Before the Expert Panel appointed under the Fast-track Approvals Act 2024

Under	the Fast-track Approvals Act 2024
And	
In the Matter of	an application for approvals by Mt Iron Junction Limited to develop 250 medium to high density residential dwellings, a childcare centre, a retail building, a café, reserve areas and recreation amenities

Statement of Evidence of **Andrew David Carr** on behalf of **Mt Iron Junction Limited** in response to comments made under Section 53

Transport

Dated: 26 June 2026

Lane Neave
Level 1, 2 Memorial Street
PO Box 7348
Queenstown
Solicitors Acting: Joshua Leckie/Charlotte Coyle
Email: [redacted]
Phone: [redacted]

lane neave.

INTRODUCTION

Qualifications and Experience

1. My full name is Andrew (Andy) David Carr. I am a director of Carriageway Consulting Ltd (**CCL**), a specialist traffic engineering and transport planning consultancy which I founded at the start of 2014.

2. In terms of academic qualifications, I hold a:

   (a) Bachelors (Honours) degree in Computing Science (1988);

   (b) Masters degree in Transport Engineering and Operations (1989); and

   (c) Masters degree in Business Administration (1998),

   all from the University of Newcastle upon Tyne in the United Kingdom.

3. I am a Chartered Professional Engineer and an International Professional Engineer (New Zealand section of the register).

4. I have more than 36 years' experience in traffic engineering, during which I have been responsible for investigating and evaluating the traffic and transportation impacts of a wide range of land use developments, both in New Zealand and the United Kingdom. I have also been a hearing commissioner and have acted in that role for Greater Wellington Regional Council, Ashburton District Council, Waimakariri District Council and Christchurch City Council.

5. My role at CCL primarily involves undertaking and reviewing traffic analyses for both resource consent applications and proposed plan changes for a variety of different development types, for both local authorities and private organisations. Prior to establishing CCL, I was employed by traffic engineering consultancies in which I had senior roles in developing the business, undertaking technical work and supervising project teams primarily within the South Island.

6. I am a Chartered Member of Engineering New Zealand (formerly the Institution of Professional Engineers New Zealand), and an Associate Member of the New Zealand Planning Institute.

7. I also served on the National Committee of the Resource Management Law Association between 2013-14 and 2015-17, and I am a past Chair of the Canterbury Branch of the organisation.

8. I have been involved in assessing the transportation-related effects changes in land use in Queenstown Lakes district for more than 20 years. This has included plan

changes and resource consent applications for a wide range residential, visitor accommodation, commercial, retail, industrial and tourism activities. Of relevance to this particular application I carried out the transportation analyses for the current resource consent at the Site (RM181471).

Code of Conduct

9. Although this is not an Environment Court proceeding, I confirm that I have prepared the Code of Conduct for Expert Witnesses, contained in the Environment Court Practice Note (2023) and I agree to comply with it. I can confirm that the issues addressed in this statement are within my area of expertise and that in preparing my evidence I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Scope

10. This statement is given as part of Mt Iron Junction Limited's (**MIJ** or **Applicant**) response to comments on the Mt Iron Junction Housing Scheme (**Project**) at 237 Wānaka Luggate Highway (**Site**) made under Section 53 of the Fast-track Approvals Act 2024 (**FTA**). This statement responds to specific transport-related comments raised in their respect memoranda and submissions by:

    (a) New Zealand Transport Agency (**NZTA**);

    (b) Queenstown Lakes District Council (**QLDC**)::

        (i) Comments by Council consultants Stantec, prepared by Mr Rossiter (Appendix 1 to the QLDC submission);

        (ii) Comments by the Property and Infrastructure (**P&I**) section of the Council, prepared by Mr Galvin (Appendix 5 to the QLDC submission);

        (iii) Comments by the Land Development Engineering (**LDE**) section of the Council, prepared by Ms Overton (Appendix 6 to the QLDC submission);

    (c) Otago Regional Council (**ORC**), Appendix 3; and

    (d) Owners and occupiers of adjacent land.

11. My original findings are provided in full in the Transportation Assessments which accompanied the substantive application (Appendix K for the effects arising internally to the Site, and Appendix K1 for the effects of the proposal on the external transportation networks).

12. I have prepared this statement in the limited time available for the Applicant to respond to comments under the FTA. If the Expert Panel requires elaboration on any of the matters raised in this statement, I am available to provide further information on request.

13. Within this statement I have generally focussed on areas of disagreement or whether further analysis is justified.

OVERVIEW OF COMMENTS AND EVIDENCE STRUCTURE

14. In reviewing the submissions made, I consider that they fall into three main areas:

    (a) The capacity constraints at the State Highway 6 / State Highway 84 / Riverbank Road roundabout. These are mentioned by the majority of submitters.

    (b) Issues around connectivity for walking and cycling. These are also mentioned by the majority of submitters.

    (c) Matters of detail or which are highly specific concerns. These are typically mentioned by only one or two submitters.

15. To avoid repetition, I have structured this statement of evidence to firstly address the roundabout and walking/cycling connectivity. I have then evaluated the remaining issues raised by each submitter.

Capacity Issues at the State Highway 6 / State Highway 84 / Riverbank Road Roundabout

16. NZTA confirms that the existing State Highway 6 / State Highway 84 / Riverbank Road roundabout is approaching capacity at the current time, that capacity will be exceeded in 5 to 7 years' time *without* the Project, and that this will lead to extensive queues and delays (NZTA paragraph 4.2).

17. The Stantec peer review (Appendix 1 to the QLDC submission) sets out some detailed commentary on the analysis.

18. Stantec notes that the movements of traffic to and from the service station has been omitted from the analysis (Stantec section 2.1). This is not the case however as they have been included within the receiving environment for the Project, as set out in paragraphs 5.3.5, 5.5.1 and 5.5.3 of the Transportation Assessment (Appendix K1). Paragraph 7.1.2 of the Transportation Assessment sets out that "*The service station and laundromat are already consented and no changes are proposed to this as part*

of the proposal. The traffic generation is discussed previously in this report and form part of the existing environment".

19. In Section 3, Stantec comments that the traffic volumes observed at the State Highway 6 / State Highway 84 / Riverbank Road roundabout do not account for seasonality and consequently it is possible that the roundabout has even less spare capacity available than assessed.

20. By way of background, traffic volumes on many roads vary accordingly to the time of year. Within Queenstown Lakes, there are busier periods in winter and summer due to the ski season and summer tourism and periods of lower flows in the 'shoulder' seasons. This variation in the volumes over the year is known as 'seasonality'.

21. Within the analysis, I compared the observed July volumes with a survey from the month of October (Transportation Assessment Appendix K1, paragraphs 5.1.6 and 5.1.7). October is generally considered a 'neutral month' which does not have traffic flow affected by seasonal factors, and I identified that one of the two survey days aligned well with the October data. This was the survey that was taken forwards in the analysis.

