BEFORE THE INDEPENDENT PANEL
OF KAPITI COAST DISTRICT COUNCIL

IN THE MATTER	of the Resource Management Act 1991 ("**RMA**")
AND	
IN THE MATTER	of Private Plan Change 4 ("**PC4**") to the Kāpiti Coast District Plan ("**Plan**") – 65 and 73 Ratanui Road, Otaihanga

STATEMENT OF EVIDENCE OF BRETT ALEXANDER BLACK ON BEHALF OF WELHOM DEVELOPMENTS LIMITED

(GEOTECHNICAL EVIDENCE)

16 JANUARY 2026

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1. INTRODUCTION

1.1 My full name is Brett Alexander Black. I am a Chartered Professional Engineer and a member of Engineering New Zealand. I am a Director of Riley Consultants Limited ("**Riley**").

Qualifications and experience

1.2 I hold the qualifications of Bachelor of Civil Engineering from the University of Auckland and a New Zealand Certificate in Engineering.

1.3 I have worked in the civil engineering services field since 1982, based in Auckland. My initial work experience was as a soil technician and, since 1989, I have worked as a civil-geotechnical engineer providing consulting engineering services. Over the past 35 years, I have gained a wide and varied experience in many facets of land development throughout New Zealand.

1.4 Typically, the developments I have worked on have been located over steep terrains, involved significant ground retention, soft or potentially liquefiable soils, and therefore, have required a high degree of geotechnical engineering input.

Involvement in Welhom Developments Limited plan change request

1.5 I have been involved with the site at 65 and 73 Ratanui Road ("**Plan Change Area**") for Welhom Developments Limited since October 2022, when I undertook due diligence assessments of the Plan Change Area. Subsequently, I was involved in the preparation of the Geotechnical Assessment to support the plan change request.[1] I confirm that I have carried out a walkover appraisal of the Plan Change Area.

Code of Conduct

1.6 I confirm that I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and will continue to comply with it while giving oral evidence before the Hearing Commissioners. Except where I state that I am relying on the evidence of another person, this written evidence is

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[1] Riley Geotechnical Assessment – Plan Change 56 and 73 Ratanui Road, Paraparaumu, 29 November 2024.

within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

2. SUMMARY OF EVIDENCE

2.1 My evidence summarises our findings from geotechnical investigations and assessments within the subject Plan Change Area and outlines key findings and recommendations to enable the proposed land-use.

2.2 My assessment and findings include seismic liquefaction, building foundations and earthworks. Full findings and recommendations are presented in the Geotechnical Assessment Report dated 29 November 2024.

2.3 In summary, the geotechnical conditions are considered suitable for the proposed use enabled by the proposed change in zone. Mitigation of geotechnical hazards is considered feasible and reasonable for the proposed change in land use.

2.4 The Section 42A Report concurs with my findings and recommendations.

3. SCOPE OF EVIDENCE

3.1 This statement of evidence will:

(a) provide a brief summary of the geotechnical context of the proposed plan change;

(b) summarise the key findings and recommendations from the Geotechnical Assessment;

(c) respond to the Council Officer's report; and

(d) respond to the submissions received.

4. CONTEXT

4.1 The Plan Change Area is located at 65 and 73 Ratanui Road, Paraparaumu.

4.2 To enable the proposed land use on the site (being a retirement village and residential development) earthworks are likely to be required to improve gradients across the Plan Change Area. This will be undertaken to form building platform levels, retaining walls, formation of road subgrades and construction of infrastructure, including stormwater detention basins within the Site.

4.3 The geology of the Plan Change Area consists of aeolian (windblown) sand deposits overlying alluvial material at depth with groundwater levels between 2.1m and 5m below ground level encountered across the Plan Change Area. The surficial soils are relatively loose so earthworks would improve site gradients and improve founding conditions.

4.4 The Plan Change Area is noted to be undulating with dune deposits and localised areas of ponding visible in lowland areas.

4.5 Investigations were undertaken to inform the geotechnical plan change assessments and included three machine boreholes, twenty-three cone penetrometer tests, fifteen Scala penetrometer tests and seven shallow hand augers to obtain samples for testing.

