

## **Qualifications and experience**

- 1 My full name is Cameron Andrew Wylie.
- 2 I am a Geotechnical Engineer Member Engineering NZ; Chartered Professional Engineer (CPEng), Member Australasian Institute of Mining and Metallurgy (AusIMM) and Chartered Professional (CP) Mining Geotechnics; Chartered Member NZ Institute of Directors and with Master of Science (MSc) in Geology, BSc (Geology)
- 3 I am currently employed as Principle Geotechnical Engineer and Managing Director of Resource Development Consultants Ltd and have held that position since 2007.
- 4 My previous work includes 35 years' continuous experience in civil and mining work including residential subdivision in Manawatū.
- 5 My role in relation to the applicants submission has been to provide geotechnical advice in relation to suitability of the area for rural-residential subdivision.
- 6 In preparing this statement of evidence I have considered the following documents:
  - (a) Palmerston North City District Plan. Section 32 Report. Plan Change G: Aokautere Growth Area. 2022.
  - (b) T+T (2022) Aokautere slope stability: considerations for consenting. T+T Job No. 85442.0300 issued 12 May 2022.
  - (c) Section 42A Technical Report of Eric Bird on behalf of Palmerston North City Council. Technical – Geotechnical. Dated 15 September 2023.
  - (d) Statement of Reply Evidence of Eric Bird on behalf of Palmerston North City Council. Technical – Geotechnical. Date 28 November 2023.
- 7 I became involved on the project in January 2024.
- 8 I have not visited the site in my capacity on the project but have visited the region many times generally, and one of my staff has recently visited on my behalf.

## **Code of Conduct for Expert Witnesses**

- 9 While this is not a hearing before the Environment Court, I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023 and that I have complied with it when preparing my evidence. Other than when I state I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

## Scope of response

10 I have prepared a response in relation to:

- (a) matters raised in the Section 42A report and response to questions.

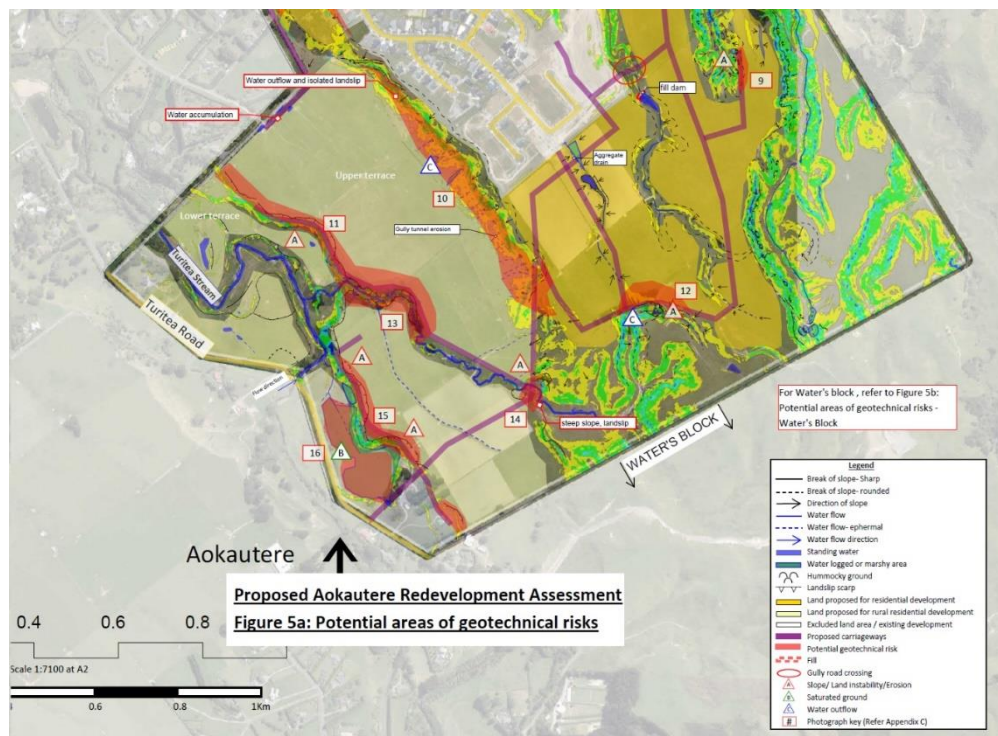
## The existing environment

11 The geotechnical environment of the area is well described in T+T (2022). As it relates to geotechnical aspects of the proposed project.

