

**BEFORE THE HEARINGS PANEL
FOR THE PROPOSED QUEENSTOWN LAKES 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

**REBUTTAL STATEMENT OF EVIDENCE OF ANDY CARR
ON BEHALF OF WATERFALL PARK DEVELOPMENTS LIMITED
S2388 – WATERFALL – T14 – CARR A - REBUTTAL**

1. Introduction

- 1.1 My full name is Andrew (Andy) David Carr. My experience and qualifications remain as set out in my Evidence in Chief.
- 1.2 I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2014. This rebuttal evidence has been prepared in accordance with it and I agree to comply with it. The matters addressed in this Statement of Evidence are within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

2. Scope of Evidence

- 2.1 In this matter, I have been asked by the submitter, Waterfall Park Developments Limited (**WPDL**), to comment on the Statement of Evidence of Mr Matthew Gatenby, a Principal Engineer Transportation at consultants WSP Opus, who has provided technical evidence on behalf of the New Zealand Transport Agency (**NZTA**).
- 2.2 In particular, I have been asked to comment on whether limiting urban development on the Ayrburn site (the subject of the WPDL submission) to just a retirement village (that is, excluding non-retirement residential activities) would have any impact on the effects which he describes.

3. Comments on Mr Gatenby's Statement of Evidence

- 3.1 Mr Gatenby highlights that the Shotover Bridge on State Highway 6 has limited ability to accommodate traffic growth (Gatenby paragraph 3.2) and that the only alternative route is via the Edith Cavell bridge at Arthurs Point. However he considers that even if this (the Edith Cavell bridge) was to be increased in capacity, it would only marginally reduce the volumes at the State Highway 6 Shotover Bridge (Gatenby paragraph 3.3) due to the additional journey length required and the requirement to use "*unsuitable*" roads (Gatenby paragraph 3.3).
- 3.2 Although it is not wholly explicit in Mr Gatenby's evidence, I expect that his comments relate to the weekday peak periods only. I draw this conclusion because Mr Gatenby appears to base his views on the evidence of Mr Dave Smith, who in turn does specify that the transportation models he used were

for the morning and evening weekday peak periods of 7am to 9am and 4pm to 6pm (Smith paragraphs 5.4 and 5.5, and Gatenby paragraph 6.2).

- 3.3 As a result, Mr Gatenby does not comment on the capacity of the State Highway 6 Shotover Bridge in the periods between 9am and 4pm. However, this is the period between the peak periods, and so by definition the traffic flows will be lower than in the peak periods. As such, the bridge will have more capacity to absorb additional traffic flows.
- 3.4 I have been asked to comment on this matter in respect of a retirement village within the Ayrburn site.
- 3.5 The traffic generation of retirement villages is lower than for standard residential developments. This is for several reasons:
 - a. Residents of retirement villages have no need to travel for work or to drop-off or collect children from school (employment and education-related travel are key parts of the weekday peak period traffic flows);
 - b. Residents of retirement villages have more flexibility in when to travel (or even if they travel) because they are typically not constrained by having to be at a particular destination at a certain time;
 - c. Residents of retirement villages are less likely to drive at all, because car ownership declines as age increases (one factor in this is that incomes are lower), and retirement villages often arrange group trips by coach; and
 - d. Residents of retirement villages may prefer to avoid travel in the peak hours simply because it is busier and thus the cognitive workload is higher.
- 3.6 In passing, at a high level, the propensity of retirement village residents to travel at non-peak times means that they make use of infrastructure that is already provided but which has available capacity at the time of travel. As such, it is an inherently sustainable use of that infrastructure.
- 3.7 Recently the Council approved an application by Queenstown Country Club for a retirement village in the Shotover Country subdivision (to the east of the State Highway 6 Shotover Bridge). The traffic generation rates for this development, which were accepted by the Council, were 0.2 vehicle movements per retirement unit (two-way). This equates to a fifth of what would be expected for standard residential accommodation.
- 3.8 Applying this to the 200 units sought by WPDL for Ayrburn, the peak hour traffic generation would be 40 vehicles (two-way).

- 3.9 In my Evidence in Chief I noted that the difference in the route length between the submitter's site into Queenstown via the Edith Cavell Bridge and via the State Highway 6 Shotover Bridge was only around 10% (with the route via the Edith Cavell Bridge being the longer of the two) (paragraph 4.3). Consequently, for the submitter's site, I consider that Mr Gatenby's comment that the Edith Cavell bridge would not be an attractive route is of only limited relevance. Rather, as it is the less trafficked and more scenic route, I consider that this route will be attractive to those who are travelling without any particular time constraints.
- 3.10 In view of this, I do not expect that all of the vehicles generated by a retirement village will use the State Highway 6 Shotover Bridge as some drivers will travel via Arthurs Point and others will have destinations toward the east. However even if all vehicles were all to use the bridge, the increase would equate to an average of just one additional vehicle movement every 1.5 minutes.
- 3.11 By way of context, Mr Smith's modelling shows that the bridge would accommodate 2,380 vehicles (two-way) in the morning peak hour by the year 2045, with 3,030 vehicles (two-way) in the evening peak hour (Smith paragraph 7.3). The addition of 40 vehicle movements to the morning peak hour flows results in total traffic volumes that remain well below those in the evening peak hour. In the evening peak hour, the volume is such that an additional 40 vehicles represents an extremely small proportion of the forecast volume (and in fact is likely to be within the margins of error of the model).
- 3.12 Put another way, Mr Smith's modelling equates to one vehicle movement every 1.98 seconds. With a 200-unit retirement village at Ayrburn, and allowing for all traffic to use the State Highway 6 Shotover Bridge, this would change to one vehicle movement every 1.94 seconds.
- 3.13 Therefore in my view if a 200-unit retirement village was to be developed at Ayrburn, the effects on the roading network at the State Highway 6 Shotover Bridge would be unnoticeable.

Andy Carr

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