22. I therefore confirm that the analysis undertaken is for a 'typical' month which does not exhibit particularly high or low volumes, which I consider to be appropriate. However, in that regard, I agree with Stantec that if the analysis was to be undertaken for either the winter or summer season, the underlying traffic volumes would be higher than have been utilised. In that case, I concur that the roundabout would have less spare capacity than has been assessed, and the outcome of this would be that the existing roundabout would run out of capacity even sooner than the projected five to seven years which I calculated in the Transportation Assessment (Section 5.3, Transportation Assessment (Appendix K1)).

23. Stantec also raises queries with the calibration of the model, and as part of this notes that they observed queues of more than 800m on State Highway 84 (Stantec Section 3). In my view, this does not reflect poor calibration, but rather, that this approach is already close to capacity (as I identified in the Transportation Assessment (Appendix K1), paragraph 5.3.1). This is because when any intersection approach is approaching capacity, even small changes in traffic volumes can disproportionately increase queues (and delays).

24. Ultimately though, Stantec concurs that the State Highway 6 / State Highway 84 / Riverbank Road roundabout is likely to reach capacity *without* the Project in five to seven years' time. Stantec does not discuss this matter further, as it falls within the purview of NZTA rather than QLDC (as per Stantec Section 5.1)

25. On this basis, it appears to be a point of agreement between myself, NZTA and QLDC that the roundabout will run out of capacity in five to seven years without the Project. The Casey, Ryan/Johnson, Langs and Laird/Smeets submissions also raise concerns with congestion at the State Highway 6 / State Highway 84 / Riverbank Road roundabout.

26. In the Transportation Assessment (Appendix K1, Section 5.4), I noted that it is unusual for a recently-constructed roading scheme to run out of capacity within such a short timeframe and showed that the forecasts of 2025 traffic volumes, made in 2018, underestimated the actual volumes seen in 2025.

27. NZTA comments that in their view, the situation has arisen due to greater traffic growth in the area than was contemplated when the roundabout was designed, even though this design process only occurred in 2018 (NZTA paragraph 4.2). To evaluate this further, I have compared the traffic data that was available at the time (i.e. 2018) to the roundabout designers.

28. The intersection was surveyed in 2017, and these results were reported in a Transportation Assessment for the previous development of the Site (discussed further in the Transportation Assessment (Appendix K1, Section 3.3)) which I produced. I then added traffic growth to this extracted from QLDC's transportation model and added the then-proposed development.

29. NZTA's consultants who designed the roundabout adopted the same approach of using the 2017 volumes to which they then added growth from the Council's transportation model and the previously-proposed development.

30. Given that we both used the same approach and the same data, our traffic volumes for 2025 should be the same. I have compared them below. For clarity, both these sets of figures were produced in early November 2018.

Approach and Direction	**2025 Forecast Traffic Flows, Evening Peak Hour**		
	My assessment	**NZTA consultant assessment**	**Difference**
Riverbank Road northbound	387	271	-116
Riverbank Road southbound	292	203	-89
State Highway 84 westbound	515	476	-39

State Highway 84 eastbound	730	715	-15
State Highway 6 (north) northbound	877	750	-127
State Highway 6 (north) southbound	531	412	-119
State Highway 6 (east) eastbound	298	289	-9
State Highway 6 (east) westbound	359	345	-14

Table 1: Comparison of Traffic Flows

31. It can be seen from the Table above that NZTA's consultant produced figures that are lower than those which I produced, despite us both supposedly using the same information. In some cases there is a high degree of agreement, such as the eastbound traffic volume on State Highway 84, where the difference is just 15 vehicles (which is insignificant). In other cases, the difference is more than 100 vehicles (which is not insignificant).

32. Accordingly, while I agree that the growth in the area has undoubtedly been greater than expected, there seems to be a discrepancy in the information available which indicates that the volumes used for designing the single-lane roundabout in 2018 may have been around 13% too low overall, and up to 30% too low on some approaches.

33. I agree with NZTA's position that the Project will add traffic onto the roundabout and the outcome of this is to increase queues and delays (NZTA paragraph 4.3) particularly in the evening peak hour which I agree is the most critical time period. NZTA has suggested that due to this, the Applicant should make a contribution to capacity improvements at the roundabout taking into account a "*proportional impact*" (paragraphs 2.2 and 4.5).

34. In Figure 10 of the Transportation Assessment (Appendix K1) I set out that expected traffic flows at the roundabout in the 'design year' of 2035. This showed that in total, in the weekday evening peak hour the roundabout is expected to carry 2,578 vehicles without the Project. In Table 9 of the Transportation Assessment (Appendix K1) I set out that in the evening peak hour, the Project would generate 255 new vehicle movements. In other words, the Project adds an additional 9.9% of vehicles onto the expected prevailing scenario.

35. NZTA considers that a full or partial circulating lane may be required to address capacity issues (NZTA paragraph 4.6). The Applicant has already contributed to the

construction of the existing roundabout (in order to alleviate the congestion seen at the previous priority intersection). However, as the proposal adds 9.9% of traffic to the design year traffic volumes, I understand that the Applicant is agreeable to making a further contribution to NZTA of 9.9% of the cost of a roundabout improvement scheme, reflecting this proportional increase in traffic.

36. The manner in which this additional 9.9% contribution will be provided is addressed by Mr White and in Legal Submissions..

37. This figure of 50 residential units aligns with the threshold beyond which a development is considered to be a '*high traffic generating activity'* under the Proposed District Plan (**PDP**) (Table 29.9). In other words, if (hypothetically) assessed under a different consenting regime, a development of this 50-unit scale would not be a high traffic generator and so would not need any assessment of effects on the transportation network.

38. As set out in paragraph 7.1.4 of the Transportation Assessment (Appendix K1), a trip rate of 0.9 vehicle movements per residential unit in the peak hours has been used, and so 50 units would generate just 45 vehicle movements in the peak hours. This equates to an average of 1 vehicle movement every 1.3 minutes, which I do not consider would be noticeable. It also equates to an increase of 1.7% over and above the prevailing volumes in the 2035 design year. A '*rule of thumb*' adopted by traffic engineers is that volumes on any road typically vary by 5% on any given day due to people travelling at different times, weather conditions, changed reasons for travel, etc, and the increase is well within this value.

39. Accordingly, from a transportation perspective, I am able to support 50 units as being a suitable threshold.

40. NZTA also seeks that the ability to implement the improvement scheme is not foreclosed by the Project (NZTA paragraph 4.6). I understand this to mean that NZTA has concerns that land required for the roundabout improvement scheme will be developed as part of the Project and so the improvement scheme could not then proceed.

