

Before Independent Commissioners

In Taupō

Under the Resource Management Act 1991 (the Act)

In the matter of Plan Change 42 – Rural

**Statement of evidence of David John Robert Smith for the Taupō
District Council (Transport)**

Dated 26th July 2023

1 Introduction

1.1 My name is David John Robert Smith.

1.2 I hold a Bachelor of Technology (with Honours) in Industrial Operations Research and Master of Philosophy in Operations Research from Massey University. I am a Chartered Member of the Institute of Logistics and Transport (CMILT), a member of Engineering New Zealand (MEngNZ) and a member of the NZ Modelling User Group sub-group of ENZ. I have been appointed to the NZ Transport Agency Independent Professional Advisors panel for Transportation Modelling. I am also certified as a Hearings Commissioner having complete the Making Good Decisions course in 2019.

1.3 I hold the position of Technical Director of Transportation Planning at Abley. I have been in this position since 2018 and have been at Abley for over 11 years. I lead a range of development planning and transportation planning projects for both public and private sector clients.

1.4 My previous work experience includes 23 years of transportation planning and engineering experience. I have managed and led numerous projects related to transportation business cases, transportation research and Resource Management Act (RMA) related matters for public and private sector clients. As an expert witness I have represented Environmental Protection Authority, Foodstuffs South Island Limited, Auckland Council, Selwyn District Council, Queenstown-Lakes District Council, Taupō District Council, Ports of Auckland and Fonterra.

1.5 My role in relation to Private Plan Change 42 (PC42) is as an independent expert witness to Taupō District Council on traffic and transportation matters. I am the author of Appendix 6 "*High Level Transport Assessment Of Proposed Rural Lifestyle Areas*" of the PC42 Section 32 report.

1.6 In my assessment I have reviewed the following documents:

a Waka Kotahi submission;

b Transport-related matters in the Section 32 report.

2 Code of conduct

2.1 While this is not a hearing before the Environment Court, I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023 and that I have complied with it when preparing my evidence. Other than when I state I am relying on the advice of another person, this 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 that I express.

3 Scope of evidence

3.1 I have prepared evidence in relationship to:

- a Overview of my High-Level Transport Assessment report;
- b Matters raised through submissions; and
- c Conclusions.

3.2 I have not undertaken a site visit at the time of preparing this evidence but am familiar with the Taupō urban area having been involved in transportation planning in the District since 2001. I have familiarised myself with the sites through online aerial and street view imagery.

4 Overview of High-Level Transport Assessment

4.1 I was engaged in 2022 by Taupō District Council to undertake a high-level transport assessment of a potential future plan change proposal to insert a Rural Lifestyle environment in the vicinity of Taupō Township. The proposed method of achieving this is to introduce a new zone/environment called 'Rural Lifestyle' (RL) which will allow creation of sites down to 2ha in area as a controlled activity, where it does not adjoin General Rural. I understand that the selection of areas was based on clusters of existing rural lifestyle blocks developed under the Rural Environment provisions.

4.2 This assessment comprises a multi-criteria analysis which assesses eight sites against:

- a Transport network capacity;
- b Road Safety; and
- c Their individual alignment with the seven priorities contained within the Taupō District Council Transport Strategy – Connecting Taupō 2020-2050 (Transport Strategy).

4.3 The assessment of transport network capacity and road safety directly fed into the alignment assessment with the Transport Strategy, noting that two of the Transport Strategy priorities specifically relate to Road Safety (safe) and Transport Network Capacity (maintaining predictable travel times in the face of growth). Other priorities in the assessment covered the ability to access the sites by walking and cycling, resilience, and how well connected the site is to the rest of New Zealand.

4.4 I clustered the potential sites being considered into eight catchments based on their location and connectivity to the wider transport network, and assigned a score to each cluster based on the level of alignment with the seven priorities from 'very poor' results to 'very good'.

- 4.5 The assessment concluded which clusters were most suitable for potential RL rezoning from a transportation perspective favouring sites with lesser impact on the already constrained areas in the transport network, and due to their relatively remote location. Notably my assessment did not conclude that any of the sites were entirely unsuitable, and all of the clusters in the assessment have been carried through to PC42.

5 Transport-related submissions

- 5.1 Taupō District Council have requested that I respond to two submission points from the Waka Kotahi NZ Transport Agency (Waka Kotahi) submission as follows.

