

Environmental Protection Authority
Expert Consenting Panel

WAIKANAE NORTH DEVELOPMENT

16 September 2026

Dear Panel

WAIKANAE NORTH DEVELOPMENT –TRAFFIC PEER REVIEW

Further to your recent instruction, I have reviewed the traffic / transport engineering aspects of the Waikanae North Development relating to the Fast-track Approvals Act 2024.

1 INTRODUCTION

My full name is Leo Donald Hills. I am a director at the firm Commute Transportation Consultants (Commute). Commute provides a wide range of transport-related services to the private and public sector clients throughout New Zealand.

I have the following qualifications and experience:

- I hold a Bachelor of Engineering with Honours (1996) and a Masters of Civil Engineering (2000), both from the University of Auckland;
- I am a Chartered Professional Engineer (CPEng) and a Chartered Member of Engineering New Zealand (CMEngNZ);
- I have over 29 years' experience as a specialist traffic and transport engineer.

During my 29 years as a practicing traffic engineer, I have been engaged by local authorities and private companies/individuals to advise on traffic and development issues covering safety, management and planning matters of many kinds. I have been involved in numerous residential developments of this scale throughout New Zealand.

I confirm that I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2023 (Code of Conduct for Expert Witnesses), and that I have complied with the Code of Conduct in preparing this memorandum.

As noted above I have undertaken a traffic / transportation review of the Waikanae North Development (the application). I have reviewed the application material including:

- Appendix 15: Integrated transport assessment (ITA) as part of the substantive application;
- the Kāpiti Coast District Council (KCDC) and New Zealand Transport Agency Waka Kotahi (NZTA) comments received;
- comments received from other parties invited to comment;
- the applicant's response to these comments;
- the response to Panel questions; and
- further responses following expert caucusing from both the applicant and responses from KCDC and NZTA.

I also attended the expert conferencing held on 7 September 2026 for the topic of Transportation and was part author of the Joint Witness Statement (JWS) also dated 7 September 2026.

I have not repeated details of the application but rather concentrated on the key outstanding issues and in particular any outstanding issues / matters of contention outlined in the JWS between the applicant, Council and NZTA.

2 PROPOSAL

The development provides for 1,181 – 1,209 residential dwellings comprising a mixture of standard and medium density residential dwellings. A small commercial centre is also proposed to serve the new subdivision and the surrounding residential catchment, providing local neighbourhood retail and commercial activities.

The application property ("Site") is located between Peka Peka Road and the new State Highway 1 Kāpiti Expressway (Expressway), with access achieved at 169-171 Peka Peka Road and 107 Paetawa Road. Figure 1 shows the site in relation to the surrounding roading network.

Figure 1: Development site



3 KEY ISSUES

3.1 GENERAL

From the JWS and subsequent NZTA / KCDC comments, the two outstanding issues / areas of disagreement relate to:

- Pedestrians, cyclists and horse riders on local roads on Peka Peka Road and the Coast Roads (defined as Paetawa Road, Rutherford Drive, William Street, Field Way, Huiawa Street and Rauparaha Street); and
- The future performance of the Te Moana Road/SH1 interchange including the adequacy of the traffic modelling undertaken and the need for any resource consent condition regarding the interchange performance.

Each of these is considered separately as follows.

3.2 PEDESTRIAN, CYCLIST AND HORSE RIDERS

KCDC has expressed concern regarding additional traffic from Waikanae North Development on the safety of pedestrians, cyclists and horse riders on Peka Peka Road and the Coast Roads (defined as Paetawa Road, Rutherford Drive, William Street, Field Way, Huiawa Street and Rauparaha Street). This matters was also raised in comments from neighbouring landowners.

As described in Section 3.2.1 of the ITA, KCDC has recently undertaken some road widening along Peka Peka Road and it is understood that further shoulder widening works are planned at other sections along the road with funding being sought to complete widening.

