

BEFORE AN INDEPENDENT COMMISSIONER

IN THE MATTER of the Resource Management Act 1991 (**Act**)

AND

IN THE MATTER Resource consent application to construct a storage and distribution facility and three warehouses and ancillary offices in the Rural Zone at 16A Wickham Street, Hamilton

COUNCIL REFERENCE Resource consent – LU/0038/23

Summary Statement of Judith Makinson on behalf of Industrie Property Rua Limited

DATED: 23 NOVEMBER 2023

MAY IT PLEASE THE COMMISSIONER

INTRODUCTION

1. My name is Judith Makinson. I am a Director at CKL specialising in Transportation Engineering. I have the qualifications and experience set out in my Statement of Evidence on this matter dated 8 November 2023.
2. In this summary statement I am addressing the following matters that have been raised in the evidence by Mr Prakash for Hamilton City Council and Waka Kotahi, Mr Van Rooy and Dr Davey for Hamilton City Council and Ms Rosser for Enviro NZ:
 - (a) Traffic Generation;
 - (b) Road Safety;
 - (c) Draft Traffic Management Plan;
 - (d) Site Access;
 - (e) Fire Fighting; and
 - (f) Connectivity.
3. As noted in my primary statement of evidence, I have read the Code of Conduct for expert witness contained in the Environment Court's Practice Note 2014. I have complied with the Code in preparing this statement. This statement is within my area of expertise and represents my best knowledge about this matter except where I note that I am relying on the evidence of another witness. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

TRAFFIC GENERATION

4. I do not agree with Mr Prakash that the likely traffic generation for the site should be based on the 85th percentile trip rates from '*NZTA Research report RR453: Trips and parking related to land use*' (**RR453**) as I do not consider that this aligns with the bespoke information provided by Watty NZ, the intended tenant of Stage 1 of the development. Notwithstanding that, throughout my assessment of effects, I have considered potential traffic effects based on both my preferred trip generation rates from the *Institution of Transportation Engineers Trip Generation Database 11th Edition (ITE)* and the RR453 85th percentile trip rates as set out in paragraph 67 of my evidence.
5. I also note as per paragraph 81 of my evidence that the proposed development does not generate sufficient traffic to warrant a Transportation Assessment under either the Hamilton City Council

(**HCC**) or Waipa District Council (**WDC**) District Plans. Taking into account the 0.6% change in daily traffic volumes on SH1C the proposed development would be likely to generate, I remain of the opinion that the proposed development has negligible effects on network capacity, as per paragraph 80 of my evidence.

ROAD SAFETY

6. In relation to the SH1C / Kahikatea Drive intersection, I agree with Mr Prakash on a number of matters, as follows:
 - (a) There is an existing road safety issue at the SH1C / Kahikatea Drive intersection and that it should be considered as a high-risk intersection (paragraph 49 of my evidence).
 - (b) The general crash patterns show the majority of crashes occur outside of the peak hours. This is not unexpected given the relative number of hours in the day however, I also note that as per paragraph 36 of my evidence that around one third of the existing crashes also occur outside of normal business hours.
 - (c) The level of road safety upgrade required to address the existing safety record, being safety transformation, is appropriate.
 - (d) Crashes are occurring at a rate higher than would be expected based on the Crash Estimation Compendium (**CEC**) crash models as set out in Table 8 of my evidence.
 - (e) Consideration of the recent reduction in observed crash rates following the completion of the Waikato Expressway which has diverted traffic away from SH1C and the recent reduction in speed limit, is not appropriate within the CEC models due to the limited data set (as per paragraph 84 of my evidence).
 - (f) The likely road safety effects from the application at this intersection based on the crash models does not significantly increase the crash rate¹, and in my assessment are negligible.
7. Where I do not agree with Mr Prakash is in relation to the appropriateness of the crash modelling undertaken and whether the existing road safety matter should preclude the development from progressing without physical works at the SH1C / Kahikatea Drive intersection.
8. Mr Prakash states that he is concerned about the risk of cumulative safety effects not being addressed.² The CEC product of flow models are based on traffic volumes with the base models

¹ Mr Prakash EIC paragraph 51.

² Mr Prakash EIC paragraph 57.

being existing traffic volumes and the future models being existing + development traffic models. As such, they inherently consider cumulative traffic effects from a road safety perspective.