Submission Point 113.6

- 6 Waka Kotahi supports restricting the number of equivalent vehicle movements per day in the General Rural Environment, however the proposed threshold of 200 included in provision *4b.2.1 vehicle movements*, is considered too high for allotments with direct access to a State Highway. Waka Kotahi seek that that provision 4b.2.1 be amended such that any activity located on a state highway shall not exceed a trip generation of 100 equivalent car movements (ecm) per day.
- 7 I note that the threshold of 100 is consistent with Waka Kotahi's SH access standards in Table App5B/4 of the Waka Kotahi Planning Policy Manual¹ which specifies the design requirements for an access to the State Highway for developments generating up to 100 ecm per day.
- 8 I agree with this submission point. The proposed threshold of 200 under provision 4b.2.1 exceeds the maximum number of vehicle movements specified in the relevant design standard, and a threshold of 100 ecm is in my view more appropriate, especially on the busier sections of State Highway in the Taupō District. With traffic volumes on State Highway corridors typically being higher and with often a greater volume of heavy vehicles, the lower thresholds of 100 are not considered appropriate unless a higher order access treatment is considered, for example the installation of turning bays or a rural roundabout.
- 9 I recommend that the change to provision 4b.2.1 sought by Waka Kotahi be accepted and further recommend an advice note be included stating that any accessway onto the State Highway should be developed as per the Waka Kotahi PPM Appendix 5B Standards and Guidelines or any future updates or replacements to this standard.

Submission Point 113.7

- 10 Waka Kotahi consider that no more than one primary residential unit should be permitted where there is direct access to the state highway network, and consider there are a number of locations where the intensification of the use of accesses may have adverse safety impacts. Waka Kotahi

¹ <https://www.nzta.govt.nz/assets/resources/planning-policy-manual/docs/planning-policy-manual-appendix-5B-accessway-standards-and-guidelines.pdf>

seek an amendment to provision *4b.2.4 Maximum Density of Primary Residential Units*, to restrict allotments to one primary residential unit per site where access is reliant on a State Highway.

- 11 I do not agree with the amendment requested in this submission point, but I do consider that the safety effects of direct access onto the State Highway is an important consideration. The safety of any access will be a function of the quantity of vehicle movements, the resultant potential for conflict, and the design standard of the site access as well as the context of the environment. It is not directly a function of the number of dwellings, however the number of dwellings will contribute to the total number of vehicle movements at a site.
- 12 My view is that the design standards included in the Waka Kotahi PPM Appendix 5B Standards and Guidelines satisfactorily addresses this based on the ecm per day at an access and the traffic volume of the State Highway itself. Provision 4b.2.1 discussed under submission point 113.6 (with or without the proposed amendment) addresses this in my view irrespective of the whether the traffic generation is as a result of one primary residential dwelling accompanied by other rural activity, or as a result of multiple residential dwellings on a site.
- 13 A residential unit typically generates 8-10 trips per day, and arguably the consolidation of accesses such that there are fewer accesses onto a State Highway which are appropriately designed is preferable to a larger number of lower standard accesses that may occur as a result of restricting the number of dwellings per site.
- 14 My view is that the amendment to provision 4b.2.1 sought by Waka Kotahi under 113.6 submission point would address safety in the event that there were multiple primary residential dwellings on a site by providing a safe and appropriate access standard. On this basis a up to ten (at ten dwellings x ten trips per day = 100 ecm) dwellings could be established on a site subject to an appropriate access design as per the requirements of Waka Kotahi PPM Appendix 5B.
- 15 In practical terms, a general rural activity would likely result in a mix of residential and farming-related trip generation. Therefore, a more likely scenario would be a smaller number of residential dwellings on a site than this theoretical maximum combined with other rural activities. In my view the prior Waka Kotahi submission point which I support satisfactorily addresses this matter by restricting the total ecm per day across all activities on a site, and restricting an individual site to only one primary dwelling is unnecessarily restrictive.

16 Conclusions

- 16.1 I have reviewed the two Waka Kotahi submission points 113.6 and 113.7.
- 16.2 I agree with submission point 113.6 and the corresponding amendment sought by Waka Kotahi to provision 4b.2.1 to restrict the traffic generated by a General Rural Environment allotment for a site

accessing a State Highway to 100 vehicles per day. I have further recommended the addition of an advice note to refer to the appropriate standards for State Highway access design.

- 16.3 I disagree with submission point 113.7 and the corresponding amendment sought by Waka Kotahi to provision 4b.2.4 to restrict more than one primary residential dwelling being established per General Rural Environment site where access relies on a State Highway. In my view the change sought to provision 4b.2.1 which I support satisfactorily addresses safety impacts.

David John Robert Smith

26th July 2023