

**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 MARK THOMSON ON BEHALF OF WELHOM DEVELOPMENTS LIMITED

(CIVIL ENGINEERING)

16 JANUARY 2026

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1. INTRODUCTION

1.1 My name is Mark David Thomson. I am a Civil Engineer and Senior Associate at Wood & Partners Limited (Woods) and have been employed in this role since January 2023.

Qualifications and experience

1.2 I hold a Bachelor of Engineering in Civil Engineering (Honours) and am a Chartered Professional Engineer (CPEng) and Chartered Member of Engineering New Zealand (CMEngNZ).

1.3 I have 15 years of experience as a professional consulting engineer with expertise in land development and infrastructure including earthworks, stormwater, water supply, wastewater and road design.

1.4 Over the past 15 years, I have been involved in the development of over 600ha of land, comprising several thousand residential allotments and more than half a dozen retirement villages. Included in this number is the Summerset Waikanae village, which is also in the Kapiti Coast District.

Involvement in Welhom Developments Limited plan change request

1.5 I have prepared or overseen the preparation of the following reports identifying the necessary infrastructure to support the proposed development of the site at 65 and 73 Ratanui Road ("Site"):

(a) Civil Engineering Infrastructure Assessment; and

(b) Wastewater Capacity Assessment for a Residential Scenario.

1.6 Prior to the rezoning process, I was also engaged by Welhom Developments Limited ("Welhom") to undertake pre-purchase due diligence assessment and reporting on the Site.

1.7 In respect of the above I have worked in an Engineering capacity for Welhom and liaised with Kāpiti Coast District Council ("KCDC") engineering staff and utility service providers in relation to services capacity to cater for the development of this Site since early 2023.

Code of Conduct

1.8 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 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 This evidence confirms that all core civil infrastructure required to service the proposed rezoning at 65 and 73 Ratanui Road can be provided in a manner consistent with KCDC's Land Development Minimum Requirements (2022) and industry standards.

2.2 The supporting investigations - including the Civil Engineering Infrastructure Assessment and the Updated Wastewater Capacity Assessment demonstrate that there is sufficient capacity within KCDC's existing water, wastewater, and stormwater networks to service the site, and that no extraordinary off-site upgrades are required to enable the rezoning.

2.3 Stormwater and flooding effects will be managed on-site through a combination of compensatory flood-storage areas, wetland-based treatment systems, and distributed soakage devices.

2.4 Construction-phase effects (earthworks, noise, vibration, dust, and sediment) can be appropriately mitigated by standard management plans required at the resource-consent stage.

2.5 Overall, the proposed rezoning is technically feasible and will result in efficient, integrated three-waters infrastructure consistent with KCDC's network planning and growth-strategy objectives

3. SCOPE OF EVIDENCE

3.1 This statement of evidence will:

(a) provide a brief summary of the civil engineering context of the PC4;

- (b) summarise the key findings and recommendations from the Civil Engineering Infrastructure Assessment;
- (c) respond to the Council Officer's report; and
- (d) respond to the submissions received.

4. CONTEXT

- 4.1 The purpose of this evidence is to present the suitability, in a civil engineering context, of the Site for proposed rezoning from Rural Lifestyle to General Residential Zone via PC4.
- 4.2 The Site is located at 65 & 73 Ratanui Road, Paraparaumu. Part of 65 Ratanui Road is proposed to be retained by the Vendor through a boundary adjustment subdivision process which is being progressed in parallel with PC4.
- 4.3 The Site has been identified by the Kāpiti Coast District Council's 2022 Growth Strategy – Te Tupu Pai as a "Medium-priority greenfield growth area" which signals its potential for future urban growth.

5. KEY FINDINGS AND RECOMMENDATIONS

- 5.1 I prepared the Civil Engineering Infrastructure Assessment for PC4. In this section of my evidence, I outline the key findings of that assessment.
- 5.2 Construction of infrastructure is feasible to mitigate post-development peak stormwater discharges so they do not exceed pre-development flowrates. Flood-storage and wetland areas can be incorporated into the masterplan to offset existing ponding and maintain natural hydrological function of the Site. Localised soakage via roof-drain soakpits would further reduce centralised detention demand.
- 5.3 Wastewater modelling by KCDC's nominated consultant, HAL Consulting, demonstrates that the existing KCDC wastewater network has capacity to accommodate flows from the Site without network upgrades. Connection details will be confirmed during detailed design.
- 5.4 Water supply modelling by KCDC's nominated consultant, Stantec, confirms that adequate supply and pressure are available from the existing KCDC network to service either residential or retirement-village development scenarios.