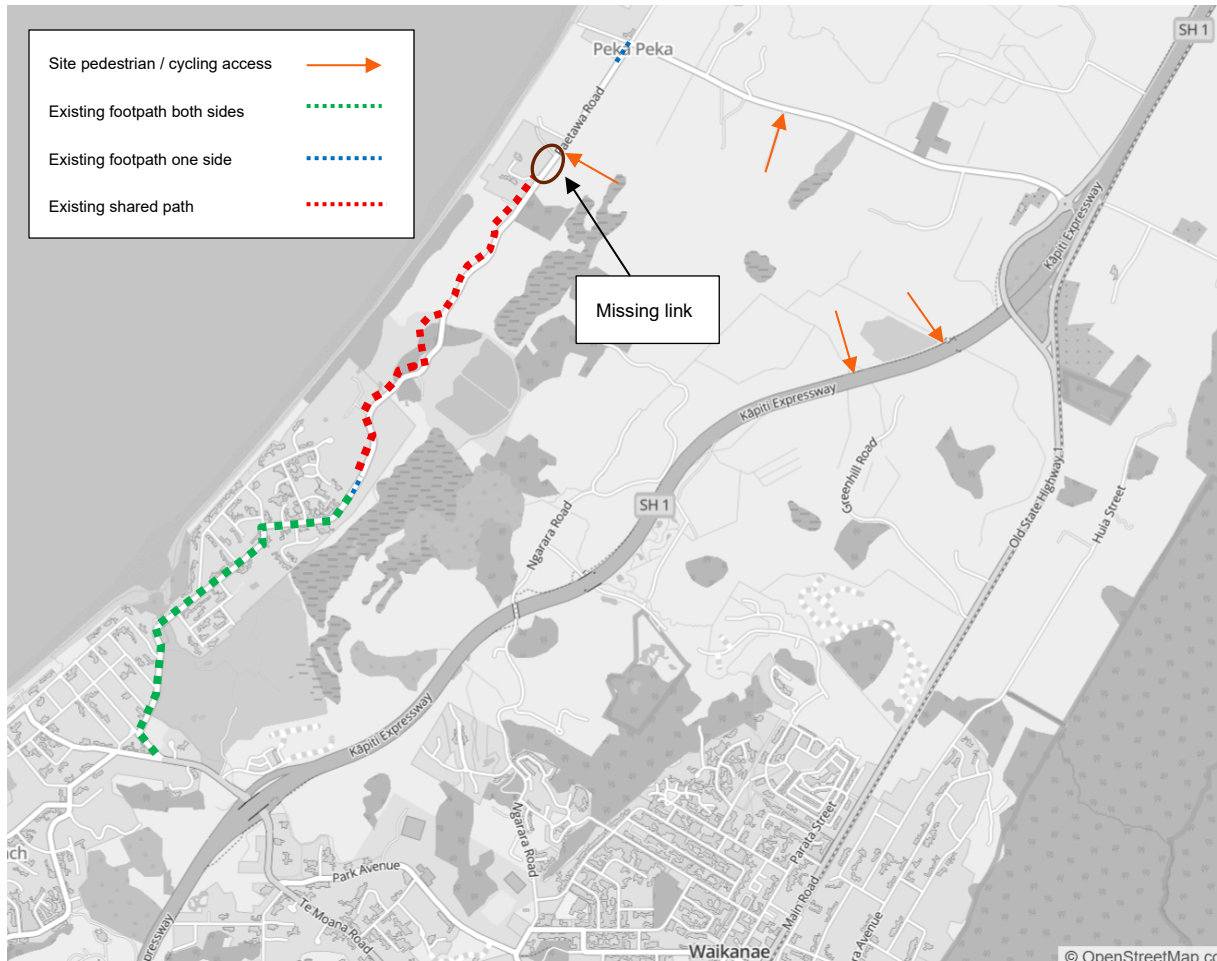
The modelling undertaken shows an increase in traffic to the west in the order of 350-415 vehicle per hour or around 4,000 vehicles per day.

