# BEFORE THE COMMISSIONERS APPOINTED BY THE MACKENZIE DISTRICT COUNCIL

**UNDER** the Resource Management Act 1991

**IN THE MATTER** of RM230149 an application for land use

consent to establish and operate a commercial tree-climb ropes course and picnic facilities at Lakeside Drive,

Takapō/Lake Tekapo

BETWEEN QUEENSTOWN COMMERCIAL

PARAPENTERS LIMITED

**Applicant** 

# STATEMENT OF EVIDENCE OF ANDREW LECKIE (TRAFFIC)

Dated: 13 August 2025



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#### Statement of evidence of Andrew Leckie

#### Introduction

- [1] My name is Andrew Francis Leckie.
- [2] I have a Bachelor of Engineering (Hons) in Civil Engineering and a Master of Engineering in Transportation, both from the University of Canterbury. I am a Chartered Professional Engineer and a Chartered Member of Engineering New Zealand.
- [3] After graduating I carried out a civil engineering role for two years at Fulton Hogan as part of the Christchurch Earthquake rebuild. Following this, I have spent the last 11 years as a specialised transportation engineering consultant. In my current role as a Principal Transportation Engineer with Stantec New Zealand I am involved in transportation engineering assessment and design for a broad range of land use activities.
- [4] My relevant experience includes leading transport assessment inputs for the consenting of a maze on Marshs Road, Christchurch and for a consent variation at the Christchurch Adventure Park. In Lake Tekapo, I led transport assessment inputs for the consenting of the Galaxy Boutique Hotel on D'Archiac Drive, and carried out transport assessment for construction of a new intake gate for Genesis Energy, accessed from Lakeside Drive. I regularly lead road safety audits / safe system assessments for new developments, typically residential but also industrial, both at design and post-construction stages.
- [5] I have been instructed by the Applicant, Queenstown Commercial Parapenters Limited, to give expert traffic evidence in respect of RM230149, an application for land use consent to establish and operate a commercial tree-climb ropes course and picnic facilities at Lakeside Drive, Takapō/Lake Tekapo (**Proposal**).
- [6] I am familiar with the site, having visited and stayed in Lake Tekapo on numerous occasions for holidays and work. I also instructed and reviewed video footage of activity on Lakeside Drive in front of the site recorded on Friday 31 January 2025. I have provided Stantec's

transport-related advice and assessment for the Proposal to date, including authoring the following documents which are attached and referred to throughout my evidence:

- (a) Lake Tekapo Tree Climb Transport Assessment, dated 28 July 2023 (Transport Assessment) (Appendix 1).
- (b) Lake Tekapo Ropes Course Mackenzie District Council RFI Transport Responses, dated 23 February 2024 (RFI Transport Responses) (Appendix 2).
- (c) Lake Tekapo Tree Climb Transport Responses to s95A Report, dated 18 June 2024 (Transport Responses to s95A Report) (Appendix 3).
- [7] I have reviewed the following documents for the preparation of my evidence:
  - (a) submissions relevant to my area of expertise.
  - (b) section 42A report.

# **Code of Conduct for Expert Witnesses**

[8] While this is not an Environment Court hearing I have read and agree to comply with the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023. This evidence is within my area of expertise, except where I state that I am relying on material produced by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

# Scope of evidence

- [9] My evidence will deal with the following:
  - (a) the existing and future transport environment surrounding the site;
  - (b) the current application RM230149 and potential traffic generation and car parking demand;
  - (c) the traffic-related effects of the proposal;

- (d) the traffic-related issues raised in submissions;
- (e) my response to the traffic matters raised in the Mackenzie District Council planner's s 42A report.

# **Executive summary**

- [10] In this evidence, I assess the transportation effects of the proposed commercial tree-climb ropes course and picnic facilities at Lakeside Drive, Takapō / Lake Tekapo.
- [11] My assessment is based on site familiarity, review of video footage, and preparation of a Transport Assessment and subsequent responses to Council requests and reporting.
- [12] Lakeside Drive is a relatively low-volume, low-speed environment with existing informal car parking and a shared walking and cycling path.
- [13] The proposed activity is modest in scale, with a proposed maximum of 60 users at any one time and an expected maximum of approximately 250 users per day.
- [14] Based on conservative assumptions regarding travel mode and vehicle occupancy, I have assessed a maximum parking demand of 10–15 vehicles and a maximum daily traffic generation of approximately 120 vehicle movements.
- [15] I consider that the effects of this additional traffic on the safety and efficiency of Lakeside Drive, including pedestrian safety, will be negligible.
- [16] I expect parking demand to be accommodated in the existing informal parking areas for the vast majority of the year, with only minor displacement possible during peak periods. I consider that these effects are typical in activity areas and acceptable.
- [17] The proposal aligns with the transport objectives and policies of the Mackenzie District Plan introduced through Plan Change 27.