41. While I understand NZTA's position, at the present time there is no layout for any roundabout improvement scheme and thus it is not possible to confirm the location of any land needed nor the area required. Potentially this could be a more complex exercise than simply 'adding on' a second circulating lane around the existing lane, since such a solution might require third party land or require costly diversion of services. A lower-cost solution might therefore be to relocate the roundabout slightly, or decrease the size of the inner (raised) island. This type of design decision for any intersection improvement scheme is not uncommon, but requires a careful process

to balance the ways in which design constraints can be overcome. The design process therefore takes longer than the timeframe now available for this application.

42. Noting that all parties agree that the roundabout capacity will be exhausted in five to seven years' time *without* the Project in place, the need to increase capacity is not an effect that arises solely due to the Project. The traffic generation of the Project simply brings forward the time at which capacity is fully used (as NZTA notes in its paragraph 2.2).

43. As such, I do not consider that the redesign of the roundabout is a task that should fall to the Applicant. I also do not consider that the contribution made by the Applicant should be related to a requirement that the roundabout is upgraded ahead of the Project commencing.

WALKING AND CYCLING CONNECTIVITY

44. NZTA, QLDC (in all parts of its submission) and ORC seek to strengthen the active travel connections (NZTA section 5, Stantec Section 4, P&I (Parts 5.2(vi) to (xii), LDE (Part 4.1.2.2). Each party considers that it is desirable to form a shared path as follows:

    (a) on the northern side of State Highway 84 between the old road reserve and the underpass of the highway;

    (b) on the western side of State Highway 6 between the Site and the State Highway 6 / Aubrey Road intersection; and

    (c) across the southern Site frontage, between the State Highway 6 / State Highway 84 / Riverbank Road roundabout and the old road reserve.

45. Under the submissions, all of these sections of shared path would be within the legal highway reserve.

46. In paragraph 8.2.2 of the Transportation Assessment (Appendix K1) I identified that a connection is proposed between the Site and the Mount Iron Trail, which provides an off-road connection to the Three Parks commercial area. This essentially runs parallel to State Highway 84. However, in response to NZTA's comments, I have assessed the potential for the construction of a shared walking and cycling route that connects the end of the existing trail at the western extremity of the Site to the current underpass of State Highway 84.

47. At its eastern end, the trail would connect from the end of the old legal road directly into the highway reserve.

Figure 1: Eastern Extremity of Proposed Shared Pathway (Source: Google Streetview)

48. Westwards from that point, there is then a minimum width of 7m of land within the legal reserve between the edge of the nearest traffic lane and any major change in topography. I consider that this is ample for a shared route to be formed, while maintaining a suitable clearance from traffic lanes.

Figure 2: Adequate Width between Toe of Bank and Movement Lanes (Source: Google Streetview)

49. Approximately 50m east of the existing underpass, an existing shared pathway runs close to the legal highway boundary. It would therefore be possible to link the proposed shared pathway into this.

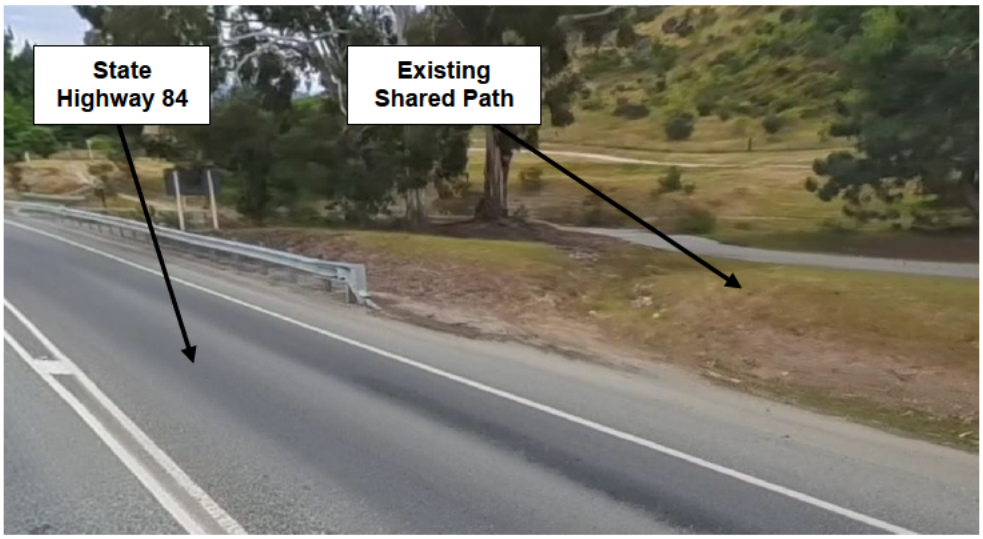

Figure 3: Potential Tie-In to Existing Shared Pathway 50m from Underpass (Source: Google Streetview)

50. On this basis, it does not appear that there are any technical or design impediments to forming this shared path. I have been provided with an indicative cost of approximately $250,000 for providing a 3m wide shared path in the manner described above over this 1.1km length.

51. However, I also highlight that this is only one option, and that it would also be possible to construct part of this shared path within the legal highway reserve, say between the old legal road as far as Puzzling World, and then tie it back into the existing Mt Iron Trail. The latter would then need to be improved between this connection and the underpass to provide a better level of service (such as widening the path, improving the surface and removing steep grades).

52. Irrespective of the specific route, the shared path would lie outside the Site and will therefore require permissions from NZTA and/or QLDC. Obtaining permissions is a process outside the current application. Consequently, I do not consider that it is appropriate for the Applicant to agree to construct the shared path because those permissions may not be forthcoming.

53. However, I understand that the Applicant is agreeable to providing a sum of $250,000 for other agencies to construct the shared pathway, in a location to be agreed in future, taking into account the views of all stakeholders. The manner in which this is to be done is addressed in Legal Submissions.

54. The submitters consider that the path is required to be sealed and lit. I do not agree, because this would represent a much higher standard of provision than QLDC (and potentially NZTA) have put in place in the immediate area. I agree that the surface

needs to be smooth but I consider that using, say, compacted crusher dust would achieve this outcome.

55. In passing, Stantec notes that one reason for this link is to allow for students to travel between the Site and Te Kura o Take Karara, a primary school located in Three Parks. However, upon checking the school website, the Site does not lie within the enrolment zone, and while the zone might expand in future, there can be no certainty of this.