12 Including comprehensive assessment of geology, site observations and analyses of slope geomorphology (Figure 1) to identify:

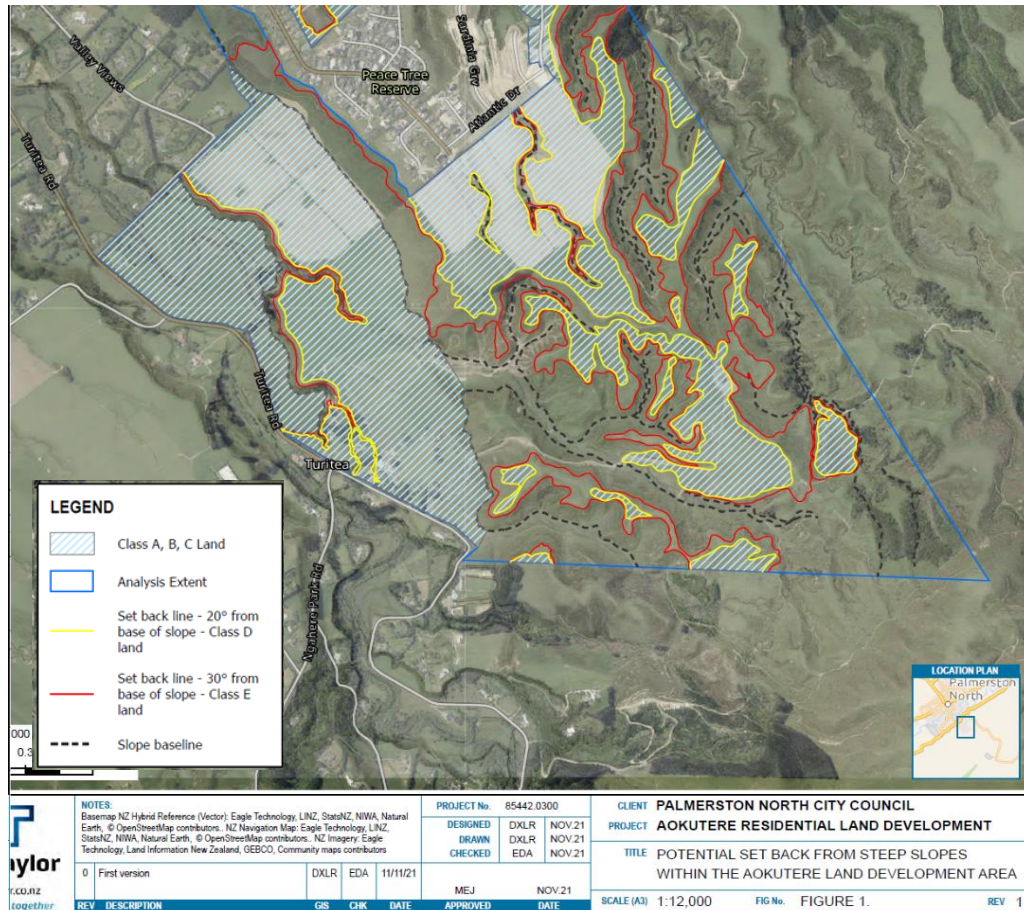
- (a) Geotechnical Risk (Figure 1) and
- (b) Areas suitable for:
- (i) Residential Development; and
  - (ii) Rural-residential development;
  - (iii) As illustrated in Figure 5a and 5b.
- (c) None of which identifies areas not suitable for residential development of some kind.