[18] I consider that, from a transport perspective, there is no reason that the consent should not be granted.

## **Existing environment**

- [19] The original Transport Assessment included description of the site's location and the existing transport environment which remains relevant. To summarise, Lakeside Drive provides access to a number of tourism and recreational activities as well as accommodation. Past the site, the road has a sealed width suitable for two-way traffic movement and a 30km/h posted speed limit. Informal car parking is available in gravel areas on both sides of the road. A concrete walking / cycling path which runs from the township to Tekapo Springs passes the site. Lakeside Drive carries low traffic volumes of typically 600 700 vehicles per day and up to approximately 2,500 vehicles per day during the peak summer season.
- [20] As part of preparing this evidence, I carried out an updated crash search. No crashes have been reported on Lakeside Drive or at the SH8 intersection in the last five years (since the start of 2020 as of 7 February 2025).

# **Future receiving environment**

- [21] The original Transport Assessment outlined expected traffic generation of the Station Bay residential subdivision and a consented hotel. As outlined in the Responses to s95A Report, the consent for the hotel has since lapsed.
- [22] The Mackenzie District Council RFI noted that a mini golf course and a reception / café at the camping ground also form part of the consented environment. As outlined in the RFI Transport Responses, the Decision documents for the two consents describe assessments which found that car parking demands will be accommodated on-site. Based on this, I consider that these two activities will not contribute to notable increases in car parking demand along Lakeside Drive and would not impact the assessment for the proposed ropes course. Also, traffic generation for these activities will be low and not impact assessments of the ongoing safe and efficient operation of Lakeside Drive or the SH8 intersection.

[23] I understand that Mackenzie District Council has aspirations to formalise the parking areas in the vicinity of the site along Lakeside Drive, possibly involving sealing and marking parking spaces, but there are no plans at this stage.

## **Proposed development**

- [24] The original Transport Assessment provided a brief description of the proposed development.
- [25] There could be four or five staff employed at peak times of the year, and a maximum of 60 users at a time.
- [26] No changes to the informal parking area in front of the site for vehicle access or parking are proposed, although I understand that the Applicant has offered a carpark design to illustrate to Council how the carpark could be more efficiently laid out and a financial contribution to go towards new gravel for the car park. One mobility parking space is proposed to be signposted close to the base station.
- [27] As described in the RFI Transport Responses, any delivery vehicles will be able to make use of the informal parking area in front of the site, noting that deliveries are expected to be made by small vehicles and on weekdays outside of peak times.
- [28] Organised group visits, for example school group and corporate group visits, will be planned to occur during weekdays and outside of holiday periods, to avoid the busiest times at the lakefront.
- [29] Twelve cycle parking spaces for staff and customers are proposed, by way of six cycle rails. The RFI Transport Responses provided detail on the proposed dimensions of these, meeting NZTA Cycle Network Guidance standards. The cycle parking will not impact the existing parking area or the walking / cycling path.

#### Traffic generation and parking demand

[30] The activity is proposed on Lakeside Drive because of the proximity to existing and planned activities, including the Tekapo Springs attractions, the lakeside, the consented mini-golf, the camping ground and the

expanding residential development in the area. I defer to corporate evidence from the Applicant in respect of site selection. From a traffic generation perspective, the ropes course is seen as a small complementary activity, rather than a primary or major attractor.

- [31] As outlined in the RFI Transport Responses, the ropes course is expected to be busiest, in terms of the number of users, during the busiest times in the Lakeside Drive area. This is because at these times there will be the most potential visitors in the area. These include people visiting the area, for example those spending time at the lakeside, but also those staying at the camping ground and in the nearby residential area.
- [32] The original Transport Assessment included calculations of potential maximum traffic generation and parking demand when the ropes course is at full occupancy. It was assumed that 30% of people could arrive by walking or cycling (so 70% by vehicle) and that there could be an average vehicle occupancy of three people per vehicle.
- [33] The resulting calculations were a maximum car parking demand of 10-15 vehicles at full occupancy and a maximum hourly traffic generation, based on an average stay of one hour, of 20-30 two-way vehicle movements per hour (vph).
- These calculations were intended to be conservative for the purposes of the assessment of transport-related effects. I emphasise that at the busiest times in the Lakeside Drive area (and therefore the busiest times at the ropes course), the proposed co-location of the ropes course with the existing activities in the area will result in the highest proportion of people using active travel to visit. The 30% assumed for active travel uptake would include people already in the area, for example at the camping ground, walking to the ropes course and I consider this to be conservatively low for peak times on Lakeside Drive.
- [35] Further to the above, the RFI Transport Responses outlined a test of the sensitivity of the maximum car parking demand to both the percentage of people arriving by non-car travel and the average vehicle occupancy.

