Memo

To: Central Otago District Council

From: Antoni Facey

CC:

Date: 3 July 2026

Re: **922 Luggate-Cromwell Road (Parkburn) ITA Peer Review**

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1. This peer review considers the report prepared by Carriageway Consulting Ltd (CCL) to support the Parkburn Mixed Use subdivision development. The CCL report is dated 5 June 2026.
2. The review follows the same structure as the CCL report and the headings refer to the relevant section from the CCL report.
3. A site visit was arranged by the applicant on 5 May 2026 where the project management team from Fulton Hogan were available to outline the proposal and respond to initial questions. Some of the plans presented at the site visit were updated and these plans that were current at 10 June have been used in this peer review.

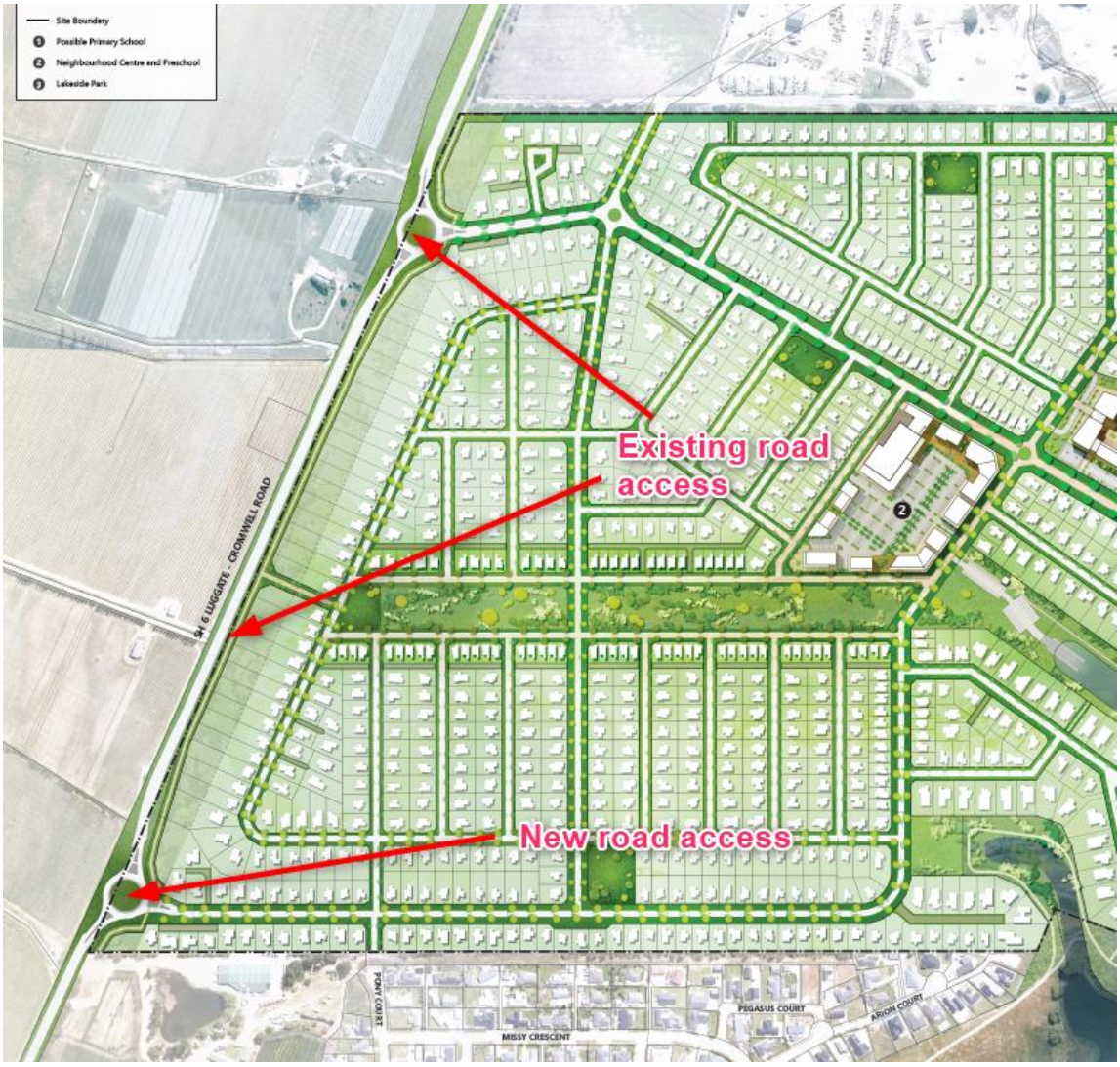
1. Introduction

4. Agreed

2. Site Overview

5. For clarity, the existing road access near the northern boundary is proposed to be upgraded to a roundabout as shown below while the southern existing access road near the centre of the site is proposed to be stopped and replaced by a new access road near the southern boundary to be controlled by a roundabout. The central road may be only a paper road that was never formed.

6. The southern roundabout will be constructed as part of stage 1 of the overall development while the northern roundabout is proposed to be developed at a later stage.



3. Current Transportation Networks

3.1 Roading network

7. The background description of the network is agreed.

3.2 Non car infrastructure

8. The description is agreed while also noting that SH 6 is the responsibility of NZTA.

3.3 Future changes

9. Agree that none are known.

4. Current Transportation Patterns

4.1 Traffic flows

10. SH 6 traffic flows and network performance are an issue for NZTA to address separately as part of their response to the application.

4.2 Non car modes of travel

11. Any future provision of walking and/or cycling infrastructure on SH 6 is for NZTA to consider. However, it should be noted that small centres close to a main centre can create demand for on road cycling as is seen on SH 8 between Pleasant Point and Timaru. Although an off road shared path has been constructed beside SH 8, cyclists are regularly seen on the SH 8 carriageway.