5.5 Earthworks to enable residential development of the Site are moderate in scale and could be completed within a single construction season, although duration would be determined by construction programming. Dust, sediment, and noise can be managed through a certified Construction Management Plan and Erosion and Sediment Control Plan in accordance with Greater Wellington Regional Council ("GWRC") and KCDC guidelines.

5.6 I have confidence that the Site can be efficiently serviced with compliant infrastructure to enable residential development and that any residual implementation risks can be addressed through standard consent conditions at subdivision stage.

6. RESPONSE TO COUNCIL OFFICER'S REPORT

6.1 I confirm that I have read the Section 42A Officers Report dated 5 December 2025, and the following statements of evidence appended to that report, that are relevant to my evidence:

- (a) Appendix 9: Water Report (Kate Waterland);
- (b) Appendix 10: Wastewater Report (Brian Robinson)
- (c) Appendix 11: Stormwater And Flood Risk Report (Rita Louise O'Brien).

6.2 These statements of evidence all align with my opinion that there are no matters that would mean PC4 should be rejected from a water supply, wastewater, stormwater or flooding perspective.

7. RESPONSE TO SUBMISSIONS

7.1 I respond to comments made in submissions in relation to civil engineering matters by way of themes rather than individually, followed by individual responses to specific submissions where appropriate.

Earthworks & Construction Effects

7.2 Several parties¹ have submitted regarding construction-phase effects and the effect that enacting development of the Site may have on the surrounding environment with regard to noise, vibration, dust, and erosion and sediment control generated by construction activities.

¹ Submission 2 – Lang Family Trust, Submission 6 – Alexander / Parsons, Submission 10 – Montcalm Family Trust, Submission 16 – Le Harivel, Further Submission 2 – Metcalfe.

7.3 The KCDC District Plan and Land Development Minimum Requirements document include standard mechanisms to require developers to address these matters through the provision of management plans at the time of resource consent.

7.4 In my opinion, the matters raised thematically in submissions with regard to the above noted construction-phase effects can be appropriately managed through the application of the standard suite of management plans, and by the imposition of standard conditions at the time resource consents to enable development are applied for.

Noise & vibration

7.5 Submitters² have sought further information and / or relief in respect of specific mitigation measures to address construction noise, such as noise bunds and specific hours of construction.

7.6 Unless otherwise consented, construction noise would be required to comply with NZS 6803:1999 Acoustics – Construction Noise, as set out in permitted activity Rule NOISE-R10 of the KCDC District Plan and the KCDC Land Development Minimum Requirements document. NZS 6803 sets out standardised thresholds for construction noise, and the times / weeks in which specific noise levels are permissible. Any specific departures, or specific mitigation strategies, would be set out by acoustic reporting and conditions of resource consent. Non-compliance with this rule would trigger a Discretionary Activity under Rule NOISE-R21.

Dust

7.7 Several submitters³ have raised the issue of dust emissions during the construction phase. Construction dust emissions from the Site are a recognised risk that will require careful management and employment of sufficient resource to effectively manage. A Dust Management Plan would be provided for certification prior to commencement of earthworks and would form part of a wider Earthworks Management Plan ("EMP") required by the KCDC Land Development Minimum Requirements document.

7.8 The KCDC Land Development Minimum Requirements document imposes requirements on a developer to control any dust nuisance and take appropriate

² Submission 2 – Lang Family Trust, Submission 6 – Alexander / Parsons, Submission 10 – Montcalm Family Trust.

³ Submission 6 – Alexander / Parsons, Submission 7 – Foo, Submission 10 – Montcalm Family Trust, Submission 16 – Le Harivel, Further Submission 2 – Metcalfe.

mitigation measures. These would include, but may not be limited to, construction of dust fences, watering of earthworks, undertaking earthworks during appropriate periods, progressively stabilizing open ground etc. It is my view that the risk of dust posed by development of this Site is commensurate with normal development of this type and scale and can be appropriately managed and mitigated by the use of standard earthworks controls.

