BEFORE THE HEARING COMMISSIONER

IN THE MATTER of the Resource Management Act 1991 and

Resource Consent Application 2250414-RMACOM

Proposed Subdivision of Lot 2 DP 442820,

Kerikeri Inlet Road, Kerikeri

<u>BETWEEN</u> <u>NAGS HEAD COW HOTEL LIMITED</u>

Applicant

AND FAR NORTH DISTRICT COUNCIL

Consent Authority

ON 22 October 2025

STATEMENT OF EVIDENCE OF JOHN FRANCIS PAPESCH

INTRODUCTION

Qualifications and experience

- My full name is John Francis Papesch. I am a Director and Senior Civil Engineer at Haigh Workman Ltd in Kerikeri.
- I am a Chartered Member of Engineering New Zealand and a Chartered Professional Engineer with two practice fields, being civil and geotechnical engineering. I have a Bachelor of Engineering from the University of Auckland and a New Zealand Certificate of Engineering from the United Institute of Technology.
- I have over 25 years of experience in civil and geotechnical engineering, with the past 22 years of that in Northland. I have been actively involved in engineering matters of resource consent applications in the Far North District over my past 18 years with Haigh Workman. My role includes working on a diverse range of land development projects in the areas of water, wastewater, stormwater, flooding, earthworks and roading. Recent projects I have managed include:
 - (a) Rangitane Riverpark Stages 3-6, where I am the civil and geotechnical lead for subdivision consent, detailed design, and bulk earthworks construction. I was also the civil and geotechnical lead for stage 2 subdivision works.

- (b) Te Puna Waiora RV Ltd (Arvida, Kerikeri), where I was the civil and geotechnical lead for resource consent for a 226-villa retirement village, care facility, clubhouse, and health and wellness centre on a 18-hectare site at the end of Hall Road. This is a 10-year construction project which is approximately 50 % complete.
- (c) Inlet Estate Ltd (Inlet Road, Kerikeri), where I was the civil and geotechnical lead through a plan change, 48-lot subdivision consent, detailed design, and construction. A precursor to this project was a subdivision of the same scale on an adjacent site for the same developer. These sites are now fully developed.

Expert Witness Code of Conduct

I have been provided with a copy of the Code of Conduct for Expert Witnesses contained in the Environment Court's Practice Note dated 1 January 2023. I have read and agree to comply with that Code. This evidence is within my area of expertise, except where I state that I am relying upon the specified evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Involvement in project

I have inspected the site at 405 Kerikeri Inlet Road (Lot 1 DP 167657) (Site) and provided engineering advice to Nags Head Cow Hotel Ltd (NHCHL). I provided guidance to Engineers who prepared the Haigh Workman Engineering Report which I also reviewed and approved which are presented in support of the application.

SCOPE OF EVIDENCE

6. This evidence covers the following civil engineering matters: natural hazards, geotechnical assessment, access, earthworks, stormwater, wastewater and water supply. These matters relate to the engineering considerations of the proposed subdivision of Lot 2 DP 442820 to create four rural-residential lots.

My evidence is in three parts:

- An overview of the Haigh Workman Engineering Assessments dated May 2025.
- My response to Engineering issues raised by submitters
- My recommendations on draft conditions of consent in the FNDC Officers' report.

- 7. My evidence relates to the following reports and information prepared by Haigh Workman Limited in respect of this submission:
 - Engineering Report for Proposed Subdivision, reference 18 268, Revision A report dated May 2025.
 - Geotechnical Assessment Report, reference 18 268, Revision A report dated May 2025.
 - Proposed Vehicle Crossing drawings, reference 18 268, Revision B dated May 2025

TECHNICAL ASSESSMENT

Natural Hazards

8. The identified building sites are not susceptible to natural hazards as defined in Section 106 of the Resource Management Act 1991. The building sites have easy topography and, from an engineering perspective, are suited to residential development.

