

Before the Selwyn District Council

In the matter of the Local Government Act 2002

And

In the matter Submissions of the Draft Rural Residential Strategy

**Statement of evidence of Rhys Andrew Chesterman on behalf of the Georges, the Jeffs and the Crabbe Partnership**

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**Introduction**

1. My name is Rhys Andrew Chesterman. I am a Director and Transport Engineer/Planner at Novo Group Limited. Novo Group is a specialist traffic engineering and planning consultancy that provides resource management related advice to local authorities and private clients. I have worked on resource management traffic planning and engineering projects for more than 15 years. This work has included a role as a traffic planner at the Christchurch City Council and direct involvement in over 2,000 resource consent applications.
2. My qualifications include a Bachelor of Resource Studies (BRS) from Lincoln University (1996), a Master of Resource Planning (MRP) from Massey University (1999) and a Master of Engineering in Transportation (MET) from the University of Canterbury (2010). I am a full member of the New Zealand Planning Institute and an affiliate member of the Institute of Professional Engineers of New Zealand (IPENZ) – Transport Group.

Code of Conduct

3. I am familiar with the Code of Conduct for Expert Witnesses and I agree to comply with this code. This evidence is within my area of expertise, except where I state that I am relying on facts or information provided by another party. The data, information, facts and assumptions I have considered in forming my opinions are set out in my evidence to follow. The reasons for the opinions expressed are also set out in the evidence to follow. I have not knowingly omitted facts or information that might alter or detract from the opinions I express.

**Background Information**

4. My involvement with this block of land extends back October 2012. At that time I was asked by Barbara and Anthony George to consider any traffic

related implications with the potential development of their land with some sort of rural-residential zoning. In short, I specifically advised them that subject to some design input I could support rural-residential development on their block of land. Given that no detailed plans had been advanced at that time I specifically indicated that the overall lot numbers and layout would dictate road reserve widths and any need for footpaths and lighting etc. I also suggested that strong consideration would need to be given to ensure appropriate links and connections for all transport modes within the site and to adjoining roads or third party land.

5. The Draft Rural Residential Strategy has however been running its course in the intervening period. The Council officer has opposed the rezoning of the 28.6 hectare block of land between Trices, Birches and Hamptons Road (the Block). Accordingly I have been asked to make any transport related comments for this hearing.
6. My colleague, Lisa Williams was also recently engaged by Selwyn District Council to peer review the PC36 Conifer Grove application that was prepared by Abley Transportation Consultants. This relates to the adjoining near-triangular block of land to the west of Birches Road and south of Trices Road. She lent her support to that application (subject to minor realignment and securing public access along the ROW). I share her views. As I understand, Mr and Mrs George also provided a submission in support of PC36.

#### **Traffic Comments Related to the Block**

7. The only traffic related comment within the Officers report relating to the Block is as follows<sup>1</sup>:

*Council's Asset Manager Transportation has identified a preference that rural residential development does not extend to the south of Hamptons and Trices Roads to avoid any reduction in the safety and efficiency of these roads, which are of strategic importance under the Christchurch Rolleston Environs Transportation Study and will be upgraded to improve local road access onto Stage 2 of the Christchurch Southern Motorway. Anticipated local road upgrades include the formation of roundabouts at the Springs Road and Shands Road intersections of Hamptons Road (refer to RRS13 Appendix 1 – Rural Residential Form, Function & Character and Prebbleton Strategic Infrastructure Locations Criteria and Appendix 2 – Map 24).*

8. It would appear that the key traffic reason for opposing any residential zoning on the Block is to avoid any potential reduction in the safety and efficiency of Hamptons Road and/or Trices Road.
9. In my opinion these reasons can easily be overcome through appropriate transport design and engineering.

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<sup>1</sup> See page 52, 4<sup>th</sup> bullet point of Officer Hearing Report Rural Residential Strategy, April 2014



10. As I understand it is possible that the Block could be developed for rural-residential purposes with around 30 new houses ultimately being constructed. From a traffic perspective, this would most likely equate to less than 30 additional traffic movements onto the surrounding road network during the peak hour periods. This, on average is less than one additional vehicle every two minutes during the busiest hour of the day. In my opinion this level of traffic would be un-noticeable.
11. To put this into some further context, both Hamptons Road and Trices Road are identified as arterial roads within the Selwyn District Plan Road Hierarchy. Birchs Road however has only a collector status – despite carrying more than three times as much traffic as Trices Road. This occurs because it also collects traffic from parts of Lincoln into Christchurch via Prebbleton<sup>2</sup>. As I understand, the upgrading of Trices Road to an *Arterial* Road (from a *Collector*) has its roots in the CRETS<sup>3</sup> study 2007. As I understand this was partly used to feed into the Christchurch Southern Motorway proposals. This comment is again emphasised in the Council Officer's Report<sup>4</sup>.
12. The Final Report and Decision of the Board of Inquiry for the Christchurch Southern Motorway Proposal (8 November 2013) outlines the proposal and includes a plan of the proposed motorway route<sup>5</sup>. With regard to its linkage with Prebbleton, it is noted that Prebbleton (and Lincoln) residents can, and will continue to, access the Southern Motorway at or near the Springs Road/Halswell Junction Road interchange so as to gain access towards Christchurch City. In this respect, Trices Road really only offers a road connection for those wanting to get to or from State Highway 75 (i.e. the road to Akaroa) and/or Halswell. In this respect, I fail to see Trices Road ultimately operating like a true arterial road – especially in respect to it carrying high traffic volumes. In my opinion, the quicker and more convenient route for Prebbleton residents to and from most of Christchurch City will be via Springs Road and ultimately the Southern Motorway via the Springs Road/Halswell Junction Road interchange.
13. That said, I accept that Trices Road remains classified as an arterial road. In this respect direct property access from this road should normally be avoided so as to promote its 'movement' function. Logically, this would leave Birchs Road as an appropriate access point given its collector road status. The complication here is that this road carries three times as much traffic as Trices Road and from a safety point of view my preference would be for access to be located on Trices Road. I also understand that from an

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<sup>2</sup> Council traffic counts reveal that Birchs Road carries 3,390vpd (last count 28/7/2012). Trices Road carries 1,072vpd (last count 14/07/2012).

