

SUMMARY EVIDENCE OF RICHARD JUSTICE ON BEHALF OF D. J JONES FAMILY TRUST AND N. R SEARELL FAMILY TRUST

INTRODUCTION

1. My full name is Thomas Richard Justice. My qualifications and experience are set out in my Evidence in Chief (**EIC**).
2. This Summary of Evidence sets out the key points within my EIC.
3. This summary also sets out an amended version of Condition 7(I) in the Draft Conditions of Consent attached as Appendix A to Craig Barr's evidence, following a further review of this condition after my initial evidence was lodged.

SUMMARY OF EVIDENCE

Geotechnical Assessment

4. I initially prepared a Geotechnical Assessment Report for the proposed subdivision dated 2 December 2021. A copy of my final report, dated 24 May 2022, is appended at Appendix A of my EIC. There is only a very slight change between the two documents and involves the correction of a cross-refencing error.
5. My Geotechnical Assessment included a desktop review of geological data, historical aerial photographs, the Otago Regional Council hazard database, a site walkover assessment and shallow subsurface investigations.
6. Much of the subdivision is underlain by lake clays and associated sediments of the Bannockburn and Dunstan Formations, with Otago Schist as the bedrock. No active fault traces were found nearby, groundwater is deep, making liquefaction unlikely, and the site is not prone to rockfall or rapid landslide hazards.
7. Field investigations undertaken as part of my investigation included engineering geological mapping, logging of test pits and soil exposures, and hand auger investigations with Scala Penetrometer testing. Some evidence of land instability was found in isolated lots, including soil toppling/cliff collapse and shallow landsliding.

8. As part of my assessment, a constraints map was created based on site geology, geomorphological conditions, and site steepness. The map categorises the level of development risk into five classes, with most lots in Class 1 (relatively low risk). Lots 15 to 20 located on the eastern side of the subdivision fall into risk classes 2-3 due to steep slopes and potential instability.
9. Based on surface observations and investigations described I consider that there is evidence of shallow landsliding on Lot 18, likely involving the displacement of shallow colluvial soil over rock, making this lot Class 3.
10. Lots 1 to 9 are near, but not on, areas assessed as Class 5 (relatively high risk). This class represents the very steep slopes associated with historical sluicing.
11. Based on my Assessment, I consider that the subdivision is suitable for development with a recommendation for Lots 15 to 19 to follow good engineering practices for hillslope development, including subsoil drainage, minimal cutting and filling, proper water disposal, and engineered retaining walls, if these are required. Specific engineering design is required for Lot 18's house foundations, and a foundation setback zone is needed along the western side of Lots 1 and 9.

Response to Submissions

12. I note that Mr James' submission¹ opposes the application, citing reasons related to 'extreme' slope gradients and challenging geology. I disagree with the claim that the slopes are extreme, as I consider that good engineering practices can address these issues, and that the geology is typical for the Central Otago region.
13. Mr James' submission requests a peer review to assess the practicality and appropriateness of the sites. While I consider that while a peer review is not necessary, I would welcome one if deemed necessary.

UPDATED DRAFT CONDITIONS OF CONSENT

14. Following lodgement of my initial evidence, I have further reviewed and updated the draft conditions of consent attached as Appendix A to Mr Barr's evidence.

¹ Submission number 06

15. I have updated Condition 7(I) which states that (relevant to slope stability):

Pursuant to Section 221 of the Resource Management Act 1991, consent notices must be prepared for registration on the records of title the following ongoing conditions:

...

I) The subdivision development design and implementation shall observe the recommendations of the ENGEO geotechnical report titled Geotechnical Investigation - Lot 4 Water Race Hill, Bannockburn, entered into Council records as part of the approved documentation of resource consent RC230398, including but not limited to the following specific measures:

I. Lot 18: Specific engineering mitigation design will be required to address creep of surficial soil overlying shallow bedrock for any development.

II. Lots 15, ~~16, 17 and~~ to 19: Development on these lots must adhere to engineering practices suitable for hillslope development, including:

1. Implementation of subsoil drainage.

2. Minimisation of cutting and filling.

3. Proper disposal of stormwater, grey water, and black water without discharge to the slope.

4. Construction of appropriately engineered retaining walls where necessary.

~~Good engineering practice for hill slope development must be applied for any development.~~

III. Lots 1 and 9, foundation construction shall be set back from the crest at a horizontal distance at least twice the adjacent vertical slope height

IV All Lots: Engineering practices suitable for hillside construction shall be incorporated as necessary.

16. Thank you again for the opportunity to present my evidence and I am happy to address any questions.

Richard Justice
28 February 2025