Erosion and Sediment Control

7.9 An Erosion and Sediment Control Plan is required to be prepared as part of an Earthworks Management Plan, and would be compiled in accordance with the "Erosion and sediment control guide for land disturbing activities in the Wellington region".⁴

7.10 A combination of specific mitigation measures would be selected from a range of available options when an erosion and sediment control plan is prepared at the time of applying for resource consent, and could include staging the construction, sediment retention ponds, irrigation, and progressive re-stabilisation of the Site with topsoil and grass / planting, or hardfill, as soon as possible.

Construction Duration

7.11 Submitters⁵ have noted their interest in the duration of construction, and the associated effects. Construction timing, and the duration of civil works construction (comprising bulk earthworks, services installation, and finished surface construction ready for vertical building construction) would be directly influenced by a development construction programme. The plan change process pre-empts any firm commitments regarding construction timing or duration.

7.12 That said, it is my opinion that the quantum of bulk earthworks likely to be required is not onerous and could readily be undertaken by a competent contractor over the course of a construction season (approximately 6 months). Trenching for services installation and formation of roads and finished surfaces would follow the earthworks phase.

⁴ <https://www.gw.govt.nz/assets/Documents/2022/03/Erosion-and-Sediment-Control-Guide-for-Land-Disturbing-Activities-in-the-Wellington-Region.pdf>.

⁵ Submission 6 – Alexander / Parsons, Submission 5 – Halliday, Submission 7 – Foo, Submission 10 – Montcalm Family Trust.

Submission 6 – Alexander / Parsons (81 Ratanui Road)

- 7.13 This submission seeks further information regarding how existing vegetation on or near the common boundary with the Site would be addressed, and what height difference (including retaining walls) would be required.
- 7.14 It is likely that existing vegetation and remnant tree stumps along the common boundary with 81 Ratanui Road would need to be removed to facilitate proposed construction on the Site, including retaining walls and earthworks. Existing root systems and vegetation on the submitters' site would be left in place, unless a side agreement is reached between the parties to remove these. Roots that cross the boundary into the Site would be cut at the common boundary. The proposed works on the Site would be designed to tie-in and respect the existing ground levels along the common boundary.
- 7.15 An intermittent low-height retaining wall is anticipated along parts of the common boundary of the Site with the submitter's land. Conceptual design indicates this could be up to approximately 1.3m high, but would be confirmed through subsequent design and approvals processes when resource consent is sought.

Stormwater / Flooding

- 7.16 Submitters⁶ have suggested that the impacts of the development should be addressed on Site, to avoid contributing to existing and / or new off-site effects.
- 7.17 The KCDC Land Development Minimum Requirements document requires that, at Clause 4.2.4:

The implications of future development on adjoining land should be on the basis of replicating the pre-development hydrological regime for the 50%, 20%, 10%, 2% and 1% AEP design storm, whereby the maximum rate of discharge and peak flood levels post-development are no greater than pre-development.

- 7.18 As noted in sections 4.1.3 and 4.1.4 of the Civil Engineering Infrastructure Assessment, there are two important but separate aspects regarding stormwater and flood management, that would be addressed separately within

⁶ Submission 2 – Lang Family Trust, Submission 4 – Hobson, Submission 6 – Alexander / Parsons, Submission 7 – Foo, Submission 10 – Montcalm Family Trust, Submission 14 – Milburn, Submission 15 – Coggan, Submission 16 – Le Harivel, Submission 17 – van Iperen, Further Submission 2 – Metcalfe.

the proposed development to meet the KCDC requirements. These are as follows.

A) Existing Flooding

- 7.19 KCDC modelling indicates that there is existing flooding on the Site, primarily adjacent to the existing highly modified stream, and some smaller areas along the southeast boundary of the Site.
- 7.20 Development in these areas would either be avoided or offset by the creation of compensatory flood storage areas to avoid the development displacing existing floodwaters onto neighbouring land.