12. It is likely that there could be some additional demand on the cycle trail as result of this development. The distance between Parkburn and Cromwell is not significant and is easily accessible with E bikes in particular.

13. The Ministry of Transport Household Travel Survey 2015 suggests that "*Cycling makes up 1.6 percent of total time travelled and just over 1% of the number of trip legs*". Paragraph 6.1.6 suggests that the development could generate up to 722 vehicle movements in the peak hour equating to 7 cycle movements in the peak hour. The trail appears suitable to accommodate this demand.

14. While scheduled public transport may not currently be available in Cromwell, on demand public transport has recently been implemented in Timaru and is understood to now be under active consideration within Mosgiel and other towns. This could be a future option for public transport in Cromwell. However, the Timaru on demand system has not been extended beyond the main urban areas at this stage and may or may not be extended to Parkburn if it is implemented in Cromwell. This is to highlight that future options cannot be ruled in or out.

15. It is important to note that the planned primary school may be serviced by school buses and these need to be considered as the design vehicle when accessing the school. This is particularly important when considering turning movements at the internal intersections.

4.3 Road Safety

16. The safety record of SH 6 is for NZTA to consider in their response to the application.

5. Proposal

17. Accepted

6. Traffic Generation and Distribution

6.1 Traffic generation

18. Trip generation rates were discussed and calculated in Annexure B.

19. The residential traffic generation was calculated using a real world survey of the adjacent Pisa Moorings subdivision. This appears to be an appropriate approach and the conclusion is generally supported for the residential component of the development.

20. However, it is noted that there is a commercial development that is proposed in Parkburn as well as a primary school and boat ramp all of which can attract traffic from outside of Parkburn and Pisa Moorings as well as some of the trips that are generated from within Parkburn that would otherwise have travelled to Cromwell. This has been acknowledged in the assessment and included in the updated model using the current masterplan.

