

Before the Hearing Panel
Appointed by the Waimakariri District
Council

Under the Resource Management Act 1991

In the matter of a hearing on submissions on the proposed Waimakariri District
Plan

Hearing Stream 12E: Residential Rezoning

Rachel Claire Hobson and Bernard Whimp

Submission: 179 / Further submission: 90

Supplementary evidence of Andrew Francis Leckie

2 August 2024

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**anderson
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Introduction

- 1 My name is Andrew Francis Leckie.
- 2 I have prepared evidence in chief dated 5 March 2024 in respect of the submission of Rachel Claire Hobson and Bernard Whimp (**the Submitters**) relating to land located at 518 Rangiora Woodend Road and 4 Golf Links Road (**the Site**).
- 3 My qualifications and expertise are set out in my evidence in chief. I authored the Integrated Transport Assessment (**ITA**) for the proposal, which was attached to my evidence in chief.

Code of Conduct for Expert Witnesses

- 4 While this is not a hearing before the Environment Court, I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023 and that I have complied with it when preparing my evidence. Other than when I state I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Scope

- 5 This supplementary evidence responds to the Officer's Report for Stream 12E: Residential Rezoning, dated 22 July 2024, in relation to transport matters raised. Key matters are the accessibility of the Site for all travel modes and vehicle access to Rangiora Woodend Road.

Responses to Mr Binder's Comments

- 6 The Officer's Report includes transport comments from Mr Binder, Senior Transportation Engineer at Waimakariri District Council, as well as transport-related comments from the Officer.
- 7 Mr Binder outlines that the Site is located adjacent to existing bus, walking / cycling, and vehicular routes on Rangiora Woodend Road, so is thus well served by all travel modes. I generally agree with this statement, although there will be work necessary to ensure development of the Site is well-connected for active travel modes. As outlined in my evidence in chief, I consider that the Rangiora Woodend Road / Golf Links Road intersection should be upgraded to an urban standard prior to residential development along Golf Links Road. An upgrade would include a safe crossing point across Golf Links Road, and there would need to be a connection from the intersection to the existing shared path on the northern side of Kippenberger Avenue.

- 8 Mr Binder notes that it is some distance from the Site to the town centre (2.5km) and to nearby schools (3.0km), but comments that it is still generally considered to be appropriate for non-car travel. The distances are dependent on where they are measured to and from, but I point out that it is less than 2km from the Rangiora Woodend Road / Golf Links Road intersection to the High Street / Ashley Street intersection which could be considered the centre of the town. The Warehouse / Briscoes retail centre and Rangiora High School are only approximately 1.3km and 1.9km respectively from the Rangiora Woodend Road / Golf Links Road intersection. As outlined in the ITA, the Site is closer to the town centre than existing and planned residential development in the west of Rangiora.
- 9 Mr Binder points out that Rangiora Woodend Road is a high speed rural road with sight distance limitations around the corner at Golf Links Road. He recommends that the existing property access (number 518) be closed and no more than one new access be permitted to Rangiora Woodend Road.
- 10 I have anticipated that the speed limit on Rangiora Woodend Road would be reduced to an urban speed limit (maximum of 60km/h) with residential development alongside it, noting the planned Bellgrove South development area is opposite the Site on the southern side of the road. Only one local road intersection on Rangiora Woodend Road is proposed through the Outline Development Plan (**ODP**) and this can be separated from the curve in the road alignment to ensure adequate visibility, as outlined in the ITA.
- 11 Finally Mr Binder considers it important that future connectivity to the north and east should be allowed for. I agree and this connectivity is proposed through the ODP.

Responses to Officer's Comments

- 12 In paragraph 528, the Officer states that 'it has connectivity issues, with no currently available alternatives to the Rangiora Woodend Road arterial'. I disagree with this since the ODP includes a road connection to Golf Links Road. This will allow for local movements to and from the north along Golf Links Road (and Coldstream Road). Also, it will allow for local movements to and from the land west of Golf Links Road, including Bellgrove, as it is developed. Suitable connectivity to the land north and east of the Site is also proposed through the ODP, in accordance with Mr Binder's recommendation.
- 13 In Paragraph 532 the Officer notes 'potential difficulty in access to the Site, particularly off Rangiora Woodend Road'. The ITA outlines that a T-intersection on Rangiora Woodend Road will be able to be located and designed to operate safely and efficiently in a future urban speed environment.