The calculated maximum car parking demand was shown to be not especially sensitive to either one of the parameters.

[36] While the activity will have capacity for 60 users at one time, the Applicant is not expecting to have 60 users present at all times on even the busiest of days. The RFI Transport Responses presented a 'design' occupancy of 40 users. This was based on information from the Applicant, that 250 visitors across a day would represent a busy day, and these being spread across six hours. Based on this design occupancy, and the traffic generation parameters adopted, a car parking demand of less than 10 vehicles would be expected. With 30% non-car travel and three people per vehicle, daily traffic generation would be 120 two-way vehicle movements per day (vpd) (60vpd arriving and 60vpd leaving).

#### Traffic effects on Lakeside Drive

- [37] Lakeside Drive carries modest traffic volumes, with two-way volumes of 2,500vpd during busy times of the year as reported in the original Transport Assessment. That represents a peak hourly volume of approximately 250vph.
- [38] I have observed that vehicle speeds past the site on Lakeside Drive are generally slow, due to a combination of the 30km/h posted speed limit, the narrow width of the carriageway and the presence of traffic calming measures. The road has a reasonably straight alignment, allowing good forward visibility for drivers.
- [39] The informal parking area along the front of the site is offset from the Lakeside Road carriageway, allowing reverse manoeuvring to occur clear of the Lakeside Drive carriageway. These informal parking areas are already used for car parking during busy times and drivers needing to be aware of vehicles manoeuvring is part of the existing environment.
- [40] Based on all of the above, I assess that even if there are 30vph generated by the ropes course (an average of one vehicle movement to or from Lakeside Drive per two minutes and a conservatively high traffic forecast), this level of additional vehicle manoeuvring will have a negligible effect on the safety and efficiency of Lakeside Drive.

# Lakeside drive pedestrian safety

- [41] A separated walking / cycling path extends from the Lake Tekapo township along Lakeside Drive and past the site, providing safe and convenient access.
- [42] From my observations in the vicinity of the site, pedestrians share much of the Lakeside Drive corridor with vehicles, particularly the informal parking area in front of the site but also the other side of the road. Some pedestrians also use the beach on the lake front.
- [43] There is pedestrian crossing demand along this section of the road, and particularly outside the Lakes Edge Lodge and at the holiday park driveway to the north of the lodge. Vehicle speeds are slow and drivers need to be alert to pedestrians, both when driving along Lakeside Drive and when manoeuvring to and from parking areas. There is no record of crashes involving pedestrians to highlight any actual safety concerns with this arrangement and from my observations, the interactions between vehicles and pedestrians occur safely.
- [44] The low traffic generation of the ropes course will not be perceptible at busier times on Lakeside Drive and I consider that it will have a negligible effect on pedestrian safety along Lakeside Drive. The ropes course will result in some increased pedestrian activity along and across Lakeside Drive but again this will be small in scale. In my opinion, pedestrians will continue to be able to walk along and across the road safely as they do currently.
- [45] The RFI Transport Responses included assessment of the effects of the ropes course on the safety of pedestrians crossing Lakeside Drive to access the nearby public toilets. The toilets serve the wider area and there will be demand already for pedestrians to cross the road to use the toilets, particularly those spending time at the lakeside. Given the small scale of the proposed activity and the relatively short expected duration of stay by visitors, I consider that any additional demand to cross Lakeside Drive to access the public toilets will be very low compared to existing demand at busy times. Any such increase will have a negligible effect on the safety of the pedestrian crossing movement.

[46] Furthermore, the ropes course will not noticeably increase traffic volumes past the public toilets, given their location to the north of the ropes course. Any additional traffic passing the toilets will also have a negligible effect on the safety of the pedestrian crossing movement.