9. I also note that as set out in paragraph 80 of my evidence that I have been conservative in my assessment by assuming that the total daily traffic volume from site would be evident at each intersection in turn i.e. development traffic assessed at the SH1C / Kahikatea Drive intersection is +153 vpd, development traffic assessed at the Kilarney Road/ Higgins Road intersection has been assessed as +153 vpd etc. This is clear from the calculations provided in Appendix C of my evidence.
10. This also means that assessment of potential road safety effects based on the CEC models do not take account of the proposed Draft TMP and assume that both existing network and future site traffic can continue to turn right in and right out of Kahikatea Drive at this intersection.
11. In relation to whether the CEC product of flow or conflicting flow models are more appropriate, I note from paragraph 49 Mr Prakash's evidence that his use of the conflicting flow models relies on Bluetooth data and an assumption of 25% right turns, rather than using an actual traffic count which would provide a higher degree of accuracy. As such, I prefer the product of flow model I have used as this is based on more reliable traffic data. However, regardless of the model used, both Mr Prakash and I reach the same overall conclusion in relation to the lack of significant effect of the development evident within the CEC model assessments.
12. Mr Prakash has made comment concerning the methodology I have adopted to assess crash risk being non standard and also comments at paragraph 54 that the CEC models do not take account of:

*"existing safety concerns associated with the intersection"*³
13. The assessment I have undertaken is staged. The first stage is to assess existing and 'with development' crash risks using the standard CEC models. The second element of my assessment has been to use engineering judgement and my experience to make an allowance for the fact that the intersections are currently experiencing a higher injury crash rate than would be expected. This is through the application of a straightforward factor between expected and actual crash rates.
14. Mr Prakash is on one hand concerned that no allowance has been made for other factors that influence crashes, and then criticises the approach I have taken using engineering judgement to do just that. I also note that Mr Prakash has made no attempt to quantify the 'other factors' and his evidence appears to rely on a 'nil effect' hypothesis.
15. Mr Prakash also notes that crash occurrence is not linear. I agree. I note this in my evidence at

³ Mr Prakash, paragraph 51

paragraph 83 where I state that:

"I note that my assessment is a mathematical one assessing the degree of change in calculated risk and should not be taken as a prediction of when a crash will occur in a real world scenario."

16. The purpose of my translation of 0.004 change in calculated crash rate as a result of the proposed development to a rate of how many years it would take (mathematically) for an additional injury crash to occur is to assist the understanding of non-specialist readers by giving a sense of scale.
17. In relation to the Safe System Approach and Vision Zero, I discussed these at paragraph 41 of my evidence. I have undertaken a detailed assessment of death or serious injury (**DSI**) crash risk for the existing environment at paragraphs 42 to 56 and with the development in place at paragraphs 82 to 91 of my evidence. I note that Vision Zero is seeking to reduce DSI crashes by 40% by 2030. To put this in context, I have applied this to my assessment of existing all injury crash rates for the SH1C / Kahikatea Drive intersection presented in Table 8 of my evidence.
18. I note that a 40% reduction in the currently observed all injury crash rate would bring the operation down to 0.688 injury crashes per year which is very close to the CEC predicted rate of 0.6049 injury crashes per year. Applying the 40% reduction to the modelled crash rate for the 'existing' scenario would give an injury crash rate of 0.3629 per annum. The 0.0064 increase in all injury crash rates I have identified in Table 8, using Mr Prakash's higher trip generation rates, and assuming all development traffic uses this intersection (and the TMP is not in force), would represent a 1.76% increase in all injury crashes. In my opinion, this change is not significant and is not contrary to the aim of Vision Zero, particularly given I have not further factored to allow for DSI crashes only.
19. In terms of the need for physical interventions to mitigate the effects of development traffic on the safe operation of the SH1C / Kahikatea Drive intersection, one of the functions of the road controlling authority (**RCA**) is to maintain their roads in such a way as to provide suitable levels of capacity and safety on their network. There are, of course competing projects for a limited road improvement budget, leading to RCAs prioritising their spend. In no way do I consider that this detracts from the fact that the SH1C / Kahikatea Drive intersection is currently operating with a higher injury crash rate than would be expected, or that it is identified as a high risk intersection.
20. However, to my knowledge and as acknowledged by Mr Prakash at paragraph 32 of his evidence, there are no projects identified or budgets allocated by the responsible RCA, even though minor safety improvement budgets could be used to alleviate the existing road safety issues at the Sh1C / Kahikatea Drive intersection. In my opinion, this suggests that this intersection is not a priority for their attention under current conditions. As per paragraph 95 of my evidence, I remain of the opinion that this is an existing issue and is for the RCA to address.
21. My interpretation of Mr Prakash's evidence is that he is seeking a 'no effects' outcome when it comes to road safety. This is not the aim of either the Safe System approach to road safety or