21. It is also noted on Page 9 of the Annexure that *"a proportion of trips observed in 2025 at Pisa Moorings will instead be made wholly internally to the Parkburn site and will therefore not occur on the state highway[1]".* This appears to rely on the Pony Court link to Pisa Moorings being constructed and that has not been confirmed at this stage. Therefore, vehicles from Pisa Moorings using the commercial centre or primary school using SH 6 to access Parkburn should be considered. Until a direct link is provided, this would require a right turn from Pisa Moorings onto SH 6 which is the movement of greatest concern in the modelling.

22. Paragraph 7.1.11 of the ITA recommends that "*development within the site should be limited to 710 residences until a direct link between the site and Pisa Moorings is created".* This is acknowledged and accepted. The new link is required prior to 710 residences being constructed.

23. While the analysis has been based on residences alone, it is considered that a sensitivity analysis should be carried out on different options since the staging plan shows the commercial development occurring before 710 residences have been constructed. These options would include:

    - The number of residences,
    - The number of residences and the school,
    - The number of residences and the commercial development, and
    - The number of residences with the school and commercial development.

24. These options would provide greater clarity on the limits of what could be achieved within the development before the direct link to Pisa Moorings (Pony Court or an alternative) was required. It is noted that if the direct link cannot be provided, this is likely to prevent the development from being completed as planned and applied for in the consent which could lead to the application being declined.

25. Performance of the roundabouts (especially queue lengths) is an important consideration for the initial sections of the internal roads.

6.2 Traffic distribution

26. Given the current levels of development to the north of Parkburn, 90% of generated traffic movements to and from the south is a reasonable assumption.

7. Effects on the transportation networks

7.1 Roading capacity

27. The transportation model appears to have been run most recently in October 2025. The basis of the model was the revised residential traffic generation for both Pisa Moorings and Parkburn as well as a revised masterplan for Parkburn. The results are discussed in Annexure C of the ITA.

28. It should be noted that the masterplan has been further updated with internal access roads to the HWR land.

29. The roundabout performance issue is for NZTA to address. It is expected that the internal road network will be able to accommodate the generated traffic from within Parkburn and Pisa Moorings. However, the roundabouts appear to be high speed and this speed could be carried from the roundabout into the internal roads and speeds may need to be addressed.

30. It is noted that the model does not consider the HWR land to the north which is understood to discharge traffic into the northern roundabout. Since the HWR development has not been confirmed, this is an acceptable approach but it does introduce risk. The amount of traffic from the HWR land through the roundabout

could be significant resulting in queue lengths increasing and capacity reducing and thus affecting the local roads and the safe and efficient functioning of the roundabouts.

31. Traffic from HWR would increase highway traffic through the southern roundabout regardless of where the HWR traffic accesses the highway. The internal road connections to HWR also increases traffic from the internal road into the southern roundabout.

32. It is my opinion that some allowance should be made in the model for the HWR development to assess the effect of the extra development and ensure that an appropriate scale of roundabout is constructed initially to accommodate the HWR development or a capacity upgrade of the roundabout may be required with inefficient use of funds and increased and unnecessary disruption and road user costs to traffic. Noting that the SIDRA models show these roundabouts operating at LOS A, the HWR development is unlikely to significantly their performance but this should be confirmed.

33. The report assesses the need for a connection between Pisa Moorings and Parkburn. It concludes that a connection must be provided to prevent the SH 6/Pisa Moorings intersection from becoming saturated and operating at an unacceptable level. The level of traffic from the Parkburn development that would generate this level of traffic was found to be 710 dwellings.

34. It is noted from the staging plan that this would occur between stages 10 and 11. However, stage 6 includes the commercial development which will generate additional right turn movements from Pisa Moorings which are the movement that causes the intersection to operate unacceptably. Hence, some further analysis should be undertaken to determine when the link would be required with the commercial development in place. It is likely that the intersection would perform poorly when stage 6 is complete. Therefore, I consider it more appropriate for a condition of consent to require the Pisa Moorings connection to be required prior to stage 6 subject to the sensitivity analysis in paragraph 23 above.

