

**BEFORE THE HEARINGS PANEL
FOR THE QUEENSTOWN LAKES PROPOSED DISTRICT PLAN**

IN THE MATTER of the Resource
Management Act 1991

AND

IN THE MATTER of Hearing Stream 14:
Wakatipu Basin hearing
and transferred Stage 1
submissions related to
Arrowtown and Lake
Hayes

**REPLY OF DAVE SMITH
ON BEHALF OF QUEENSTOWN LAKES DISTRICT COUNCIL**

WAKATIPU BASIN: TRAFFIC AND TRANSPORTATION

10 August 2018

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TABLE OF CONTENTS

1. INTRODUCTION..... 2

2. ACCESS TO STATE HIGHWAY 6 ALONG LADIES MILE..... 2

3. RESPONSES FROM MR PENNY FOR BOXER HILL TRUST & TROJAN HELMET LTD (2385, 2386 & 2387)..... 3

4. CAPACITY OF SHOTOVER BRIDGE AND TUCKERS BEACH ROAD INTERSECTION..... 4

1. INTRODUCTION

- 1.1** My name is David John Robert Smith. I prepared the Traffic and Transportation Evidence for the Wakatipu Basin chapter of Hearing Stream 14. My qualifications and experience are listed in my evidence dated 28 May 2018.
- 1.2** I have reviewed the evidence filed by other expert witnesses on behalf of submitters, attended part of the hearing on 9 July – 10 July 2018 and have been provided with information from submitters and counsel at the hearing, including reports of what has taken place at the hearing where relevant to my evidence.
- 1.3** This reply evidence covers the following issues:
- (a) access issues onto State Highway in the Ladies Mile area and potential inconsistencies between my view and that of Ms Vanstone in this matter;
 - (b) questions from the Panel to Mr Penny relating to Boxer Hill Trust & Trojan Helmet Ltd (2385, 2386 & 2387); and
 - (c) questions to Mr Gatenby appearing on behalf of NZ Transport Agency relating to the capacity of Shotover Bridge.

2. ACCESS TO STATE HIGHWAY 6 ALONG LADIES MILE

- 2.1** Ms Vanstone's evidence is that access onto the State Highway in the vicinity of Ladies Mile is a significant issue, which is a matter that I addressed in paragraph 9.3 of my rebuttal as follows:

The assessment of transportation effects would also need to address access to SH6 from development along the Ladies Mile corridor. There are currently only a limited number of access locations for development to connect to the wider network. Access to SH6 should be considered as part of an assessment of cumulative transportation effects arising from development along the SH6 Ladies Mile corridor.

- 2.2** I received a question from the Panel as to whether I considered that access issues are likely to be a significant consideration. My view is that access to the road network from development can generally be

addressed through the resource consent process on a case-by-case basis. But in response to a specific question relating to Lades Mile I responded that along Ladies Mile there are a very limited number of accesses available and there are likely to be some access issues there.

2.3 This response is consistent with paragraph 9.3 from my rebuttal in the context of Ladies Mile, and I believe this is also consistent with Ms Vanstone's view as stated to the Panel.

2.4 The legal requirements relating to access to the State Highway network was addressed in Council's legal submissions¹ prepared by Ms Scott for the Proposed District Plan Hearing Stream 13. In paragraph 6.16 Ms Scott states:

Legal submissions have been filed by the NZ Transport Agency that explain the separate process for considering new accesses directly onto the State Highway (where a limited access road). Under section 91 of the Government Roading Powers Act 1989 (GRPA) the Transport Agency's authorisation must be obtained before a new access onto limited access road can be constructed. In relation to any new accesses, under the GRPA legislation the Agency needs to be satisfied that additional accesses are necessary, and are designed in a way that promotes the safe and efficient functioning of the State Highway network, before it would be in a position to authorise additional accesses.

3. RESPONSES FROM MR PENNY FOR BOXER HILL TRUST & TROJAN HELMET LTD (2385, 2386 & 2387)

3.1 I would like to respond to two questions put to Mr Penny during the hearing.

3.2 Mr Penny was asked "Does Austroads anticipate the skewed access of McDonnell Road with Lake Hayes Road?". To be clear I understand this question is referring to the intersection of McDonnell Road and Arrowtown-Lake Hayes Road. Mr Penny's response was that Austroads is just considering the efficiency of the intersection. I agree with this statement and consider that skewed intersection alignments are likely to have implications on both the safety and efficiency

¹ <https://www.qldc.govt.nz/assets/Uploads/Planning/District-Plan/Hearings-Page/Hearing-Stream-13/Pre-Lodged-and-Pre-Tabled-Evidence/Pre-Lodged-Legal-Submissions/S0001-QLDC-T13-ScottS-Opening-Legal-Submissions.pdf>

performance of the intersection that would necessitate a more detailed assessment of those effects.

3.3 Mr Penny was also asked a general question relating to the impact of high levels of tourists driving in the District, and stated that tourists do not necessarily add to the critical flows, adding that in a lot of cases they are not travelling in peak periods. I agree that the travel demand for tourists is likely to be less than that of residents during the critical morning and evening peak hour periods as many residents would be travelling to or from workplaces at this time of day.

3.4 There is no definitive source of data that I am aware of that compares the travel patterns of Queenstown locals against those of tourists. However, I would still expect some tourist travel during the peak hours as they travel around the road network to or from tourist, retail and hospitality activities, but acknowledge that the trip generation of tourists is likely to be lower than the trip generation of locals at these times.

