

### **Anthony Thomas Penny – Hearing Stream 14 – Wakatipu Basin Chapter**

1. My name is Anthony Thomas Penny. I have prepared three statements of evidence addressing traffic and transportation matters in respect of submissions by:
  - (a) Trojan Helmet Limited (Submitter 2387 and Further Submitter 1157) in relation to the Hills Resort Zone (HRZ) dated 13 June 2018; and
  - (b) Boxer Hills Trust (BHT) in relation to sites at:
    - (i) McDonnell Road (Submitter 2386), dated 13 June 2018; and
    - (ii) Hogans Gully Road (Submitter 2385), dated 13 June 2018.
2. I have the experience as set out at paragraphs 2 to 4 of my evidence.
3. In this statement I will briefly summarise my evidence and respond to rebuttal evidence as necessary.

### **The Hills Resort Zone**

4. In my EIC I identified access requirements for the proposed new home sites and accommodation activity areas that would be enabled by the HRZ. These involve the upgrading of the existing golf course access and a new access on McDonnell Road; two existing accesses off Lake Hayes-Arrowtown Road with one being upgraded; and one existing access and one new access off Hogans Gully Road. In my opinion the traffic activity associated with the accesses will not adversely affect the local road network.
5. Mr Smith for the Council has generally accepted this conclusion in his evidence although in his rebuttal evidence he expresses some concern with the future safe operation of the McDonnell/Arrowtown-Lake Hayes/Malaghans Roads intersection. In my opinion this intersection will not be adversely affected by traffic generated by any future development of the HRZ but it will also be used by additional traffic from any other new developments in the vicinity. While this increase in traffic is not expected to adversely affect the efficiency of the intersection, I consider a rule could be included in the HRZ provisions requiring a safety assessment of the intersection at the resource consent stage. I understand Mr Brown will propose such a rule.
6. In assessing the potential traffic generation of development enabled by the HRZ I have adopted "worst case" generation rates for peak hours of 1 vehicle movement per hour for each accommodation unit. I consider that adopting worst case generation rates for peak hours is very conservative in this instance given the HRZ accommodation units are unlikely to all be occupied at the same time, less than 50% of occupants are likely to be working and some 30% of those will likely work at home. Furthermore, many occupants will likely be using the golf course which will reduce both the potential traffic generated by the course and the accommodation units. Much of the traffic potentially generated by the HRZ will not need to travel in the peak hours and in particular not need to use the critical State Highway 6 bridge across the Shotover River at peak times. For example, much of the traffic will be attracted to Arrowtown and more of the future (and existing) traffic with destinations in the Queenstown town centre will be able to use the Edith Cavell Bridge route particularly when a new bridge is constructed. Mr Smith acknowledges his original error in this regard in his rebuttal evidence stating "*I have reconsidered my view ... that the proposed Special Resort Zone ... would have a significant impact on the efficiency of the Shotover River Bridge.*"
7. He does reiterate however his concern about the cumulative effects of development in the Wakatipu Basin on the future operation of the Shotover River Bridge at peak times. Mr Smith bases his concern on modelling undertaken for the year 2045 which predicts that with planned development (i.e. the Council's notified proposal) the evening peak hour traffic across Shotover River Bridge would reach peak hour capacity at around year 2035. I

consider however that "capacity" on the Bridge is not an absolute limit on further development because there are likely to be changes in travel behaviour in the future. For example, Mr Smith predicts that with a 10% shift in car driver mode share the SH6 Shotover River bridge would not reach capacity until year 2043. On Mr Smith's evidence, in the morning peak hour capacity would not be reached until year 2043 even without a mode shift. In my opinion a 10% mode shift is achievable if the Council (and NZTA) adopt their integrated transport programme business case by increasing bus numbers, introducing park and ride facilities, providing bus priority to improve reliability and improving cycling facilities.