## Effects on car parking supply

- [47] The original Transport Assessment was conservatively based on maximum car parking demand for 10-15 spaces at the busiest times at the ropes course. I consider it more likely that there will be car parking demand for less than 10 spaces even on busy days. This lower demand is based on the 'design occupancy' I introduced earlier, which recognises that the ropes course is not expected to be at full occupancy throughout even the busiest of days.
- [48] Based on my observations, I expect that there will be more than adequate car parking available in the immediate vicinity to accommodate this demand at almost all times throughout the year.
- [49] During the busiest times of the year, there may be a shortage of parking in the immediate vicinity and people may have to park further away and walk, use other travel modes or not visit. It is common industry practice to not design parking supplies for the busiest time of year. The widely referenced NZTA Research Report 453 states that 'there is some inefficient use of resources if a traffic circulation or parking supply is designed to accommodate the peak demand in a year.'
- [50] The busier the Lakeside Drive area is, the more people there are to visit the ropes course who are already in the area and can walk to the site. Proportionally, the users of the ropes course will make up a decreasing proportion of the Lakeside Drive users at those times. At the busiest times, my view is that very small increases in vehicle activity in the area will be imperceptible.
- [51] Concerns relating to people not being able to find a car parking space or 'displacement' were raised in the s95A report and responded to in the Transport Responses to s95A Report.

- [52] As outlined in the Transport Responses to s95A Report, a small number of extra vehicles travelling along Lakeside Drive (even 10-15 vehicles per hour which is the conservatively assessed maximum car parking demand of the activity) with drivers looking for a parking space and potentially turning around and leaving the area, is not going to generate significant adverse effects. My view is that this level of added vehicle activity would not be noticeable and would have a negligible effect on the safe and efficient operation of Lakeside Drive on the very busiest days of the year.
- [53] If there is any 'displacement', I consider it would only affect a small number of people, and it would only occur on the very busiest days of the year. As I noted earlier, not fully meeting parking demand with parking supply is typically accepted at the busiest times of the year it is a typical outcome for activity areas. Furthermore, I consider the very occasional occurrence of not being able to find a car park somewhere during a peak period to be a very low-severity adverse effect.
- The RFI Transport Responses outlined that any staff car parking demand would be expected to be low (possibly up to one or two vehicles only) and would have a negligible effect on the availability of parking in the area in practice. As outlined in the Responses to Transport s95A Report, the Applicant could adopt a travel plan with measures put in place to minimise staff parking in the area. Examples of such measures would be arranging ride sharing for people living further from the site, use of a pick-up point somewhere else in Lake Tekapo, and any measures to encourage walking and cycling. I understand that the Applicant accepts a condition of consent in this regard.
- [55] Similarly, the Applicant could include travel demand management information on its website to encourage other travel modes. This could include a warning that car parking can be in short supply at busy times, the walking and cycling times from the village centre, a simple map highlighting the location of the site relative to the lakeside walking / cycling path and information on the cycle parking available. Again, I understand that the Applicant accepts a condition of consent in this regard.

#### Wider traffic effects

[56] As assessed in the original Transport Assessment, the increase in use of Lakeside Drive south-east of the site and the SH8 / Lakeside Drive intersection generated by the proposed activity will be small and I consider will have negligible effects on the safe and efficient operation of the wider road network.

# District plan rules

- [57] The original Transport Assessment included an assessment against the Mackenzie District Plan Section 15 Transportation Section 2 standards. Non-compliance with standards relating to minimum car parking supply and loading space provision were identified.
- [58] Standard 2a requires one car parking space per four persons designed to be accommodated for recreational facilities. This equates to a requirement for 15 car parking spaces for a maximum of 60 users. As the activity is within a public space, there is no 'site' on which to provide dedicated car parking spaces. I have addressed effects on car parking supply above.
- [59] It was assessed that Standard 2i requires a loading space to be marked, whereas no loading space is proposed. I assess that any small and infrequent delivery vehicles will be able to use the informal parking area in front of the base station and I consider that any associated manoeuvring will have a negligible effect on the safe and efficient operation of Lakeside Drive.
- [60] The s95A Report questioned the assessment of compliance with the mobility parking requirement (Standard 2d). Technically, if no car parking spaces are being provided for the activity, then I understand there would be no mobility parking requirement and therefore no shortfall. The proposal to sign one space as a mobility space is a well-meaning attempt to achieve the intent of the District Plan standard to ensure mobility parking is provided at activities where appropriate. This is appropriate in my view.