B) Impacts of development

- 7.21 Development of the Site would increase the proportion of impervious area and would consequently result in increased stormwater runoff flowrates and volumes. Stormwater management areas would be set aside to mitigate the increased stormwater quantity generated by increased impervious areas before discharge to the highly-modified stream.
- 7.22 These areas would be separate from the area set aside to maintain existing flooding or compensatory flood storage areas. Two separate stormwater management areas would be provided, to address the developed catchment on either side of the highly modified stream.
- 7.23 Where feasible due to infiltration rates and masterplan, soakpits would be designed and constructed throughout the Site to dispose of some of the stormwater runoff from roofs, thereby reducing the size of the centralised stormwater management areas.
- 7.24 The sizing of the soakpits would be in accordance with the methods set out in KCDC Land Development Minimum Requirements document (referencing NZBC E1/VM1). It is my experience that soakpits sized in accordance with this method offer a reasonable balance between disposing of a reasonable flowrate and volume of stormwater, while not requiring significant land area to be set aside. This is particularly important in a retirement village context where available footprint is at a premium. Regardless of the extent of soakpits across the Site, or the specific design method used to size these devices, the overarching requirement from KCDC to replicate the pre-development hydrological regime remains.

7.25 Two submissions⁷ query the impact that groundwater may have on the feasibility of stormwater disposal to ground via soakpits. I set out in section 4.2 of the Civil Engineering Infrastructure Assessment that I expect soakage rates to be variable across the Site, and that further testing may be required to validate the assumptions made to date. This will be fully assessed at resource consent stage.

7.26 In respect of development sequencing, optimisation of the stormwater management regime for the Site will require that a comprehensive array of soakage testing will be required across the Site before finalising the design of the centralised stormwater management areas. This will ensure that stormwater management regime as a whole is sufficient to mitigate the impacts of development and is optimised to provide an efficient design that is not larger than necessary.

7.27 Stormwater quality mitigation will also be provided within the stormwater management area in accordance with KCDC and GWRC requirements. These requirements, in addition to the presence of groundwater, will influence that the stormwater treatment system is based on created natural systems, such as wetlands.

Integration of existing and reconstructed wet areas

7.28 The evidence of Dr. Keesing identifies that there are several existing low-value wet areas present on the Site.⁸ I have worked with Dr. Keesing to establish that, where possible, these existing features will be incorporated into the proposed stormwater management areas and / or compensatory flood storage areas. Constructed wetlands to offset the demolished wet areas that are not able to be incorporated into the Site masterplan could also be incorporated into these areas.

Submission 4 – Hobson (12 Bridford Way)

7.29 This submitter has commented that there should be zero exemption for waivers on stormwater retention policies as set out by the current KCDC District Plan.

7.30 I reconfirm that the proposed infrastructure design concept has been prepared in accordance with the KCDC District Plan and KCDC Land Development Minimum Requirements document.

⁷ Submission 15 – Coggan, Submission 16 – Le Harivel.

⁸ Evidence of Dr Keesing (Ecology) on behalf of the Applicant dated 16 January 2026 at [3.10].

Submission 6 – Alexander / Parsons (81 Ratanui Road)

- 7.31 These submitters have requested additional information about how stormwater runoff from Ratanui Road will be addressed.
- 7.32 Traffic evidence of Mr Georgeson identifies that the north edge of Ratanui Road along the frontage of the Site will be upgraded to an urban standard, with kerb and channel.⁹ Stormwater sumps will be installed in the kerb and channel, and will direct road runoff from this section of Ratanui Road to the existing open channel on the south side of Ratanui Road.
- 7.33 The submitters have also provided evidence that stormwater drainage from their site is linked to the existing man-made pond on 73 Ratanui Road, and that there are pipes that link this pond to another at the northwest corner of 81 Ratanui Road, which then drains the 81 Ratanui Road pond to the existing highly-modified stream.
- 7.34 Any required changes to the stormwater reticulation from this property will be considered at resource consent stage and worked through with the relevant landowners. This will be considered carefully and there are options available to ensure the stormwater drainage is dealt with in a way which aligns with the proposed Site masterplan.

Submission 10 – Montcalm Family Trust

- 7.35 This submitter raises that the recently updated KCDC flood hazard mapping identifies there are small areas of ponding in low-lying areas on the Site, adjacent to the common boundary with their land.
- 7.36 These would either be considered as un-developable and retained in their current form, or appropriate stormwater drainage reticulation would be integrated into the proposed development to mitigate the effects of filling in these low-lying areas. The selected treatment would be confirmed through the design process to inform and support a resource consent application.