Vision Zero, which focuses on reducing the severity of outcome when drivers make mistakes, and also seeking to reduce DSI crashes on the road network by 40% by 2030. Logically, if this interpretation of the RMA were to be correct, then from a traffic perspective, no development that increases traffic volumes in the area that would need to turn right at the SH1C / Kahikatea Drive intersection could occur, regardless of its activity status. Similarly, if Vision Zero and the Safe System approach to road safety are taken as 'no effects' aspirations, I reach the same logical conclusion.

22. Overall, I do not agree with Mr Prakash's conclusions at paragraph 19 of his evidence. I consider that the minimal likely right turn demand at the SH1C / Kahikatea Drive intersection (even if the Draft TMP was not in place) would result in a negligible effect on road safety. With the TMP in place, I consider that this minimal risk is further reduced and is entirely in alignment with road safety policy.

DRAFT TAFFIC MANAGEMENT PLAN

23. Notwithstanding the negligible traffic capacity and safety effects, a Draft TMP has been proposed in recognition of the existing safety issue at the SH1C / Kahikatea Drive intersection until such time that the RCA addresses this issue.
24. The intersections of concern and management in relation to the TMP are all the responsibility of Waka Kotahi as RCA, with all matters of road safety and control that have been raised in submission being in relation to their intersections only. As such, in my opinion, HCC has no regulatory or affected party interest in the operation of these intersections and therefore no need to be party to the TMP. However, in the interests of moving forward, I see no issue with HCC being included in the TMP and relevant consent condition if that is their preference and if considered appropriate.
25. At paragraphs 11 and 41 of his evidence, Mr Prakash raises concerns regarding potential TMP non-compliance during off peak periods. Based on Mr Prakash's assessment of traffic generation, and making no allowance for existing trips on the network from the site, I assess that the total off peak traffic demand for the site would be some 35vpd. When spread across a typical industrial working day of 10 hours and removing the peaks, that equates to some 4vph off peak traffic demand across the wider road network. Notwithstanding this clearly negligible traffic demand, I consider that if necessary, the need for off-peak monitoring can be discussed as part of the TMP development and agreement process as set out in proposed condition 17.
26. Mr Prakash notes that the GPS monitoring has been removed from the Draft TMP.⁴ I have discussed the relative merits of GPS monitoring and number plate matching as monitoring

⁴ Mr Prakash, paragraph 36

methodologies at paragraph 101 of my evidence. It is my opinion that this is a detail that can be agreed through the final TMP provisions as per condition 17.

27. In relation to the effectiveness of the TMP and Mr Prakash's concern that it is up to the businesses established on site to instigate disciplinary actions, and that the TMP is only seeking to avoid or minimise right turns⁵. In my opinion, the TMP is also very clear at 3.1.1 that:

'no right turns into or out of Kahikatea Drive will be permitted at any time for any Watty/ NZ vehicles, including staff vehicles (private and work related), commercial visitors and HCV's'.

28. This is not an avoid or minimise situation, but is clearly directive. Proposed condition 18 also requires compliance with the TMP, which is again directive and legally enforceable. This places a legal requirement on the consent holder, and site occupiers, to comply with the TMP and provides a mechanism for enforcement by WDC. Given HCC and Waka Kotahi will be party to the TMP and the ongoing consultation it includes, I consider that this gives ample opportunity for the parties to raise any concerns and seek resolution collaboratively as well as having recourse to enforcement notices if necessary.