# District Plan objectives and policies

- [61] I have reviewed the Objectives and Policies of the Transport chapter of the Mackenzie District Plan, which have recently been adopted through Plan Change 27.
- [62] There is one objective, being a safe and efficient transport network, and four supporting policies. I consider parts of Policy 1 and Policy 3 to be most relevant to the Application.
- [63] Policy 1 includes providing for safe entry and exit for vehicles to and from a site to a road without compromising the safety or efficiency of the road corridor. As outlined, I have assessed that additional vehicle manoeuvring to and from the gravel areas next to Lakeside Drive that could be generated by the proposed activity will have a negligible effect on the safe and efficient operation of Lakeside Drive.
- [64] Policy 3 relates to safe active transport. The site is well-located for uptake by active travel modes, being located on the lakeside walking / cycling path. This will provide convenient and safe access to the site from the wider area for active travel modes. I have assessed that the proposed activity will have a negligible effect on pedestrian safety along the Lakeside Drive corridor.

#### Response to submissions

- [65] I have reviewed all submissions made on the application. Six submissions<sup>1</sup> raise general concerns related to traffic and / or parking. I consider that my evidence has addressed these concerns. I comment on specific matters from other submissions below.
- [66] The Groundwater submission states that 'Intensification of an already congested parking area and dense foot traffic area will be exacerbated by a commercial high ropes course'. I have already addressed car parking effects and assessed effects on pedestrian safety in Paragraphs 41-46.

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Ott, Keen, Ward, Currie, Khanna + Sareen, Staley.

- [67] The Houghton submission raised concerns with travel mode assumptions. As outlined in paragraphs 30-36, the parking demand assessment outlined in the original Transport Assessment is considered to be conservative due to the proposed co-location of the activity with the existing activities in the area, including the camping ground and the growing residential area. At the busiest times in the area, there will be more people within an easy walking distance of the activity. I consider that the 30% walking and cycling mode share adopted in assessment is likely very low for the busiest times in the Lakeside Drive area. Also as outlined, the car parking demand is not especially sensitive to the assumptions.
- [68] The Juliet Satterthwaite submission raises a concern with the proximity of the activity to Lakeside Drive which will have 'significant traffic' in the future. The proximity of the activity to Lakeside Drive is not a concern, with the ropes course proposed in the trees in front of the large, informal parking area. Any additional manoeuvring associated with ropes course car parking will have a negligible effect on the safety and efficiency of Lakeside Drive as I assessed in paragraph 40. Also, I disagree that Lakeside Drive will carry high traffic volumes in the future, noting that traffic volume increases as a result of residential development will be modest and I understand primarily occur to the south of the site (to and from Station Bay Rise).
- [69] The Lake Tekapo Power Boat and Water Ski Club submission raises concerns relating to vehicle and boat trailer parking during the peak summer season and protecting vehicle access to the lakeside. As outlined in paragraph 50, my view is that at the busiest times of the year in the Lakeside Drive area, increased vehicle usage as a result of the ropes course will not be perceptible. People launching their boats make use of the public space for vehicle parking and are competing for parking space with other activities already and this will not change. The ropes course will not prevent vehicle access to any areas currently used for parking, including under the ropes course. In relation to protecting vehicle access to the lakeside, there is signage already to prohibit parking across the vehicle access and I consider that this is not an issue needing further consideration as a result of the proposed ropes course.

[70] The Mackenzie Tourism Industry Association has raised safety concerns with existing vehicle access and parking arrangements on Lakeside Drive. As I have outlined, the ropes course is a small complementary activity which will not noticeably change how the area functions in terms of vehicle and pedestrian usage at busy times of the year. Based on this, I consider that widespread improvements to the area as suggested by the Mackenzie Tourism Industry Association would not be commensurate with the scale of the activity and its effects.

# Response to s42A report

- [71] I have reviewed the section 42a report. The assessment generally relies on the assessment of transportation effects from the Notification Report.
- [72] The conclusion from that report was that any effects on access and parking would be less than minor. The section 42a report notes that finding was supported by the Commissioner, who generally agreed that transport effects will be no more than minor, noting that several conditions in respect to transport have been proffered by the Applicant to mitigate effects, including a commercial lease agreement with Council and financial contributions for landscape and car park surfacing.
- [73] The author recommends one further condition requiring additional signs to ensure that the vehicle entry laneway down to the boat ramps between the clubrooms and the proposed base station building are kept clear at all times as suggested by the Lake Tekapo Power Boat and Water Ski Club. As I have noted above, there is signage to prohibit parking across the vehicle access and in my view this is not an issue needing further consideration as a result of the proposed ropes course.

#### Conclusion

[74] Based on my assessment and with the proposed consent conditions in place, I consider that, from a transport perspective, there is no reason that the consent should not be granted.

Dated:	13	August	2025
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Andrew Leckie