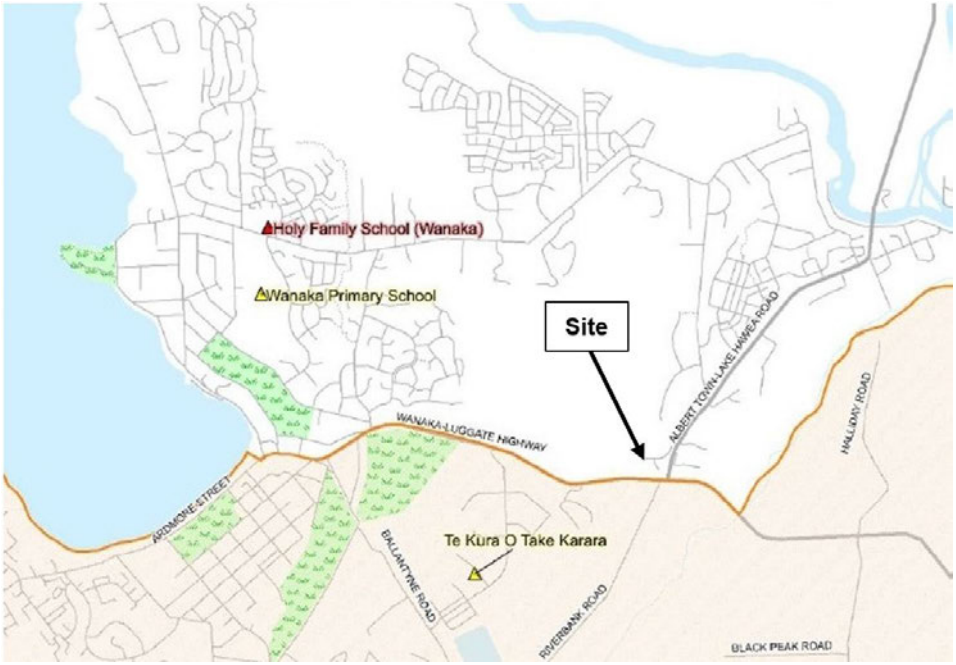

Figure 4: Te Kura o Take Karara Primary School Enrolment Zone (Extract from School Website, Annotated)

56. NZTA and QLDC have also sought the provision of a shared path towards the north, that is, in the direction of Albert Town (NZTA paragraph 5.2, Stantec Section 4, P&I Parts 5.2(vi) to (xii), LDE Part 4.1.2.2)), and as far as Aubrey Road, approximately 250m north of the Site. No rationale for this requested extension is provided other than by LDE that sets out that it is to provide "*a safe route for school children and pedestrians in general*" (LDE Paragraph 4.1.2.2). Any school children associated with the Site will not be present on this section of the highway and I am unclear why the Applicant is being asked to provide infrastructure for "*pedestrians in general*".

57. As set out in the Transportation Assessment (Appendix K1, paragraph 7.2.1) in my view, the bulk to movements will be made to and from the west, as this is the direction of commercial, education and employment opportunities. While there might be some travel towards the north and Albert Town, I consider that this would be minimal as there are no major trip attractors in this direction. In that regard I note that the requested section of shared path requested does not link to any particular

destination to which travel might reasonably occur, but to an intersection (the State Highway 6 / Aubrey Road intersection).

58. I acknowledge that residents of Albert Town might with to travel to and from the Three Parks development and might wish to cycle. However, this travel demand is not a consequence of the Project.

59. Consequently, I do not consider that a shared walking and cycling route is justified alongside State Highway 6 to manage or mitigate an effect of the Project. Rather I consider that the vast majority of users of such a route will be Albert Town residents rather than residents of the Project. However, I highlight that this section of the highway is already characterised by a wide and flat gravelled berm, which can be used by cyclists. I also note that the layout of the Project already makes allowance for a connection to any possible future shared path between the Site and Albert Town, through providing a shared path to its northeastern boundary.

60. For similar reasons, in my view it is also not necessary to construct a shared route between the western end of the Site and the State Highway 6 / State Highway 84 / Riverbank Road roundabout along the northern side of State Highway 84, as I do not consider that this section of shared path would be used by residents of the Project. Rather, the shorter and faster route for residents will be via the old paper road as described in Figures 1 to 3 above.

61. Should NZTA or QLDC consider that either the link alongside State Highway 6 to the north, or across the Site frontage on State Highway 84, are needed, I understand that the Applicant is agreeable to part of the contribution of $250,000 noted above being used to construct these sections of shared path. This could be done through narrowing the width from 3m to 2.5m, which in turn would mean that the financial contribution would fund an additional 220m length of shared path.

62. Finally, NZTA seeks that the formation of the shared paths is undertaken in a "*timely manner*" (NZTA paragraph 5.3). Any works within the legal highway corridor are wholly at the discretion of NZTA and their timing is not a matter that this (or any) Applicant can influence. However, I consider that it would be possible to specify that the provision of the financial contribution should be made at a particular time or in response to a particular 'trigger', and then for the works to be undertaken at NZTA's convenience (subdivision conditions 50(ff-jj).

ADDITONAL COMMENTS ON MATTERS OF DETAIL IN SUBMISSIONS

New Zealand Transport Agency

63. NZTA has not raised any further transportation matters that are not addressed above.

Queenstown Lakes District Council – Stantec Peer Review (Appendix 1)

64. Within Section 5.2.1 of their report, Stantec comments on the size of car parks, and highlights a difference between the provisions of the PDP and that of the overarching national Standard AS/NZS2890.1:2004. I agree with the description of the differences. I am aware of the revision to the Standard, although as work is on hold, draft updates can be given no weight. Rather, the approach taken within the Transportation Assessment (Appendix K) was to use the dimensions of car parking spaces as set out in the PDP.

65. In a small number of cases, the approach taken was to interpolate between the PDP values for the width of the spaces and width of the aisles to conclude that intermediate values were supportable (Transportation Assessment (Appendix K), paragraphs 7.3.1.9 and 7.3.6.5) and Stantec queries this approach (Stantec Section 5.2.1). Unfortunately, in promulgating their *reductio ad absurdum* argument, Stantec *extrapolates* the widths of the parking spaces. In that respect, I agree with their position that if parking spaces become wider then there is a limit to how much the aisle width can reduce. However that is not the question to hand – the issue is that if, say, the PDP allows spaces to be 2.6m wide with an aisle of 7.0m, and 2.7m wide with an aisle of 6.0m, is it reasonable to *interpolate* dimensions mid-way between these (that is, a 2.65m wide space with a 6.5m aisle)?

66. Rather than reiterate the text of the Transportation Assessment, I have instead simply provided tracking curves below. In these Figures, the thicker cyan line is the area occupied by the vehicle bodywork, the yellow line is a clearance of 0.3m around the bodywork, and the white lines represent the parking spaces and the aisle.