In this regard:

- On the Coast Roads (comprising sections of William Street, Field Way, Huiawa Street, Rauparaha Street and the southern end of Rutherford Street which are more built up urban areas), there is a series of footpaths typically provided on both sides of the roads. I consider these roads including their footpaths are appropriate to cater for additional traffic expected.
- On Rutherford Road and Paetawa Road (from the south to Marram Way) there is a shared path on one side of the road (off road).
- The remainder of Paetawa Road and Peka Peka Road has little in the way of pedestrian / cycling provision.

Figure 2 below shows the current pedestrian / cycling situation together with the site pedestrian / cycling access points.

Figure 2: Pedestrian cycling (main route to Te Moana Road)



From the above, in terms of the subject site pedestrian / cyclist access:

- i. The pedestrian provision within Waikanae Beach urban area (William Street, Field Way, Huiawa Street, Rauparaha Street) is considered appropriate even with the additional traffic from the proposal;
- ii. The area of Rutherford Street / Paetawa Road with the shared path is also considered appropriate with the additional traffic from the proposal;
- iii. There is a “missing link” from the proposed site pedestrian access on Paetawa Road to the shared path (as shown in Figure 2);
- iv. If the Paetawa Road site access is not formed early in the staging of the development, there will then be a significantly greater “gap” for residents of the Waikanae North walking to Waikanae Beach;
- v. Peka Peka Road and an existing section of Paetawa Road has no footpath / cycling provision which will experience noticeably greater levels of traffic. KCDC have noted and requested additional information regarding numbers of pedestrians / cyclists / horse riders in this area however this has not been provided (even within the Minute 12 response of 12 October 2026). I agree with KCDC that these local roads are frequented by pedestrians,

cyclists and horse rider users. I note the applicant response to Minute 12 (item 12) states *"The posted speed limit on Peka Peka Road has recently been reduced from 80 to 60 km/h, and Council has widened approximately 0.5 km of the road east of the site access to provide a cycle shoulder, with funding presently being sought to complete the widening along its length"*. As such this appears to be an existing issue which Council appears to be aware of. It is difficult to gauge the effect of the additional traffic on these existing users without both the existing pedestrian / cycling volumes and the exact nature of upgrade. I do however note the general agreement that pedestrian volume is low on this section of the network¹. The additional traffic from the Waikanae North Development will increase the potential conflict with these existing users, however with the appropriate links provided as part of the Waikanae North Development (as noted above which link to existing paths / destinations) the pedestrian and horse rider volumes in this section of road network are unlikely to significantly increase.

- vi. It is however considered the Waikanae North Development will add significant levels of traffic to Peka Peka Road. Without details of the exact number of existing pedestrians / cyclists / horse riders it is difficult to quantify the effect. Potential mitigation includes:
- a. Reduction in speed limit (noting this is outside the control of the applicant and already recently undertaken);
 - b. Increased sealed / unsealed shoulders to provide additional run-off area particularly for cyclists (similar to what has recently been completed near the site access); and
 - c. Installation of an all-weather bridle / shared path along one side of Peka Peka Road similar to that on Paetawa Road (2.5-3.0m wide gravel path). Initial review shows this is achievable in the existing road reserve.

Overall, in terms of Peka Peka Road, with the absence of any background data to prove otherwise (pedestrians, cyclists and horses), I consider some upgrade is warranted. Given the general agreement that pedestrian volume is low, a full shared path is not considered warranted, however the road shoulders should be widened in a similar manner as Council has already undertaken near the site access.

As such the following is recommended (as part of conditions):

1. The sites pedestrian link to Paetawa Road should be formed in the initial stages of development of Waikanae North.
2. When this Paetawa Road link is formed, the existing shared path on the west side Paetawa Road should be extended to the site link and an appropriate pedestrian crossing facility created.
3. Widening of Peka Peka Road to include an appropriate sealed shoulder to accommodate cycling in a similar manner to that recently undertaken by Council near the site access.