5. KEY FINDINGS AND RECOMMENDATIONS

5.1 The Plan Change Area has been identified as having high liquefaction potential. With reference to the MBIE modules following the Christchurch earthquake, predicted liquefaction induced settlements are predominantly in accordance with TC2 / TC3 (hybrid) levels of predicted ground damage with TC3 zones also identified where governed by lateral spreading.

5.2 This anticipated level of liquefaction settlement is a significant consideration in new foundation design however this is not restricted to the Plan Change Area, and seismic liquefaction induced hazard is high within the wider Paraparaumu area due to high seismicity and loose sandy soils.

5.3 New building foundations should and can be designed to resist these corresponding levels of liquefaction induced settlement on the site.

5.4 There is a risk of seismic induced lateral spread affecting the Plan Change Area if free faces are present within the future site development. Where free faces are formed, protection or mitigation measures will likely be required adjacent to property boundaries where a minimum setback cannot be achieved to avoid increasing the risk of lateral spread hazards and / or effects to neighbours. These mitigation measures are considered feasible for the subject Plan Change Area.

5.5 Based on on-site observations of the ground conditions and topography, we consider that the site is not presently affected by slope instability, however, surcharging steep slopes across the Plan Change Area should be avoided.

5.6 There is potential that mounds and low-lying areas have been historically altered, and organic layers have been trapped. These organic layers are likely to be undercut and replaced with engineered fill to mitigate the risk of settlement and facilitate future development.

5.7 Near surface founding soils are likely to have a geotechnical ultimate bearing capacity (GUBC) of 200kPa. This is generally in line with the standard foundation requirements for sites within TC2 / TC3 areas as per the MBIE Modules.

5.8 The natural subgrade CBR when confined is typically 3.

5.9 Earthworks are likely to be required to improve gradients across the Plan Change Area for residential development. The excavated material is generally considered appropriate for reuse as engineered fill from a geotechnical context.

5.10 Retaining walls will likely be required along boundaries where there is significant variation in landform. Founding conditions for retaining walls are generally considered favourable with gravity and cantilever type walls considered feasible.

6. RESPONSE TO SUBMISSIONS

6.1 As referenced in the submission by Derek Robert Foo and Helen Patricia Foo,[2] liquefaction lateral spread hazard will need to be considered and addressed when free faces (ie for stormwater basins) are formed to facilitate the proposed land use. Liquefaction hazard to neighbouring properties is to be maintained at a level no worse than that prior to development. Mitigation measures are available and feasible to maintain liquefaction hazard on neighbours to pre-development levels.

6.2 The submission of Allan Kelly[3] concerns the sand dune that straddles the northern boundary. The stability of the dune slopes will be assessed in detail at the time of resource consent. Mitigation measures are available should assessment indicate stability improvement is required to protect future development and neighbours.

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2 Submission #7.

3 Submission #11.

7. RESPONSE TO S42A REPORT

7.1 I have reviewed the Council's Section 42A Report together with the specialist Statement of Evidence (Geotechnical Engineering) prepared by Mr McDermott referenced in the Section 42A report.

7.2 I note Mr McDermott's Statement of Evidence considers the Riley Geotechnical Assessment - Plan Change report adequate to support the plan change.

7.3 Mr McDermott also outlines a number of geotechnical matters that may need to be further addressed and included in a more comprehensive geotechnical report prepared in support of a resource consent application in the future. These include further consideration of liquefaction, slope stability, earthworks and founding requirements. I agree that these (and any other potential geotechnical hazards) should be assessed in detail at resource consent stage.

7.4 The Section 42A Report accepts the advice of Mr McDermott and concludes there are no geotechnical constraints that mean the plan change should be rejected.

8. CONCLUSION

8.1 The geotechnical conditions within the Plan Change Area are considered suitable for the proposed use in change in zone. Mitigation of geotechnical hazards is considered feasible and reasonable for the proposed change in land use.

Brett Black

16 January 2026