Geotechnical Assessment

9. The geology of the site comprises Waipapa group which has a low instability risk at the locations of the building platforms assessed. The residual soils are clay dominated which will require specific design of foundations due the presence of moderately expansive soils but present no unusual engineering difficulties.

Access

- 10. A vehicle crossing is to be formed in accordance with FNDC Engineering Standards (May 2023) as a "Type 1A" shown on Sheet 21 'Vehicle crossing Rural', with some local widening to provide a slip bay for vehicles entering from the west. Sight distance from the vehicle crossing complies with Council Engineering standards.
- 11. A bridge or culverted crossing will be required to access the Site. The proposed vehicle crossing drawings show a single lane (4 m wide) bridge structure = with sufficient carriageway each end for passing. It is proposed that the carriageway of the entirety of the crossing structure is sealed.
- 12. Internal access to the proposed subdivision is via three existing easements over Lot 2 DP 210733 and four proposed easements on the proposed lots. On completion of the subdivision the existing easements over Lot 2 DP 210733 serve up to 6 lots.

Earthworks

- 13. Earthworks to complete the subdivision comprise excavation and filling to form the internal accessway. Our resource consent design models the proposed earthworks (cutting and filling including placing aggregate) as 3,306 m³ on Lot 2 DP 442820 and 1,022 m³ on Lot 2 DP 210733.
- 14. An Erosion and Sediment Control Plan is to be provided before earthworks commence designed in accordance with Auckland Council Guideline Document 2016/005 (GD05). This will minimise sediment runoff during earthworks and support compliance with regional and district rules.

Stormwater

- 15. The majority of the site drains towards a pond on Lot 4 DP 167657 via natural flow paths.

 This pond in turn drains into the coastal marine zone. The internal accessway stormwater system consists of grass lined swales directing water into culverts which discharge into natural flow paths.
- 16. Impermeable surfaces created by the internal access, in combination with future lot development, are likely to exceed the 600 m² threshold permitted by the District Plan rules. It is recommended that the land-use consent provides for up to 800 m² for future on lot development, in addition to the impervious coverage provided from the imposed on the lots from the internal accessway formation. Low impact design in accordance with the ARC Countryside Living Toolbox (comprising devices like dispersal trenches, swales and level spreaders) is considered appropriate for the Site.

Wastewater

17. The residual soils at the Site have been classified as AS/NZS 1547:2012 category 6 medium to heavy clays which is capable of sustaining a Design Irrigation Rate of 2 mm/day. A typical 3-bedroom house generating 870 litres/day will require an effluent disposal field of 435 m². Sufficient space is available on all lots for this area plus a 100% reserve area.

Water Supply

18. Water supply will be from stored rainwater collected from building roofs. The system should be fitted with a first flush device or filtration to comply with drinking water standards.

19. Water storage for firefighting can be provided in accordance with NZ firefighting water supply code of practice SNZ PAS 4509. Fire and Emergency NZ normally require 25,000 litres of permanent storage for dwellings up to 200 m².

20. A typical water supply is expected to comprise 3x 25,000 litre water tanks, to provide an adequate supply of water for drinking water and firefighting.

ISSUES RAISED BY SUBMITTERS

21. I have reviewed the submissions received on the notified application and comment on the engineering issues raised as follows:

Kim and Sally Taylor

22. Legal Access [Submission part A paragraph 21 and 22]. The Taylor's seek clarification on the allotment calculations for the right of ways. The allotment calculations (based on easements shown on Deposited Plan DP 167657) is as follows:

Easement J (6 lots):

- Lot 2 DP 210733 (Angela Houry)
- Lot 1 DP 442820 (Peter Malcom)
- Proposed lots 1 − 4.

Easement D (5 lots):

- Lot 1 DP 442820 (Peter Malcom)
- Proposed lots 1 − 4.