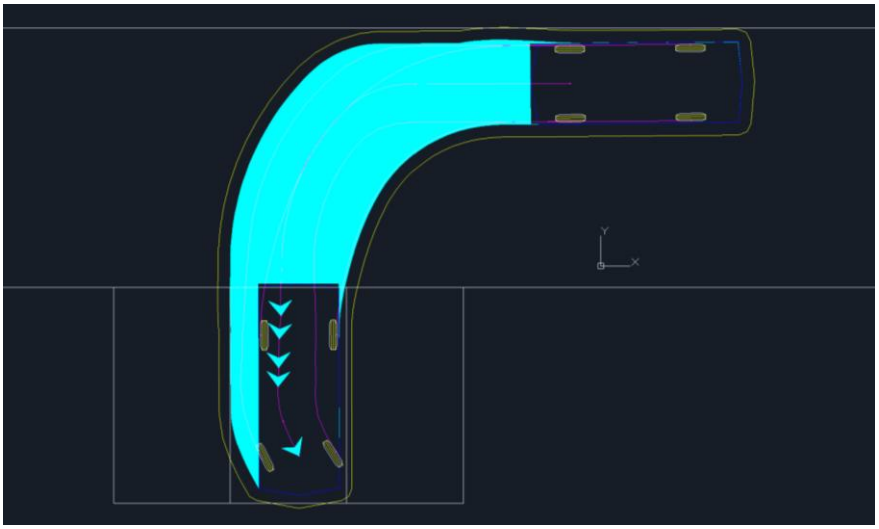

Figure 5: Car Entering 2.7m Wide Space and 6.0m Aisle (Dimensions as per the District Plan)

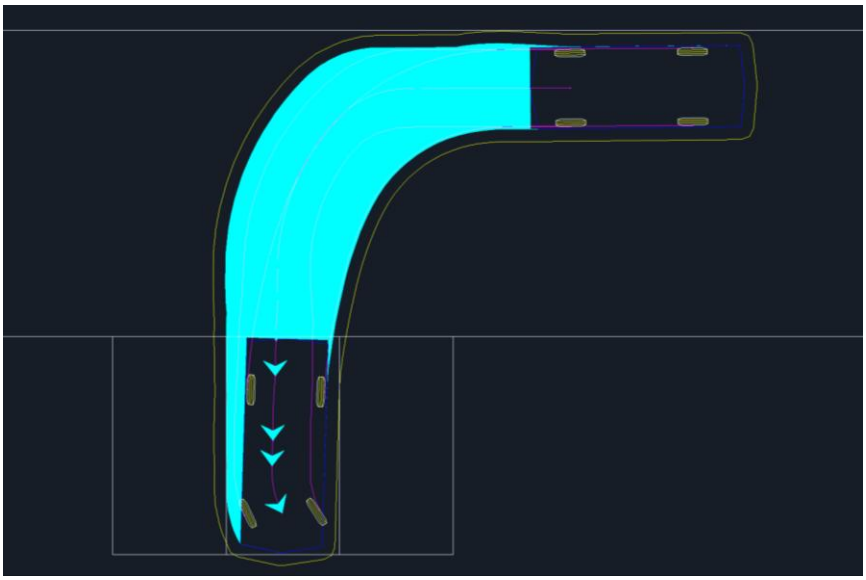

Figure 6: Car Entering 2.6m Wide Space and 7.0m Aisle (Dimensions as per the District Plan)

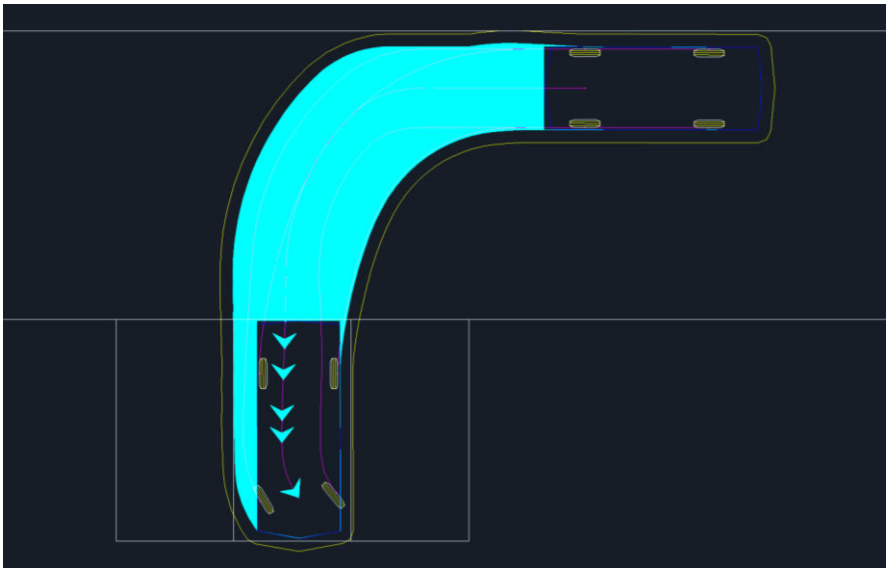

Figure 7: Car Entering 2.65m Wide Space and 6.5m Aisle (Dimensions Interpolated between District Plan Values)

67. These Figures show that a space that is of intermediate dimensions can easily be driven into by a car. By way of further assessment, I have measured the clearance between the car bodywork and the edge of the space as the vehicle enters enter:

    (a) 2.6m wide space and 6.0m aisle (PDP dimensions): 0.04m.

    (b) 2.7m wide space and 7.0m aisle (PDP dimensions): 0.15m.

    (c) 2.65m wide space and 6.5m aisle (interpolated dimensions): 0.10m.

68. The clearance for the interpolated dimensions of the space falls halfway between the values for the PDP spaces. This is as would be expected if there is a linear relationship between the widths of the spaces and widths of the aisles.

69. I therefore do not agree with Stantec's conclusion that "*a linear relationship does not exist in practice*" because the data demonstrates that it does. Irrespective, the argument is somewhat arbitrary as the outcome through the tracking is clear that such spaces can be accessed in practice.

70. Stantec goes on to state that in order to meet the PDP parking dimensions, spaces should be reallocated between Class 1 users (those familiar with the car park) and Class 2 users (those unfamiliar with the car park). However, as the spaces are accessible as shown above, I do not consider that this is necessary.

71. In Section 5.2.1 of their memorandum, Stantec notes that those units expected to be used for residential visitor accommodation should be specified in order to ensure that their associated parking spaces are of the correct dimensions. I agree with this

in principle. However only 20% of units could be used in this manner, and I am aware that a condition of consent is already proffered that the balance of lots will have a consent notice prohibiting their use for visitor accommodation (subdivision consent condition 9(o) and 50, land use condition 11).

72. Section 5.2.2 of the Stantec memorandum sets out that two mobility spaces are required in Car Park 2 as it is a public car park. I acknowledge that this car park is annotated on the drawings as being '*public*' but in practice it is not associated with any specific land use but rather, is anticipated to be largely used by visitors to the residential elements of the Project. Residential development, including visitors, is not required to provide any mobility parking. Consequently, I consider that the provision of one mobility space will be appropriate.

