the top of the existing slip faces.
- I have attached the following pictures that maybe of use in displaying the above as well as the Hot Pools and the Motor Camp in relation to the main slip features.
- Section 2.3 paragraph 3 – do you have an opinion as to the age of the landslide features?
- Section 2.3 Para 5 – did the rainfall intensity relate to a significant AEP storm? And was the significant storm and rainfall experienced around 10 June 1998 when we experienced two large failures relating to the water catchment areas significant in saturating to the stratigraphy so that even a minor rainfall event may have tipped the scales and activated the minor slide?
- Section 3.2 para 4 – within the sentence finishing “..... resting against the wires.” Insert at the end the reference to the relevant figure.
- Section 3.3 second bullet point – what is the potential for a high speed debris flow to occur from the mechanism described? And if it did occur, what is the potential threat/risk to the camp/hot pools?
- Page 6, 1st para – do these damaged frontal lobes require remediation?
- Page 7, 4th bullet point – to provide the average reader with a sense of the conservatism built into the simulation runs can you quantify what the possible velocity may be for a boulder in, say, an event such as the Edgecumbe earthquake?

- Laurie, it maybe of benefit to see if at the end of paragraph 2 on page 7, the text on risk probability be placed into a separate section entitled "Risk Probability Analysis from Boulder Fall". What do you think?
- Can you put together a table of definitions explaining what the various terms mean within the risk section and Appendix A. Both [REDACTED] and I feel that it will be a portion of the report given most attention and therefore would benefit from more explanation of the terms used, phraseology and possibly an explanation within Appendix A on how the equations are formed and used.
- Did you run a risk analysis for a stationary person on the upper tracks?
- Within Table 2, I found it difficult to quantify/visualise exactly what the numbers in the table meant. Can you clarify this for me so that if asked, I can clarify it for others?





- On tables 3 and 4 can you clarify the expressions for our reference (i.e. P(L:T)?
- Section 5 point 2 – with regard to your comments relating to potential debris flows, would it be prudent that if there is a significant/non significant potential for this to occur that it also be addressed with the comments on boulder fall potential?

I would appreciate that prior to undertaking any alterations/amendments, we discuss your impressions of our feedback by phone.

I believe this to be a well compiled report and commend you for it.

Please don't hesitate to contact me should you require further assistance.

Yours sincerely

§ 7(2)(f)(ii)