8. I also note that in the next 25 years it is expected that there will also be considerable advances in technology. For example, more telecommuting can be expected; flexible working hours are likely to become more prevalent enabling people to commute during the shoulder of peak periods; and semi-autonomous cars with improved adaptive headway control should allow vehicles to travel more closely and accordingly increase the capacity of road links such as the Shotover River bridge. Ironically increased development and traffic generation are the drivers for improved transportation infrastructure and without them improvements might not be made.
9. Accordingly I consider that there are no reasons for not adopting the HRZ from a transportation perspective.

#### **McDonnell Road Site**

10. I would firstly like to correct an error in my McDonnell Road EiC at page 8, Table 1, where the access road should be indicated as McDonnell Road not Hogans Gully Road.
11. My EiC notes the potential for eight rural residential lots to be developed on the McDonnell Road site owned by the BHT. I have concluded that safe and efficient access can be provided via the existing driveway to The Hills golf course and this is not disputed by Mr Smith.
12. The traffic generation associated with eight sites is so small that I cannot accept that it would have an effect on the Arrows-town-Lake Hayes Road/McDonnell Road/Malaghans Road intersection or the Shotover River bridge as asserted by Mr Smith. He insists that traffic generated in McDonnell Road will use Arrows-town-Lake Hayes Road to access the wider network (para 7.2 of Smith rebuttal). While I was very surprised that Mr Smith would refer to travel times predicted by Google Maps (para 4.14 of Smith rebuttal) instead of the Queenstown transportation model he has used for his other analyses, I note that Google Maps indicates that traffic making longer distance trips from McDonnell Road to the Queenstown urban area either uses Malaghans Road or the southern section of McDonnell Road to SH6 not Arrows-town-Lake Hayes Road.
13. In respect of paragraph 7.3 of Mr Smith's rebuttal evidence I am confident that the superseded Austroads traffic volume thresholds are still a valid basis upon which to conclude, as I have, that there will be no efficiency issues with the McDonnell/Arrows-town-Lake Hayes/Malaghans Road intersection. However, should the Panel consider that the safety of the McDonnell/Arrows-town-Lake Hayes/Malaghans Road intersection may be an issue as a result of a WBLP zoning of BHT's site, I consider that the issue could be addressed by the inclusion of a rule or standard in the Proposed Plan that requires an assessment of the intersection performance to be undertaken when a resource consent application for subdivision (or similar) is submitted.
14. In terms of wider traffic effects and Mr Smith's concern about cumulative effects, I refer to my above comments relating to the HRZ where I note that I expect the cumulative traffic generation effect will be addressed by future changes in travel behaviour and infrastructure improvements, particularly in support of public transport and cycling, as well as technological advances that will see increased capacity able to be achieved with the existing road network.

15. I understand that the Council is considering that in the future BHT's site may become urban as it is between the Arrowtown Lifestyle Retirement Village that is currently being constructed and other urban development further north along McDonnell Road. If that were the case then in my view it is interesting that Mr Smith is not able to support the zoning of the site proposed by the BHT with its very limited potential to generate traffic movements with only eight residential lots.
16. I confirm my opinion that there are no reasons to not adopt the requested WBLP zoning from a transportation perspective.

#### **Hogans Gully Road Site**

17. This site is within the notified Wakatipu Basin Lifestyle Precinct and has the potential to accommodate up to 20 residential lots. My EIC describes the possible forms of access to this site from Hogans Gully Road. My investigations have indicated that such access can be provided safely and efficiently without any adverse effects on the local road network.
18. The potential 20 lots have conservatively been estimated to add 20 vehicle movements per hour to the road network in the morning and evening peaks. As with the HRZ and BHT's McDonnell Road site described above, the traffic effects associated with such small traffic volumes particularly when dispersed on the wider network are considered to be insignificant. This is not disputed by Mr Smith.
19. Accordingly I consider that there are no reasons for not adopting the zoning proposed for this site from a transportation perspective.