35. Similarly, the stage at which the SH 6/SH 8B roundabout upgrade should be reconsidered although the commercial development may have less impact on this site than the residences and the 875 residences limit may still be appropriate. However, this may be complicated by the HWR project if it is advanced before the 875 residences are completed in Parkburn. A further sensitivity analysis should be carried out to ensure that the proposed limit of 875 residences is appropriate.

7.2 Non car modes of travel

36. The provision of walking and cycling infrastructure appears to be appropriate for the internal roads.

37. It is not clear how access from the development to the cycle trail will be achieved, particularly in the early stages. There are no obvious links from the development to

the cycle trail shown on the masterplan. Additional permanent links should be provided.

38. It is my opinion that access should be provided from stage 1 to the cycle trail beside the Lake. This will allow pedestrians and cyclists to access the trail from the start of the development and upgrading of the access should continue through as stages progress. A condition to require an access from stage 1 to the cycle trail and maintained through subsequent stages should be volunteered.

39. A potential public transport route should be protected on the Road 1/Road 3 loop linking the two roundabouts and the commercial centre. This appears to be a viable route through the development should a public transport service be provided in the future.

7.3 Road safety

40. The roundabout design will be overseen by NZTA. However, the internal roads connecting to the roundabouts are the domain of CODC (assuming the roads are vested) and will need to be designed to achieve an urban speed environment and design standard. An important consideration will be the speed that drivers can exit the roundabout onto the local roads and how this is controlled. This could potentially be overlooked by NZTA and CODC should be involved in overseeing the design to the extent that it affects the local road network.

41. There is no reason to expect that road safety within the development would be compromised with appropriate design.

8. District Plan and Engineering Code of Practice

8.1 Introduction

42. Agreed

8.2 District Plan Part 12.7.1: Access standards from roads

43. The approach taken for sight distances at accesses is supported. However, compliance will need to be shown at each individual building consent. Where a breach of standards occurs, the speed environment may need to be altered to match the sight distance available. This cannot be assessed at subdivision stage.

44. The roundabouts fall under the jurisdiction of NZTA.

45. The geography of the development suggests that access to the local roads can comply with other requirements. However, it is unlikely that it will be acceptable for vehicle accesses to be constructed close to the exit from the roundabouts due to the exit speed from the roundabouts. It would appear from the masterplan that this may already have been considered but a condition requiring an appropriate separation should be volunteered although this would be based on a design not yet confirmed. Note also the poor alignment of the footpath while recognising this is only a schematic

plan. The boundaries for the properties bordering the roundabout cannot be set until an acceptable roundabout design has been agreed with NZTA.



46. An item not considered is the separation of the two roundabouts on Road 3. It is unclear what the separation is but it scales roughly as 170 metres. An assessment of the safety of this separation should be provided given the potentially high speed roundabout exit onto the local road as well as the vehicle accesses.



8.3 District plan Part 12.7.2: Parking

47. Residential parking is more relevant to consider in Engineering Acceptance. However, the District Plan requires one space per residential unit to be provided on site. Typically, this implies a garage but is not explicitly stated as such. With the road

setback being 4.5 metres in the low density residential zone, this is insufficient to provide an additional space on the site on the driveway. A design B85 (85%ile vehicle) is 4.9 metres long and would overhang onto the road reserve and the B99 design vehicle is longer at 5.2 metres long. While there are small micro vehicles and motorcycles that could fit into these spaces, they are not the design vehicles. The medium density residential zone requires a setback of only 2 metres which does not allow for an extra parking space on site for any practical vehicle.