<sup>3</sup> The Christchurch, Rolleston & Environs Transport Study (CRETS). Available for online viewing at <http://www.selwyn.govt.nz/services/roading/crets>

<sup>4</sup> See page 52, 4<sup>th</sup> bullet point of Officer Hearing Report Rural Residential Strategy, April 2014

<sup>5</sup> See Volume 1, Appendix 1 (Map of Project), page 169 of the Final Report and Decision of the Board of Inquiry into the Christchurch Southern Motorway Proposal. Available for online viewing at: [http://www.epa.govt.nz/Publications/Final\\_Ddecision\\_Volume\\_1\\_Decision\\_30\\_Oct\\_FINAL.pdf](http://www.epa.govt.nz/Publications/Final_Ddecision_Volume_1_Decision_30_Oct_FINAL.pdf)

urban design perspective, the Birchs Road/Hamptons Road intersection is seen as a Gateway into Prebbleton and therefore there is a preference to avoid a proliferation of vehicle access points in this locale.

14. Either way, from a sole traffic engineering perspective, access could be made to work from any of the road frontages serving the Block. The key criteria from a traffic engineering perspective (and that which also aligns with the District Plan rules) is to essentially ensure that any new road serving the Block from Trices Road is located such that it is at least 180 metres from the Birchs Road nearby intersection<sup>6</sup>. If this is achieved, then safety and efficiency is unlikely to be compromised. In terms of good subdivision design, the Block would ideally have an alternative access for emergency access purposes in the event that one is blocked.
15. It could also be feasible for a future rural-residential subdivision layout to avoid the proliferation of property access points from either Birchs Road or Trices Road. This could easily be achieved through a variety of mechanisms including District Plan rules, conditions or via an outline development plan. There are already six existing houses within the Block that have property access from Trices Road – and if a future rural-residential subdivision is designed appropriately, it is possible to remove some of the existing vehicle crossings serving individual houses. The end result suggests that both safety and efficiency would not be compromised. In my opinion, any reduction in individual vehicle crossing points could only be seen as positive.
16. Appropriate links and connections could also be designed and engineered into any future rural-residential subdivision to ensure that pedestrians, cyclists and motorist can get to, from and between adjoining blocks. For example this could include a direct pedestrian link between the Block and Stonebridge Way, which directly links with the Prebbleton Domain and Reserve to the north (approximately 500m by cycle or foot). Connections to or from the Rail trail on Birchs Road could also be made, which I would consider as positive.
17. Rather than get into detailed design, the point I am trying to emphasise is that a rural-residential zone for the Block could easily be planned such that any adverse transport related effects could be avoided or mitigated to a point that safety and efficiency is not unduly compromised.
18. To this end, my colleague Lisa Williams has specifically discussed this issue with Andrew Mazey (Council's Transportation Asset Manager) who has reiterated the point that the CRETS study identified Hamptons and Trices Roads as part of a wider arterial orbital route connection between SH1 & 75. He has also specifically stated that the Council is conscious of wanting to maintain their mobility function such that they are not unduly impaired by an access function. I consider that the development of the Block can

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<sup>6</sup> See District Plan Table E13.9 – Minimum Distance Between Intersections. Roads with a 70km/hour speed require a separation distance of 181 metres.



occur in a manner to ensure that the mobility function of these roads is maintained.

### **Crabbe land**

19. I have also been asked to comment specifically in relation to the Crabbe land which is the 2.0236 hectare block on the corner of Trices and Birches Roads and currently has access onto Trices Road. I understand the Crabbe Partnership are represented separately and support the development of the wider Block but are also advancing the position that if the Commissioners' decide not to include the Block then their land should still be included. From a traffic perspective I consider that the development of the Crabbe land will have a relatively insignificant effect on the safe and efficient operation of Trices Road as the number of extra traffic movements from three additional blocks will be un-noticeable.
20. Having said that I remain convinced that the inclusion of the Block (including the Crabbe land) is a better outcome from a traffic perspective as the road access will be able to be placed 180 metres from the Brichs Road intersection and the number of existing accesses onto Trices Road will be able to be reduced significantly. The comprehensive development of the Block will also enable pedestrian and cycle linkages with other surrounding blocks.

### **Concluding Remarks**

21. It is my opinion that the Block can be developed for rural-residential purposes such that the function and status of Trices Road as an arterial road will not be adversely affected or compromised. On this basis I consider that rural-residential development of the Block can be supported from a transport perspective subject to appropriate controls ensuring that the proliferation of individual access points are avoided and that any new road intersection serving the block complies with the District Plan intersection separation requirements and/or other relevant traffic engineering best practice. Appropriate links and connections for all modes with nearby roads and other blocks would also be expected and the ultimate layout could also be tailored in recognition of any expectations in terms of urban design philosophy. Any detailed cross section design of the road carriageway, intersections, footpaths and service reserves etc. could all be negotiated and agreed with Council staff at the time of subdivision (or even beforehand if that detail is required for an ODP). In my view all transport related issues could be easily resolved to a point that I could lend my support for rural-residential zoning of this Block of land.

**Rhys Chesterman**

11 April 2014