Figure 1 Extract T+T (2022) Figure 5a Aokautere potential areas of geotechnical risk



- 13 And Including Appendix C: Slope Angle Analysis including Figure 1. Potential Set Back from Steep Slopes within the Aokautere Land Development Area.

Figure 2 Aokautere Area A & B Geotechnical Land Classification (T+T, 2022)



- 14 Section 42A report repeats much of the 2022 assessment but puts more store on assessment of stream downcutting by others and the likely effect on slope stability.
- (a) Much of the report describes a simple model to classify land against slope angle; with
  - (b) Limited Developable Land classified:
    - (i) Class D including  $20^\circ < \text{slopes} < 30^\circ$ ; and
    - (ii) Class E including slopes  $> 30^\circ$ .

- (c) Most of the Limited Developable Land is within the norther part of the site comprising flat topped terraces intersected by incised streams, all underlain by Pleistocene Beach sands and marine terrace deposits.
  - (d) Instability is reported in the steep incised slopes bordering streams. There is no report of global scale slope displacement.
- 15 In concluding development suitability, the Section 42A report relies on:
  - (a) Para 68 - states that residential development is “not expected in Class E land” but being suitable for rural-residential development;
  - (b) And makes that comment that the Turitea Block is unsuitable for residential development because it is a “waterlogged swampy area. As such it is likely subject to soft ground, shallow groundwater, and possibly liquefaction issues”.
- 16 In response to questions; Section 42A response simply says:
  - (a) G. RESPONSE TO CHRISTLE PILKINGTON REGARDING RURAL-RESIDENTIAL ZONING IN TURITEA VALLEY
    - (i) [25] The land in question is low lying and has been mapped by Tonkin and Taylor as being a waterlogged, swampy area. As such it is likely subject to soft ground, shallow groundwater, and possibly liquefaction issues.
    - (ii) [26] In the absence of geotechnical evidence to the contrary, I do not support this land being rezoned to Rural-Residential, as in its current state it is unlikely to be able have housing built on it.
- 17 T+T (2022) Appendix C (Figure 2, this evidence) clearly shows large swathes of land classified Class A, B and C.
- 18 This land is the terraced land:
  - (a) Encompassed by the (30°) set-back line;
  - (b) Clear of instability;
  - (c) Clear of water courses; and
  - (d) Clear of waterlogged and marshy areas.
- 19 RDCL has visited both sites, although I have not in person. Based on our considerable experience in land development in the Manawatū, we see no reason

that the large areas of land should be excluded for residential development, subject to the usual, appropriate investigations and assessment.

- 20 We have done many projects in similar ground.
- 21 The Section 42A report and response to questions is in our mind out of line with T+T (2022) which should be considered the more authoritative reference.
- 22 As it relates to specific development, we have been asked to comment on the general suitability of a conceptual development proposed by Resonant Ltd (Resonant) on behalf of their client Brian Green Residential Developments Ltd (Attached).
- 23 Our view is that the development should be allowed to proceed subject to setbacks and ground investigation as required by PNCC/the District Plan. We see no conflict with the work reported in T+T (2022) and the proposal as shown to us so far.

### **Conclusion**

My view is that the T+T (2022) report titled "Aokautere slope stability: considerations for consenting" clearly indicates that the land within Areas A & B are clearly indicated Class A-C and therefore suitable for residential and rural-residential development albeit subject to setbacks and investigation requirements.

Our view is that the recommendations for development given in Section 42A report and response (both 2023) are essentially at odds with the conclusions in the original report.

Exclusion of Areas A & B is not justified based on the evidence presented and from our own experience in the region.

We think that from a geotechnical perspective all developments in this area including the one proposed by Brian Green Residential Developments should be treated on its merits following established PNCC guidelines and expectations for technical evaluation.

**Cameron Andrew Wylie**

Dated this 23<sup>rd</sup> day of January 2024