48. Given the lack of public transport, reliance on private vehicles is likely to be high.

49. Census data shows the number of vehicles per household in Central Otago is likely to be around 2 vehicles per dwelling. The applicant will need to provide sufficient on street parking to accommodate the overflow parking demand from residential demand and also make an allowance for service vehicles and visitors. Hence, the on street parking will ideally need to accommodate at least 1 space per residential site. This level of on street parking is not likely to be available on the roads shown on the Roading Typology plans with narrow carriageways without compromising safety and further strengthens the case for the wider carriageways in the current Code of Practice based on NZS 4404:2004 with CODC amendments. The current Code of Practice carriageways allow for parking on at least one side of all residential roads and this would be an appropriate design standard.

50. The commercial centre has no detail provided and will need to have a separate Resource Consent. Parking and other transport related effects will be considered at that stage. Similarly, details of the proposed primary school have not been confirmed and on street parking and access cannot be assessed at this stage.

8.4 District Plan Part 12.7.3: Loading and manoeuvring

51. Loading is not required for residential properties and loading will be considered for the commercial centre as part of the Resource Consent.

8.5 Councils Engineering Code of Practice

52. While the details of the cross sections can be dealt with as part of the Engineering Acceptance, draft cross sections have been provided. The important consideration for the subdivision is that the proposed road reserves are suitable to ensure a compliant/acceptable cross section can ultimately be constructed. CODC is currently at the start of the process of updating the Code to introduce some aspects from NZS4404:2010, with these changes expected to be consulted on in the near future, however any consideration of these alternatives would be premature at this time because they have not been tested by and accepted as appropriate in the CODC communities context.

53. In the meantime, it is considered that the subdivision should be planned on the current Code of Practice requirements Table 3.1. This has road reserves for most of the roads in the development as 20 metres. Future stages of the development can be reviewed when the consultation regarding NZS4404:2010 has been resolved.

54. Note that NZS4404:2010 does not have any expectation of road reserves greater than 20 metres for any of the roads in the development except around mixed use/neighbourhood centres. Wider road reserves such as the 28 metre road reserve proposed for Road A has berms of up to 7.65 metres width which some residents may not be prepared to maintain. This could result in a varied approach to berm maintenance along the road particularly around the 420 m^2 sections where occupants may not need or own a lawnmower.

55. Paragraph 8.5.2 of the ITA states "*The road cross-sections are matters relating to the Engineering Code of Practice is addressed by other consultants and is not included within this report".* While this is indeed the case, the assessment by other consultants has not been provided at this stage so no comment can be made on this issue. Considering the application is for Land Use AND Subdivision consent, these issues need to be clarified, assessed and agreed at this stage. There is little scope to address these issues after consent is issued so need to be dealt with and agreed now. Note that some of the proposed roads have large catchments with long straight roads that would be difficult to manage in a narrow reserve. Informal feedback prior to consultation on the replacement Code of Practice indicates that the public are not accepting of these types of narrow roads in a lifestyle environment such as this. The community considers that a wider road reserve consistent with the current Code of Practice is required to accommodate community expectations around speed management, safety and on street parking in particular.

56. It is considered that the development should be based on the road reserve widths of the current Code of Practice. There are no technical reasons given why a compliant road layout could not be provided. For the avoidance of doubt, the road reserve widths and cross section elements as currently proposed by the applicant in their plan of typical road cross sections is **not** agreed.

8.6 Summary

57. It is generally agreed that the development can be accepted subject to consideration of the items within this review.

9. Conclusions

58. Agreed.

Items not covered in the Transport assessment.

