

20 November 2025
Job No: 1095111.0000

ACG Properties Limited
34a Wyndham Street, Papanui,
Christchurch 8053

Attention: Connor Magides

Dear Connor

Punakaiki Wild, State Highway 6, Te Miko, Punakaiki

Geotechnical responses to Section 92 request for further information

1 Introduction

Tonkin + Taylor Ltd (T+T) was engaged by ACG Properties Limited to prepare geotechnical responses to the Section 92 request for further information (RFI) for the development at 4663 State Highway 6 (SH6) at Te Miko, Punakaiki.

We understand that following T+T's delivery of the Perpendicular Point Natural Hazard Desktop Assessment¹, and ACG Properties' resource consent application, a RFI was received from Buller District Council on June 25 2025². The RFI contains three geotechnical-related questions (points 5, 7 and 8) requiring response from T+T. These responses were prepared in accordance with Variation Order 1 (VO1) dated 25 August 2025³.

2 Background

The Natural Hazard Desktop Assessment¹ identified four different hazard areas, including:

- Falling debris hazard
- Gully hazards
- Cliff erosion hazard
- Undermined cliffs hazard

For each hazard area, the risk level of each geotechnical consideration, as well as concept-level management measures and general geotechnical development advice were provided.

3 RFI Responses

Table 3.1 below set out the RFI questions and our response to each point.

¹ T+T (March 2025). Perpendicular Point – Natural hazard Desktop Assessment Version 2. T+T reference, 1095111.0000.

² Buller District Council (June 2025). Request For Further Information – RC240079 – 4663 State Highway 6, Te Miko, Punakaiki.

³ T+T (2025). Variation Order – VO1. Punakaiki Wild, State Highway 6, Te Miko, Punakaiki. Geotechnical responses to Section 92 request for further information. Ref. 1095111.1000

Table 3.1: T+T responses to RFI submissions

RFI Summary	Response
<p>5. Further to the above, provide a geotechnical assessment of the potential slope stability and stormwater effects on SH6 associated with any upgrade of the vehicle crossing and removal of vegetation to increase sightlines along the property boundary with SH6.</p>	<p>We understand that road widening in the downslope direction will be required to accommodate an upgrade to the vehicle crossing. Following the RfI, a memorandum by East Cape Consulting⁴ recommended a right turn bay instead of a Diagram E NZTA design as less widening will be required – approximately 2-3 m instead of 5-6 m. Either option may require either an earth embankment or retaining wall downslope of the road.</p> <ul style="list-style-type: none"> • Accordingly, the proposed upgrade to the vehicle crossing does not include upslope earthworks, therefore upslope stability of the existing road will be unaffected by the proposed works. • Regarding the downslope fill placement for road widening: <ul style="list-style-type: none"> – Long term stability: An earth embankment or retaining wall of the dimensions and location proposed downslope of the road will not reduce the slope stability of the road in the long term. – Short term construction management: Short-term stability risks during construction will be managed through a detailed construction methodology developed during the detailed design phase. The methodology will likely incorporate staged excavation and backfilling in short sections (e.g., 10 m lengths). It will likely also require that vegetation clearance be carefully sequenced with the earthworks to limit any adverse effects on slope stability (e.g. due to longer term effects such as erosion or root decay).
<p>7. Provide further comment from the engineering geologist on whether the proposed location of the cabins, particularly that within the TTPP coastal setback, are supported, and whether there will be any adverse effects from construction on the stability of the cliffs and identified sea caves.</p>	<ul style="list-style-type: none"> • T+T has undertaken an assessment of the cliff erosion hazard for the proposed development. This provides a detailed site-specific hazard delineation, which is considered more precise at the site-scale than the regional-scale TTPP coastal overlay. Accordingly, the currently proposed cabin locations which are within the TTPP are supported from a geotechnical coastal slope hazard perspective (both in terms of the buildings affecting the cliff, and vice-versa) provided that: <ul style="list-style-type: none"> – Cabins are located outside the T+T-mapped cliff erosion and undermined cliff hazard areas; – Discharged water is conveyed using the existing gully systems; and – Measures and consent conditions detailed in the RFI No. 8 response are adhered to. • For any cabins where the currently proposed location is within the T+T-mapped cliff erosion or undermined cliff hazard areas, the location should be shifted inland to avoid the cliff hazard area. In some cases this may require cabins to be located within the T+T-mapped gully hazard areas, however this is preferable to being within cliff hazard areas and can be managed with engineering design. Any cabins located within gully hazard areas should be located near the slope crest, to avoid flooding and debris flow hazard at the base of the gullies. At the slope crest localised slope stability risks can be effectively managed using standard engineering solutions (such as piled or robust shallow foundations and discharging drainage at the base of the slopes) – the specific engineering details will be confirmed during detailed design.

⁴ East Cape Consulting Limited (2025). Memorandum 4663 State Highway 6, Punakaiki Development, Access Options Design Statement

RFI Summary	Response
<p>8. Provide further specific analysis and details of how the “concept-level management measures and general geotechnical development advice” detailed on sheets 5, 6 and 7 of the Natural Hazard Assessment Version 2 will be addressed to ensure that the risk level is reduced to an acceptable level, or whether these measures are not necessary due to the proposed locations for development. Where, in the opinion of the engineering geologist, any unacceptable level of risk remains, provide details of/confirm the measures that will be undertaken to reduce the risk to an acceptable level, including via proposed/volunteered consent condition wording if relevant.</p>	<ul style="list-style-type: none"> • The development layout has been planned to avoid the identified hazard areas where practicable, which is the primary risk mitigation measure. • Where buildings and access routes are located within hazard areas, the concept-level measures identified in the Natural Hazard Assessment will be developed into specific, engineered designs. This will follow a standard process: <ul style="list-style-type: none"> – Site-specific geotechnical investigations to inform the design. – Detailed design of earthworks, foundations, drainage, and any required mitigation works. – Construction observation by a qualified geotechnical professional to confirm the works are completed in accordance with the design. • The following consent conditions are considered appropriate to ensure the above measures are implemented: <ul style="list-style-type: none"> – Condition 1: All buildings shall be located outside the 'cliff erosion hazard area', 'undermined cliff hazard area', and 'falling debris hazard area' as delineated on Sheets 3 and 4 of Tonkin + Taylor Perpendicular Point Natural Hazard Desktop Assessment Version 2¹. – Condition 2: All buildings, earthworks, and drainage infrastructure shall be designed and constructed to avoid materially increasing the natural hazard risk on the site or adjacent properties, including during construction.

4 Applicability

This report has been prepared for the exclusive use of our client ACG Properties Limited, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

We understand and agree that our client will submit this report as part of an application for resource consent and that Buller District Council as the consenting authority will use this report for the purpose of assessing that application.

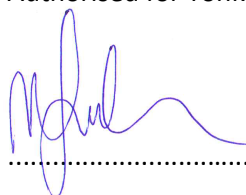
Tonkin & Taylor Ltd

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21-Nov-25

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