4. CAPACITY OF SHOTOVER BRIDGE AND TUCKERS BEACH ROAD INTERSECTION

4.1 At the hearing I was asked by the Panel to address a reconciliation issue relating to the level of development included in my modelling for the as notified Wakatipu Basin Lifestyle Precinct Zone (**Precinct**) and Wakatipu Basin Rural Amenity Zones (**Amenity Zone**) against Mr Barr's figures.

4.2 This matter was addressed in a Council memorandum filed on 24 July 2018 but note that the Panel also discussed this matter with Mr Gatenby on 23 July 2018 at the hearing. I defer to the Council memorandum dated 24 July for my response to this matter.

4.3 The future modelling baseline referred to in my evidence in chief and addressed in the Council memorandum corresponds to the level of development that can occur under the Wakatipu Basin chapter as notified including any development already in the Basin. For clarity any approval of rezoning requests that seek to intensify development would be over and above this 'notified baseline'.

- 4.4** This is not consistent with the baseline that Mr Gatenby discussed with the Panel, which related to the base year of assessment in the capacity analysis presented in Attachment B of my evidence in chief.
- 4.5** Mr Gatenby observed that the Shotover Bridge capacity analysis supporting my technical evidence in Attachment B included a base year of 2016, and in his view, the high level of traffic growth experienced between 2016 and 2018 resulted in my technical analysis being out of date, underestimating the level of traffic on the bridge and subsequently the year at which the bridge reaches capacity is nearer than I have reported.
- 4.6** Mr Gatenby has provided me with 2018 traffic count information collected at the intersection of SH6 and Stalker Road roundabout collected in January-February 2018 for the morning peak and June 2018 for the morning peak period. These traffic counts are compared against the 2016 flows reported in my Evidence in Chief in the table below. The calculated bridge capacity and volume-to-capacity (V / C) ratios are also included to provide an assessment of the remaining capacity of the Shotover Bridge.

Road/Period	AM Peak Hour Westbound			PM Peak Hour Eastbound		
	Volume	Capacity	V / C	Volume	Capacity	V / C
2016 (from E.I.C)	1011	1590	0.64	1181	1590	0.74
24 January 2018 (AM) & 8 February 2018 (PM)	1320	1590	0.83	1270	1590	0.80
19 June 2018	1478	1590	0.92	n/a	1590	n/a

- 4.7** I note that the counts undertaken in the morning peak on 24 January 2018 would not include school traffic as this is before the start of the school year. The 19 June 2018 morning peak count is more representative of typical weekday traffic volumes.
- 4.8** The increase in the volume of traffic crossing the bridge in the morning peak hour is significant and I understand that this increase between 2016 and 2018 is due to several factors including:

- (a) An increase in westbound capacity at SH6 / SH6A intersection (known locally as the BP roundabout) through the addition of a westbound through circulating lane. In my view, this roundabout was previously the most significant traffic bottleneck along the SH6 corridor between Ladies Mile and Queenstown and therefore constrained the traffic flows on the remainder of the corridor including the SH6 Shotover Bridge;
- (b) The opening of Hawthorne Drive providing an alternate route to Remarkables town centre and the Airport, further reducing the traffic volumes travelling through the SH6 / SH6A intersection. The impact of this is to further increase downstream throughput and has led to increased traffic volumes upstream along the corridor;
- (c) Further residential development along Ladies Mile including Shotover Country and Lake Hayes Estate resulting in higher traffic generation including construction traffic as this area develops;
- (d) Additional commercial development along SH6 in Frankton Flats including Five Mile and Queenstown Central developments including construction traffic as this area develops;
- (e) A very significant increase in tourist activity in the District including activity at the Queenstown International Airport which have increased nearly 30% from 821,000 passengers (January – June 2016 inclusive) to 1,056,000 passengers (January – June 2018 inclusive) in two years²; and
- (f) Anecdotally an increase in the number of vehicles turning left out of Tuckers Beach Road and undertaking a U-Turn at the Stalker Road roundabout due to an inability to turn right out of Tuckers Beach Road onto SH6 (resulting in these vehicles crossing the Shotover River twice).

4.9 With respect to the last point above (f), the Tuckers Beach Road intersection is scheduled to be grade separated by the end of 2018, which will remove these vehicles from crossing the Shotover River twice to avoid the right turn onto SH6. This will result in a reduction in

² Source: <https://www.queenstownairport.com/assets/documents/ZQN-monthly-passengers-2016-to-2018-June.pdf>

traffic volumes in both westbound and eastbound directions at the Shotover Bridge although I am uncertain of the extent of this reduction during the critical peak hours.

- 4.10** The significant increase in traffic flows at the Shotover Bridge in the past two years means that my technical analysis presented in Attachment B to my evidence in chief and the year at which the Bridge will reach capacity is highly conservative, under-estimates the level of traffic demand at this location and over-estimates the year at which the bridge is likely to reach capacity.
- 4.11** The June 2018 morning peak hour traffic count suggests that in the westbound direction the morning peak hour the bridge has less than 10% capacity left. This being the situation, my view is that this is likely to reach capacity in the near future (most likely in the next five years based on recent high levels of growth) however the removal of vehicles turning left out of Tuckers Beach Road and using the Stalker Road roundabout to undertake a U-turn manoeuvre (that is when the Tuckers Beach Road grade separation is completed later in 2018) will provide some relief at this location.
- 4.12** This additional analysis reinforces my position that there should be no additional development beyond that which is notified in the Wakatipu Basin chapter of the PDP, but further demonstrates that this critical piece of infrastructure is now approaching capacity and there is likely to be increased congestion at this location on the transport network as notified development continues to occur along Ladies Mile and across the Wakatipu Basin. The approval of requests for intensified development would exacerbate this situation.



David Smith

10 August 2018