Submission 16 – Harivel (16 Otaihanga Road)

- 7.37 This submitter raises that stormwater attenuation and flood modelling for the Site should account for sea level rise, climate change, and changes in groundwater levels.

⁹

Evidence of Mr Georgeson (Transport) on behalf of the Applicant dated 16 January 2026 at [6.31].

7.38 The flood modelling information used in my assessment and reporting for the Site has been provided by KCDC's nominated flood modelling consultant, Awa Environmental. Awa has confirmed that their recent updates to KCDC flood modelling includes provisions for climate change and sea level rise.

7.39 I also confirm that rainfall data used in assessing the stormwater runoff from the development of the Site incorporates climate change as outlined in section 4.2 of the Civil Engineering Infrastructure Assessment.

7.40 I defer to the geotechnical evidence provided by Mr Black regarding the influence of groundwater.¹⁰

Wastewater

7.41 Several parties¹¹ have submitted regarding the capacity of the KCDC wastewater system and the ability of the system to accept wastewater generated by development of the Site.

7.42 KCDC's nominated wastewater network modelling consultant, HAL Consulting, was engaged to update KCDC's existing network model to include the Site for both a residential development and retirement village scenarios and prepare reports summarising the findings. Both reports have been submitted to KCDC as part of the Plan Change application. Both reports concluded that sufficient capacity is available in the existing wastewater network to accept wastewater generated by development of the Site without requiring off-site upgrades to the existing infrastructure.

7.43 Submitters¹² have also raised the issue of cumulative effects of wastewater generated from development of other (unzoned) land surrounding the Site. While this is outside the scope considered by the Plan Change application, I consider that KCDC, in its role as a network utility operator, would assess any proposal for other developments in a similar manner to what has been undertaken for the Site, and assign available capacity and / or the cost of any upgrade works to the relevant properties in a fair and equitable manner. It is my experience that any available unallocated capacity in the existing network is often assigned by councils on a 'first-in, first-served' basis at the time of resource consent.

¹⁰ Evidence of Mr Black (Geotechnical) on behalf of the Applicant dated 16 January 2026 at [4.3].

¹¹ Submission 4 – Hobson, Submission 15 – Coggan and Submission 17 – van Iperen

¹² Submission 15 – Coggan, & Submission 17 – van Iperen.

Submission 6 – Alexander / Parsons (81 Ratanui Road)

7.44 The submitters have advised their existing grey-water (effluent) disposal system encroaches onto the Site, and state reliance on existing use rights for this system to be either incorporated into the design of the Site or adjusted to fall wholly within the submitters site.

7.45 I agree that the existing effluent disposal system would need to be removed from the Site to facilitate development contemplated by PC4. This would either need to be re-constructed wholly within 81 Ratanui Road, or an alternative outfall constructed to facilitate discharge of wastewater to the KCDC reticulated wastewater network in Ratanui Road.

Water Supply

7.46 In a similar manner to wastewater, submitters¹³ have questioned the ability of the existing KCDC water supply system to provide potable water to service development of the Site.

7.47 KCDC's nominated water supply network modelling consultant, Stantec, was engaged to update KCDC's existing network model to include the Site for a retirement village scenario (on the basis that this has a higher, more restrictive water supply demand than a residential scenario) and prepare a report summarising the findings. The report has been submitted to KCDC as part of the Plan Change application. The report concluded that sufficient capacity is available in the existing water supply network to service development of the Site.

8. CONCLUSION

8.1 Based on the investigations and assessments undertaken, I am satisfied that the proposed rezoning of 65 and 73 Ratanui Road can be supported from a civil-engineering and infrastructure perspective.

8.2 The site can be integrated into KCDC's existing three-waters networks without adverse downstream effects or the need for major public-infrastructure upgrades.

8.3 Construction effects are temporary and manageable through established consenting processes.

¹³ Submission 15 – Coggan, & Submission 17 – van Iperen.

8.4 In my professional opinion, PC4 provides a sound and practicable framework for future development, aligns with KCDC's growth-strategy intentions for Otaihanga, and can be implemented safely, sustainably, and efficiently.

Mark Thomson

16 January 2026