3.3 TE MOANA ROAD/SH1 INTERCHANGE

From my review of the information and attendance at the expert conferencing, there appears to be significant difference of opinion between applicant's traffic experts and that of KCDC / NZTA. The issue centres around the performance of the Te Moana Road / SH1 interchange in the future specifically relating to the trip rates used, traffic model used and the methodology used in the analysis.

¹ Page 7 KCDC Response to Minute 8

In this regard:

- i. From my review, KDCDC instructed the applicant to use the KDCDC KTM4 SATURN model ("SATURN model") to assess the proposal.
- ii. The SATURN modelling has been undertaken by an independent consultant "Transport Futures" who operate and run the KTM4 model for KDCDC.
- iii. This model is an assignment model and includes the entire Kapiti Coast District.
- iv. The KTM4 model includes an allowance for background traffic growth (to the 2036 year used) to represent new development-related trips that will come online over time.
- v. The proposed development traffic has been added in to the 2036 KTM4 model. In this regard, I consider that some of the growth already assumed in the 2036 model will likely be taken up by the proposed Waikanae North Development (thus there will be a double-up of growth).
- vi. In my opinion the trip rate used (0.9 / dwelling) is high. Since COVID-19, there has been a change in behavioural patterns that has typically resulted in greater working from home and driving patterns that has reduced traffic generation per household in peak hours. This is evidenced in the applicant's surveys of similar developments (suggesting 0.7-0.8 per dwelling) and recent studies undertaken particularly in Australia.
- vii. The applicant has noted² that a comparison of the 2026 model outputs against available existing traffic count data indicates that the model currently predicts traffic volumes at the Te Moana Road interchange that are approximately 15-20% higher than those actually being observed.

I acknowledge KDCDC comments in their "*Response to Minute 8 of the Expert Panel*" around the comparison of the Base, 2036 base and 2036 "with development" flows from the SATURN model into SIDRA including expressing concern that the 2036 with development scenario was less than the base for some movements. In my opinion this is to be expected. The SATURN model re-assigns traffic on the network. For example, if additional traffic is added to one route causing additional delay on this route, some existing traffic may be assigned to a different route. In practice this is what occurs with drivers adjusting their route / patterns based on the environment. This is the exact benefit of using a model such as SATURN.

Overall, I considered the traffic modelling to be appropriate if not likely conservative.

The modelling results show the interchange in 2036 with all the Waikanae North development (as well as general growth) is performing at acceptable levels and significantly the changes from the do-minimum in 2036 are minimal. Of particular interest is the two off-ramps have queues that do not extend anywhere near the SH1 expressway lanes with the northbound off-ramp in the PM peak having a queue of around 175-211m (depending on scenario). This offramp has over 450m of queuing space.

Finally, regardless of the modelling, it would be highly unusual to have a monitoring condition on a motorway interchange linked to development some 6km away. The main difficulty with such a condition is how the effects / traffic generated by the development can be distinguished from other traffic in the area given the distance and multitude of route choice in the area.

² Waikanae North Development: Section 53 Comments Transport Response page 6

4 CONCLUSION

From a review of the documentation provided including the additional responses and modelling as well as a review of comments received, I consider the proposal is acceptable from a transportation / traffic engineering point of view, including traffic generation and associated effects as well as overall design. The key aspects include:

1. I consider the modelling contained in the ITA to be appropriate;
2. The modelling shows minimal effect on the Te Moana Road / SH1 interchange;
3. I thus do not consider a "monitoring" or future analysis condition of the Te Moana Road / SH1 interchange to be necessary
4. There are some gaps created in the pedestrian / cyclist network as identified in Section 2. I have suggested there should be conditions added regarding staging and upgrades to ensure pedestrian / cyclist safety is not compromised.

If you have any queries, please do not hesitate to contact me.

Yours sincerely

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