73. In Section 5.2.3 Stantec also comments that no specific storage locations are provided for cycles and considers this to be a "*poor design outcome*". Stantec draws comparisons with the provisions for residential cycle parking in the Te Pūtahi Ladies Mile Zone within the PDP, and I consider that this is a helpful approach. The PDP provisions in this regard are set out in Table 29.6, where it is noted that residential units in the Te Pūtahi Ladies Mile Zone require 1 cycle parking space, and 1 space for visitors is required per 20 units. Under Note 29.10.17, these can be provided within garages or communal cycle storage sheds.

74. For the Project, cycle storage is anticipated within the garages at Unit Types A to C. Unit type D have covered areas adjacent to the ground floor living rooms and have outdoor space that could be used for a cycle storage shed. The ground floor area of the apartments (Type E units) have dedicated ground floor lockable storage areas for cycles (shown on Sheets A1.39 and A1.59 of the architectural plan sets, and included as Appendix C1 to the application). Each apartment block has at least one cycle parking space per unit (in passing, I note that the plans show that cycles are stored with both wheels on the ground but additional cycle parking could be provided by a 'hanging' type of system).

75. On this basis then, at least one cycle parking space is available for each residential unit.

76. With 250 units, a total of 13 cycle parking spaces is required for visitors. Because the residential development extends for a distance of over 400m through the Site, I do not consider that providing one communal area for visitor cycle parking is a practical solution. Visitors will seek to park their cycle close to the unit that they are visiting and so a centralised parking area is unlikely to be well-used. However, there are numerous locations where a cycle stand could be provided within the road reserve, which would lead to an outcome of stands conveniently located throughout the Site. Examples of possible locations are shown below.

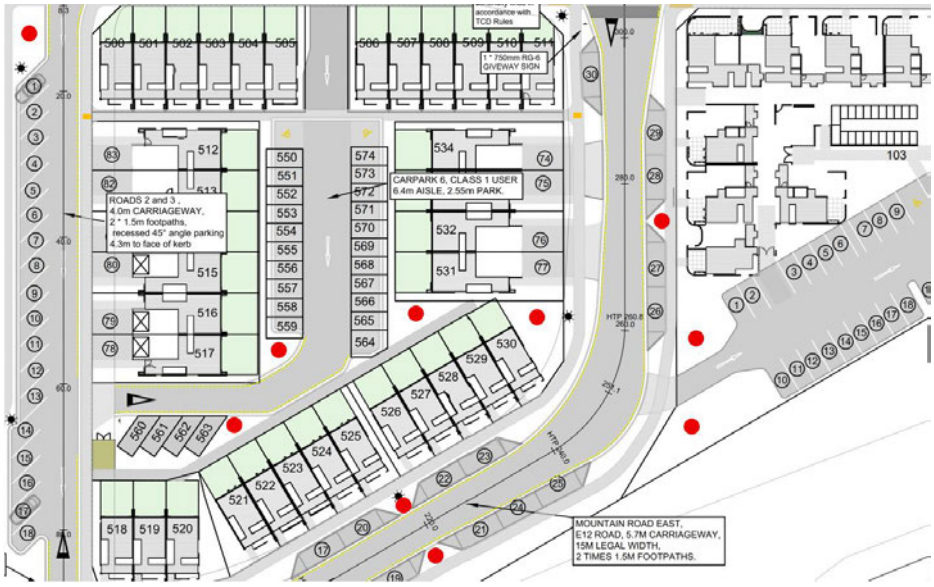

Figure 8: Examples of Potential Locations for Cycle Parking (Red Dots) (Extract From Engineering Drawings Sheet 300C)

77. On this basis I consider that ample cycle parking is provided within the Site, and there are no reasons to anticipate that the uptake of cycling would be suppressed through a lack of cycle parking in the Site.

78. Stantec raises (Stantec Section 6.5) that there is an internal discrepancy in the QLDC Land Use and Subdivision Code of Practice (**CoP**), where corner radii are required to be in a specific range but this necessarily means that it is not possible to achieve another CoP requirement that trucks cannot pass into the opposing traffic lane when turning. As a result, Stantec sets out that the layout of the Site accommodates the movement of trucks and this may then lead to adverse road safety outcomes for pedestrians.

79. I agree with Stantec in regard to the internal discrepancy of the CoP, and agree that within a residential area such as this, the optimum design outcome is *not* achieved by providing large intersections to accommodate refuse trucks, but rather, to expect that trucks will use both sides of the road. I concur with Stantec that trucks are lawfully able to make such a manoeuvre under the overarching legislation. In practice, the vast majority of trucks within the development will be collecting refuse, and residents will be aware of when these trucks will be present.

80. The present layout provides for truck movements in the manner expected in the CoP. If the radii were to be reduced as Stantec suggests, then this would simply result in a minor adjustment of kerblines at intersections. No other changes would be required, and the formed road and footpaths / cycle lanes would continue to fit within the proposed legal road reserves.

81. Overall though, I am aware that the proposed roads will be subject to engineering approvals by QLDC, and the engineers may have a different view to Stantec and seek the retention of the larger radii and intersections. Consequently, I consider that at this stage the layout should not be adjusted, but that this is a matter that can be revisited when engineering approvals are sought. However, I fully support Stantec's views that where possible, radii should be decreased to better provide for pedestrians.

82. Finally, Stantec notes that a full suite of tracking curves has not been provided for waste collection vehicles. While I acknowledge this, the eight curves that have been provided (Substantive Application Appendix F, Sheets 343 and 344) are located at the most constrained locations, and show that trucks are able to manoeuvre. This matter will need to be reassessed at engineering approvals stage if the kerb radii at intersections change, and I consider that any further tracking can be provided at that time.

Queenstown Lakes District Council – Property & Infrastructure (Appendix 5)

83. In Parts 5.2(i) and (ii), P&I queries the level of detail provided to show how the proposed walking and cycling routes connect to possible future bus stops on the state highway, and to show the transitions between shared paths and the carriageway. I highlight that there is no bus service in the area at present, nor any firm proposal that one will be provided. There are no bus stops.

84. As there is no confirmed public transport in the area, I consider that the matter raised by P&I is largely hypothetical. However, the layout of transitions between cycle lanes and carriageways is a well-understood and relatively standardised design throughout the country. The engineering plans provided are not detailed plans for construction (they are noted as '*preliminary*'), and I anticipate that they will be subject to refinement through the engineering approvals process. Consequently, the design of transitions and details of connections to possible future bus routes are appropriately dealt with at this time.

85. In respect of the design of the crossing points (Part 5.2(iii)), P&I notes that refuge islands are insufficiently large for cyclists. On Figure 5 of the Transportation Assessment (Appendix K), I showed the locations of the proposed shared paths where cyclists are anticipated, and there are no refuge islands on any of these routes. I conclude that either P&I is commenting on the existing refuges at the roundabout, or contemplating a situation where a cyclist is pushing their cycle along a footpath and then wishes to cross the road.