29. Mr Prakash has raised concerns in relation to visitors to the site and whilst acknowledging the proffered condition to limit activities on site to ones that do not attract members of the public, he appears to be seeking to limit operational visitor access also.⁶ These trips have already been considered within the trip generation rates and road safety assessment. In addition, the Draft TMP includes for these trips at section 4.1.2 where I note that in relation to briefings for people visiting site:

"...Suitable examples of information may also include on-site signage showing the permitted and safe route for travel and through other physical and electronic means that are used to provide information to staff, contractors and visitors. This may include physical and digital noticeboards, company website and appointment or meeting booking systems for commercial visitors."⁷

30. As such, I consider that the Draft TMP provides suitable means of control for all site visitors, that the monitoring proposed is in keeping with the degree of traffic likely to be generated, that the Draft TMP provides betterment over existing situation where traffic from site is not controlled in any way, and given the final TMP is to be developed in consultation with WDC, WK and potentially also HCC there is opportunity to refine this further.

⁵ Mr Prakash, paragraphs 33, 38 and 40

⁶ Mr Prakash, paragraph 18

⁷ Emphasis added

SITE ACCESS

31. I acknowledge Enviro NZ's acceptance of the proposed white lining and signage scheme proposed by the applicant to control access to the Enviro NZ, Waste Management and subject sites. I understand that prior approval is being sought from the land-owner and all parties having right of access along the right of way. The traffic control scheme is also subject to detailed design and approval by WDC as covered by proposed consent condition 19 in Mr Moran's EIC. Further to my primary statement which proposed stop or give way signs, I recommend that give way signs and markings be preferred over stop signs to assist with HCV traffic to and from various sites and that this be reflected in proposed condition 19.
32. In relation to Ms Rosser's proposed condition at Paragraph 25 of her evidence, I agree that the vegetation or any fence directly to the west of the Enviro NZ entrance should be limited or maintained to no more than 1m in height. I consider that proposed condition 19 provides suitable certainty on how the visibility interface is to be managed, but if considered necessary, the last bullet point of the condition could be amended to be more specific as follows:

Details on how visibility for 24m southward along the boundary from the point where the Enviro NZ vehicle crossing meets the right of way is to be maintained such that no visual obstructions above 1m in height are present within the right of way.

FIRE FIGHTING

33. I note that Mr van Rooy raises potential traffic effects in relation to water, wastewater and fire-fighting supply. I have assessed the likely demand of the proposed water and waste-water management put forward by Mr Brimelow and note that this is likely to result in 2 HCV movements per week for wastewater and at worst, 2HCV movements per fortnight if rainwater harvesting cannot provide sufficient supply of potable water. In relation to fire, I understand from Mr Pottow that the tanks would require filling once only, subject to their being a fire event, with any testing resulting in minimal water loss. This initial fill would occur as part of the construction and commissioning of the site with traffic effects being temporary only. If rainwater harvesting occurs as suggested by Mr Brimelow, then the quantum of water delivery for the fire-fighting tanks would be reduced.

CONNECTIVITY

34. Dr Davey has raised some policy matters in relation to the Hamilton Urban Growth Strategy and its out of boundary development principles. Mr Moran will address this further, but in response to the points raised, I note that the proposed development uses an existing right of way and road network for access, requiring no additional road infrastructure resource to be created. The site

also offers additional industrial employment opportunities within and adjacent to an existing industrial employment node. In my opinion the site is therefore integrated in terms of road infrastructure and also provides connections to places of work commensurate with those for the rest of the adjacent industrial development within HCC boundaries. Due to the sites proximity to the Hamilton City boundary and existing right of way to Wickham Street, I do not consider that development of the site will impact the future road network planning for the wider area.

DEVELOPMENT CONTRIBUTIONS

35. The matter of effects on HCC roads has been raised from a maintenance perspective. I understand that the applicant has offered to make a 'development contribution equivalent' payment to address this. I consider that this is reasonable given all traffic must currently access the site via the HCC road network. As a worst case, I consider that this DC equivalent payment should be based on HCC's own assessment of traffic generation arising from the site as put forward by Mr Prakash in is evidence of 215 vehicles per day.

CONCLUSION

36. I remain of the option that the traffic effects in terms of network capacity and safety are negligible and the Draft TMP is an appropriate mechanism to further minimise potential effects at intersections along the SH1C corridor, recognising their existing poor safety record. As such, I consider that there are no traffic related reasons why the proposed development cannot be granted resource consent.

Judith Makinson

22 November 2023.