Easement C (4 lots):

- Proposed lots 1 4.
- 23. Bridge Access [Submission paragraph 22]. The Taylor's raise the reduced carriageway width at the bridge which is proposed at 4 m wide. One-way bridges are commonplace on low volume access roads. The normal considerations are safety and level of service. The safety elements of the bridge location are met by having open intervisibility and the ability to pass at either end. The level of service is satisfied by the low volume nature of the right of way. The width and load capacity is also suitable to support heavy vehicles such as fire engines.

24. Bulk Earthworks [Submission part B paragraph 3c]. The Taylor's raise concern with the volume of earthworks proposed. The proposed earthworks are over nearly 1 km length to form the proposed accessway which equates to approximately 4 m³ per metre. The depth of cut and fill is less than 1.5 m. The scale of earthworks proposed is in keeping with the gently sloping terrain.

An Erosion and Sediment Control Plan is to be provided before earthworks commence. This will minimise sediment run-off during bulk earthworks.

- 25. Sealing of internal access roads [Submission part B paragraph 8I]. The Taylor's raise concern with the noise generated from an unsealed private access road. Far North District Council Standards for Private Access (Appendix 3B-1) permit the use of low volume gravel driveways, which are commonplace throughout the district. Whilst gravel surfaces generally create more noise than a sealed surface, it will contribute to a lower speed environment, and coupled with vegetated swales for stormwater treatment, will support low impact design principles.
- 26. Earthworks for stream crossing [Submission part B paragraph 8n] The Taylor's have raised concern regarding deposited sediment and debris associated with forming a stream crossing. Construction of the proposed crossing in easement J, whether it be culvert or a bridge will be subject to a detailed engineering design which will be reviewed as part of an Engineering Plan Approval and/or building consent process. A properly engineered stream crossing will be designed to meet district and regional requirements for stability and protection against erosion to mitigate any downstream effects.

FNDC OFFICERS' REPORTS

27. I have reviewed the s42A report and Engineers memo and note that there are no civil engineering matters in contention. I have also reviewed the draft conditions of consent and provide the following recommendations:

Conditions of Consent

- 28. Condition 3b. This condition may be struck out as no vested infrastructure is proposed.
- 29. Condition 5d. The intent of this condition should be to seek confirmation that all surfaces are stabilised on completion, as erosion Sediment Control plan requirements are laid in out the Construction Management Plan, which already covered under 4 (b). I recommend this condition is written as follows:

"Within 3 months of completion of earthworks activities, the consent holder must provide to the Councils Resource Consents Engineer certification that any exposed earthworks have been stabilised in accordance with GD05...."

Consent Notices

- 30. Notice 6a. The second paragraph of the condition relates to finished floor levels. A consent notice relating to finished floor levels may be appropriate in a flood prone area, however the no flood hazard assessment is required with future buildings. I recommend this paragraph is struck out.
- 31. Notice 6d. The consent notice seeks submission of a stormwater management report with a building consent and for the approval of Council. A single process (building consent) is adequate to mitigate the risk and a separate approval should not be required. The consent notice should also be clear as to the design objectives. Risks such as downstream flooding have already been addressed in the Engineering Report, so it need not be addressed in future building consents. I recommend the condition is written as follows:

"In conjunction with the construction of any building on the lots the lot owner shall submit, in conjunction with an application for building consent, a stormwater management report incorporating low impact design in general accordance with ARC publication The Countryside Living Toolbox or similar approved...."

CONCLUSION

- 32. Overall, I consider the site is suitable for subdivision from an engineering perspective as laid out in the Applications. Whilst concerns have been raised by submitters relating to the accessway formation, this may be formed in accordance with the requirements of the Far North District Plan. Earthworks to form the accessway is also fairly straight forward due to the gently sloping terrain along the alignment.
- 33. Detailed mitigation measures can be provided via detailed engineering design and subsequent Engineering Plan Approval processes. I have reviewed the civil engineering elements of the draft conditions and whilst I am in general agreement, I have recommended some minor amendments as laid out herein.

John Francis Papesch

7 October 2025