86. The refuges within the Site are shown as 2.2m wide (measured between the white edgelines), and a standard cycle length is 1.8m. I consider that the proposed refuges

are therefore ample. That said, I concur that this is a matter that can be refined later, as can minor adjustments to the radii and angles of travel.

87. In Section 5.3 of their comments, P&I discusses in detail the dimensions of the car parking spaces and seeks that additional tracking curves are provided. On my reading of their paragraph 7.4(i) though, these appear to be matters that they consider can be addressed through the subsequent engineering approvals process. I agree with this approach – the engineering plans are preliminary and will necessarily be subject to refinement should the Project be approved. The nature of the comments made on the parking space dimensions do not appear to be fundamental flaws, but rather, matters of detail.

88. P&I sets out that the location of parking for the residential visitor accommodation should be specially identified (Part 5.3(iii)). As set out previously (paragraph 71), I agree but consider that this is already addressed through the conditions of consent proffered (subdivision consent condition 9(o) and 50, land use condition 11)..

89. In Parts 5.3(vi) to (ix), P&I sets out their preference that on-street parking is provided by way of parallel spaces rather than angled spaces, raising concerns around sightlines. They confirm though (Part 5.3(ix)) that angled spaces comply with the PDP. On this basis, I do not consider that it is necessary to change the layout.

90. Section 5.4 of the P&I comments refers to pedestrian crossing sight distances, stating that the distances provided are incorrect and that "*required*" sightlines are provided. At the outset, I confirm that it is important that pedestrians are able to have sufficient sight distance to see approaching vehicles and to cross the road. Although no further details of the concern are includes in their memorandum, having liaised with P&I on several previous commissions relating to pedestrian sight distances, I am aware that they apply the provisions that are set out in the Austroads Guide to Road Design Part 4A published in 2023 (**Austroads Guide 2023**).

91. In my view, this approach is incorrect. It results in P&I applying provisions intended for formal pedestrian crossings (which have a specific legal definition in New Zealand) to every place where a pedestrian might cross a road (such as at a kerb cut-down), and which are not 'pedestrian crossings' in a legal sense. As such, there are parameters used for calculating pedestrian crossing sight distances that are unrealistic to apply to locations such as kerb cut-downs. One example of this is an expectation that pedestrians wait to cross at a distance of 1.6m from the kerb. However pedestrians waiting at a kerb cut-down do not wait in this location (if they did, they would not be standing on the tactile paving).

92. Another example is that the process assumes that once a pedestrian has identified that it is safe for them to cross, they wait for up to a further 3 seconds before starting

their crossing movement (and because they are 1.6m behind the kerb, it takes a further 1.3 seconds before they reach the edge of the carriageway). This is simply not how pedestrians cross a road at a kerb cut-down. However, these characteristics are, in my experience, indicative of how pedestrians cross the road at a formal location such as a zebra crossing where they need to exercise caution to ensure that vehicles have stopped for them.

93. In January 2026, issues associated with calculating pedestrian crossing sight distances were identified by Auckland Transport and included in a Practice Note. While it has no statutory weight in Queenstown Lakes, I consider it is helpful background to note that pedestrian crossing sight distance "*presumes vehicles do not give way to pedestrians. It is very difficult to provide this long distance in urban streets, particularly where communities require kerbside parking. A safe sight distance that allows vehicles to give way to pedestrians can be significantly less and so be easier to achieve with less effect on opportunity for on-street parking*" (Auckland Transport Practice Note 09). It also goes on to set out that this issue is known to Austroads and that they are progressing an update. Unfortunately, within the timeframes available for this statement of evidence it has not been possible to obtain a timeframe for this update.

94. I have however tracked the source of the Austroads Guide 2023 calculation. The specific reference given is a Queensland design guide, but having reviewed this, the Queensland guide itself refers to a 1995 Austroads Guide ('Guide to Traffic Engineering Practice Part 13') (**Austroads Guide 1995**). Crucially, the 1995 and the 2023 versions are different, with no indication of why this is so. By way of example, as I noted above, the Austroads Guide 2023 includes a requirement that pedestrians are assumed to wait at 1.6m from the kerb. This is not present in the Austroads Guide 1995 (nor, for completeness, in the Queensland design guide).

95. Importantly, the Austroads Guide 2023 sets out that "*parked vehicles can cause visual obstructions… This may require banning parking for some distance on each side of the crossing, the distance being determined for each case to* ***ensure that parked vehicles will not obscure the required sight lines***" (our emphasis). The Austroads Guide 1995 sets out that "*parked vehicles can pose visual obstructions… As a minimum, parking is generally prohibited within the statutory distances (18m in most States) of a crossing. However* ***the actual distances over which standing is prohibited should be determined by site conditions****"* (our emphasis).

96. The difference is important in my view., Both require that suitable visibilities are provided but one imposes a blanket prohibition on on-street parking and the other requires a site-specific approach. I have not identified any reasoning as to why this change was made in the different versions.

97. Consequently I do not agree with the P&I view that parking must be prohibited within the pedestrian crossing sight distance. Rather I consider that a Site specific approach is justified to ensure that suitable sight distances are provided, especially in this case where road users will be regular users and familiar with the crossing locations, and traffic speeds will be low.

98. In Part 5.5(i), P&I seeks that additional tracking is provided for vehicles, and as discussed above (paragraph 82), I consider that this could form part of the engineering approvals process.

99. In Part 5.6(i), P&I seeks to confirm that refuse vehicles are able to circulate through the Site. However they propose that a 10.6m long vehicle is used for this assessment.

100. The PDP requires that testing manoeuvrability at intersections and roads is carried out using a vehicle that is 8.8m in length. The same 8.8m length of vehicle is specified by QLDC in its own CoP, including the version published by QLDC just a year ago. In fact, I am unable to find a reference in any QLDC statutory document or guide that specifies a 10.6m vehicle length. This length of vehicle is also not a '*standard*' length pre-coded into software used for testing vehicle tracking and so would need to be set-up specifically. However, QLDC has not provided any of the details needed for this (such as wheelbase and turning circle).

101. In my view, if QLDC wishes a different vehicle to be used for road design, it is of critical importance that this is communicated to designers at the earliest opportunity (that is through the PDP or CoP), and that sufficient details are provided to enable such an assessment. QLDC has done neither in this case.

102. Accordingly, the Site layout has been designed using the 8.8m long truck, being the one specified in QLDC documents.

103. Section 5.7 of the P&I comments relates to intersections, and queries the choice of a priority (tee) intersection within the Site, suggesting a mini roundabout instead on the basis of road safety.

104. By way of background, I highlight that the intersection is presently formed, and suitable sight distances are provided on every approach. I also note that there is no design guide for mini roundabouts in New Zealand and so any layout would need to be bespoke. Unlike a priority intersection (which is a standardised layout) having bespoke intersection layouts can result in driver confusion and thus increase road safety risk.