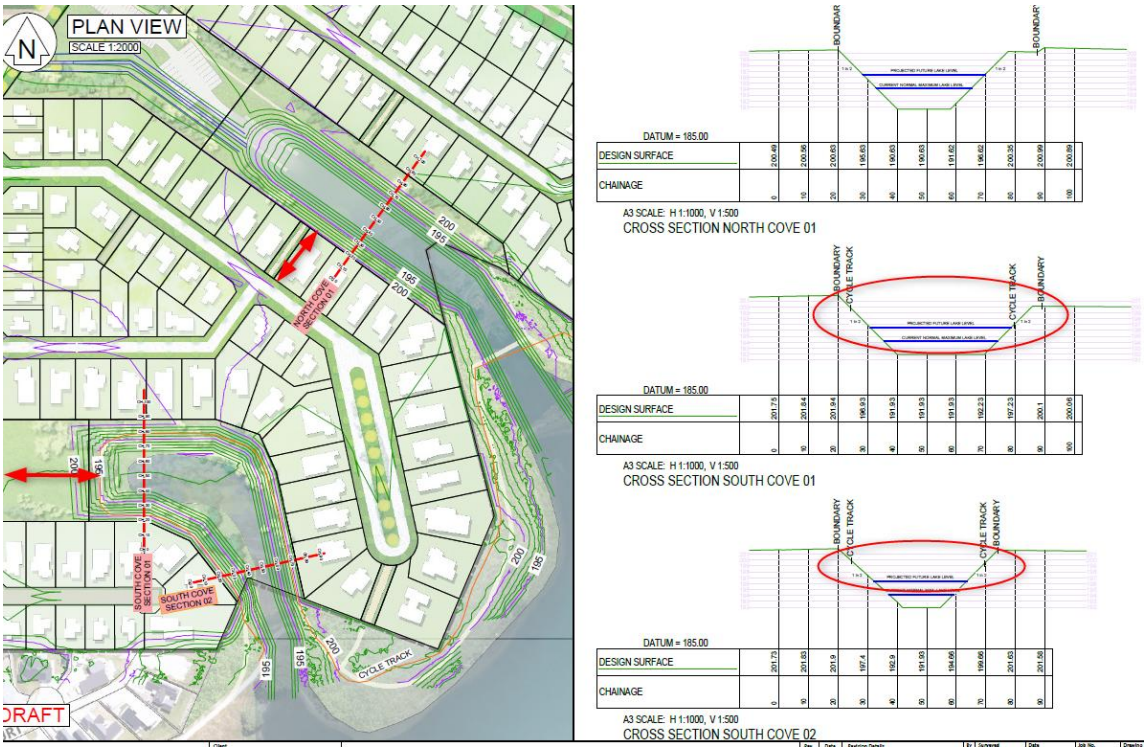
59. Initial review of the plans identified a number of issues that will need to be addressed. These are as follows:

60. The cycle track around the Coves is shown to be on a steep slope. Consideration should be given to showing how the cycle track will be accommodated on the slope and whether boundaries need to be adjusted to accommodate the cycle track. Bearing in mind that the track width of 3 metres would require a 1.5 metre high retaining wall.

61. Connectivity between the development and the path seems to be easy to provide in some places but difficult in others. Consideration should be given to providing links in the masterplan, particularly in light of the potential for a retaining wall on the edge of the cycle path.

62. The boat ramp appears to be within the proposed deep swale drain which would appear to prevent it from being installed. The plan does not show how a vehicle can turn around to reverse the trailer into the lake.

63. Similarly, the sports field has little detail shown. Appropriate parking supply and manoeuvring provisions need to be made for the sports field.



64. The HWR land to the north is currently used as an industrial site. Given that the timing of any proposed land use changes is unknown, it would be appropriate to consider this access as an industrial road with potential changes to be made before construction of the roundabout if the land use changes. In any case, construction activity to build the HWR development may require access through this route so it should be designed assuming semi trailers as the design vehicle. The roundabout

circled will need to be well designed to cater for this traffic and property boundaries should reflect this.



65. Some roads shown are long and straight potentially leading to high traffic speeds in urban areas. Consideration should be given to a better urban form by breaking these roads into shorter sections to control traffic volumes and speeds on local residential roads. These could include roundabouts at midblock intersections, platforms at intersections, single lane road narrowings, crescents etc to achieve the design speed (considered to be 40km/hr or less) suited to a residential environment.

Conclusion

66. Subject to further consideration of the items identified in this review and a suitable set of volunteered conditions, it is anticipated that an acceptable subdivision layout can be achieved.



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