105. The potential for conflict at any intersection not only depends on conflicting turning movements, but also on the ability of road users to see each other, and the number

of movements that are made. In this case, the sightlines are excellent and traffic volumes will be low (as shown on Table 9 of the Transportation Assessment (Appendix K1) with a maximum of 327 vehicles passing though it in the busiest hour (equivalent to an average of just 5 or 6 vehicle movements every minute). This volume will not increase in future because the Site cannot be developed any further.

106. Since the intersection is already constructed, I consider it would not be an efficient use of resources to reconstruct it as a roundabout. Rather, I consider that its formation as a lightly-trafficked priority intersection is unlikely to give rise to adverse road safety effects.

Queenstown Lakes District Council – Land Development Engineering (Appendix 6)

107. LDE has not raised any further transportation matters that are not addressed above.

108. I note though that in paragraph 4.1.3.8, LDE sets out that up to 80% of the proposed units could be used for visitor accommodation. As I noted above in paragraph 71, the figure is capped at 20%, with at least 80% of units having a consent notice that means they can only be used for residential activity. Accordingly, I do not consider that all parking spaces should be designed for unfamiliar users, as LDE recommends.

Otago Regional Council – Land Transport Team (Appendix 3)

109. ORC comments on the possible future provision of bus stops and recommends that the layout seeks to integrate possible future connections. I noted above in paragraphs 83 and 84 that there are no public transport services in Wānaka nor any confirmed plans for their provision, but that the Site layout already provides walking and cycling connections to possible bus stop locations on the State Highway.

Owners and Occupiers of Adjacent Land

110. In considering these submissions, where different owners/occupiers have raised the same issue, I have responded only once.

111. The Morgan Family Trust and Miles' submissions raise the matter of evacuation of the Site in the event of a wildfire which means that many people will attempt to evacuate at the same time (Morgan submission paragraphs 35 and 36). Although this has not been explicitly considered, the traffic generation of the Site is modest (as shown on Table 9 of the Transportation Assessment (Appendix K1)). Further, in the event of a fire, I would expect that the emergency services will close roads in the area and this will inevitably significantly reduce traffic flows passing through the State Highway 6 / State Highway 84 / Riverbank Road roundabout, and likely

change the directions of travel. This will generate additional available capacity at the roundabout for any necessary evacuation of the Site.

112. The Barham/McFarlane submission sets out a view that the extent of parking within the Site will not be sufficient. My calculation of parking demand is set out in Section 6.4 of the Transportation Assessment (Appendix K), and I note that QLDC/Stantec specifically comments that they "*agree that the level of parking being proposed is appropriate to accommodate the anticipated level of demand*" (Stantec Part 4.2).

113. The Barham/McFarlane submission also sets out that they consider that garages will not be used for parking vehicles, citing their own experience and also a research paper into this matter (Vale and Khajehzadeh, 2016). I have read this paper and note that it does indeed set out that 38% of residents report that they do not necessarily use their garage for parking vehicles. However, I conclude that if they are not parking within their garage, then this is because they are able to conveniently park in a different location. This Project is somewhat different in that on-street parking is limited, with most roads having parking restrictions and parking being permitted only within indented bays. It is therefore unlikely that residents will park on-street to the same extent as the study, because the availability of on-street parking is more limited.

114. The study also set out that on average, each household surveyed had access to 1.5 parking spaces. Within the Site, the ratio is greater than this (as set out in paragraph 6.4.2 of the Transportation Assessment (Appendix K1)) with 532 car parking spaces for 250 units (an average of 2.1 spaces per unit). This will further ensure that parking demand is retained on the Site.

115. The Barham/McFarlane submission also considers that residents will choose not to use the parking space provided immediately outside the garage as it would be inconvenient for them to move their vehicle if the vehicle in the garage is to be used. I do not agree with this perspective, but I also highlight that the PDP specifically makes allowance for 'tandem' parking spaces to be provided in this manner. Put another way, had this development been brought forwards at a time when minimum parking ratios were still within the PDP (prior to the National Policy Statement on Urban Development), then the parking spaces outside the garages would count towards the parking provision. The Site layout does not introduce any novel design or unusual parking provision in this regard, and the ability to use this area for parking has been in the District Plan since at least 2005.

116. The Barham/McFarlane and Laird/Smeets submissions considers that due to a parking shortfall within the Site, on-street parking could occur on roads that are not expected to accommodate this, leading to adverse road safety effects. As I noted previously Stantec does not share the view that there is a parking shortfall, and

although the state highways are noted as possible parking locations in the submission, concerns regarding parking were not raised by NZTA.

117. At a general level, the CoP has a presumption that on-street parking will occur on local roads, and the Council has a range of tools at its disposal to appropriately manage parking (the Barham/McFarlane submission correctly notes one option of introducing parking restrictions, and this could also be considered to address their concern regarding parking on the shoulder of the highway). Overall though, I remain of the view that my calculation of parking supply and demand in the Transportation Assessment is appropriate.

SUMMARY

118. A wide range of transportation-related concerns have been raised through submissions, in varying levels of detail.

119. One common area of agreement between the submitters and the Applicant is that the existing State Highway 6 / State Highway 84 / Riverbank Road is presently approaching capacity *without* the Project being in place. As the Project will add traffic to the roundabout, the Applicant has made provision for a financial contribution based on the proportional change in traffic volume that the Project will create (an increase of 9.9% in the traffic flows). However, the design of the roundabout and the timing of its construction are not matters within the Applicant's control, and so I do not consider that this contribution should be related to a requirement that the roundabout is upgraded prior to the Project commencing.

120. A second common area in the submissions is the strengthening of walking and cycling linkages. The Applicant has volunteered a financial contribution equivalent to the approximate cost of forming a 3m wide shared walking and cycling route between the underpass of State Highway 84 and the northwestern boundary of the Site, either alongside the highway, or partly alongside the highway and partly through improvements to the existing Mt Iron Trail. Such shared paths will be outside the Site and so will ultimately be constructed by others outside the Applicant's land. I consider that this addresses the issues raised around connectivity along this transport corridor, although I do not consider that this should be provided to a higher standard than QLDC or NZTA has put in place in the immediate area.

121. I do not consider that the sections of shared route sought by submitters towards the north of the Site (along State Highway 6) or along State Highway 84 between the State Highway 6 / State Highway 84 / Riverbank Road roundabout and the western end of the Site are required. In my view they are not needed to address any effect arising from the Site because they will not be used by residents of the Site. However,

the Applicant is agreeable to part of their financial contribution being used for construction of these if NZTA or QLDC desire.

122. I have also considered and addressed the more discrete and focussed matters raised in the submissions. However, in large part, I consider that these can be addressed through the detailed design of the transport infrastructure, and through engineering approvals.

123. I remain of the view that the Project can be supported from a transportation perspective.

Andrew David Carr

26 June 2026