- 14 The Officer assesses the proposal against the Canterbury Regional Policy Statement requirements of a 'well-functioning urban environment' in paragraph 536. He considers that 'access to community, social and commercial facilities is a challenge, as the development is isolated from other developments, except by way of existing busy roads'. He also considers that 'it may affect the operational capacity of the strategic Rangiora Woodend Road'.
- 15 I disagree that development of the Site would be isolated. Residential development is expected on the western side of Golf Links Road and opposite the Site south of Rangiora Woodend Road. Provided the Rangiora Woodend Road / Golf Links Road intersection is urbanised with a safe crossing point over Golf Links Road, and the shared path on the northern side of Kippenberger Avenue is extended to the Site, I consider that a residential development will be suitably connected for non-car travel modes. I note that a crossing point on Rangiora Woodend Road connecting to the existing Rangiora – Woodend path would be expected as part of the new intersection. Also, local connections will be available along Golf Links Road and into the future development to the west of that road.
- 16 In response to the comments on Rangiora Woodend Road traffic volumes and effects on that road's operational capacity, Rangiora Woodend Road is not an especially 'busy road' for an arterial road. The ITA outlines that long-term 2038 traffic volume forecasts for Rangiora Woodend Road are in the range of 700 - 1,100 vehicles per hour at peak times (equivalent to approximately 7,000-11,000 vehicles per day). At these volumes a new T-intersection will be able to operate satisfactorily, with minimal impact on the through-traffic carrying function of the road.

Comment on Rangiora Woodend Road Intersection Location Relative to Bellgrove South Intersection

- 17 The Officer's report includes recommended updates to the South East Rangiora ODP, which includes the Bellgrove South development area, in Figure 41 of his report. The recommended ODP includes a road connection to Rangiora Woodend Road approximately in the location of the existing 479 Rangiora Woodend Road driveway.
- 18 The proposed South East Rangiora road connection is approximately 90m east of the intersection indicated on the ODP for the Site. Figure 1 below has the proposed ODP for the Site and the South East Rangiora ODP overlaid, with approximate intersection separation distances noted.



Figure 1: Proposed ODP and Officer Recommended South East Rangiora ODP

- 19 The approximately 90m separation between the two ODP access points is less than the minimum intersection separation requirements of the Proposed District Plan (125m for a 50km/h speed limit and 160m for a 60km/h speed limit).
- 20 The left-right stagger means that right turns into the two side roads could overlap and therefore conflict. I would recommend at least achieving the minimum intersection separation requirements set out above if the intersections are staggered in this direction. A 160m separation (assuming a future speed limit of 60km/h) would not be possible as the intersection on the northern side of the road would be too close to the Golf Links Road intersection and the curve in the road (limiting visibility). I consider a number of alternative intersection arrangements below.
- 21 Preferably, off-set T-intersections will be staggered in the opposite direction, so that right turn movements do not overlap. Separation distances below the recommended minimum can be supported for this intersection arrangement. Standard right turn bays can be provided, if appropriate on the specific road, with a flush median in between the two intersections. This central section of flush median is appropriate for a pedestrian refuge island, whereas these are more difficult to locate with a left-right stagger.
- 22 I note that the intersection on the southern side of the road is separated much further from the curve in the road (at the Kippenberger Avenue / Rangiora Woodend Road intersection) than would be necessary to provide a suitable sightline in an urban speed environment. A sightline in excess of 250m is suitable for a 100km/h speed environment, whereas urban vehicle speeds can be expected

with residential development adjacent. As outlined in the ITA, a sightline of approximately 150m would be adequate where urban vehicle speeds are achieved. Based on this, I consider that there would be flexibility to locate the intersection on the southern side of the road closer to the curve, with the aim of achieving a right-left stagger. From a transportation perspective, the intersection indicated on the proposed Site ODP could be moved to the east (towards the boundary) if necessary to provide further separation.

- 23 I consider that there is no need for the two intersections to line up for through travel as they are local roads accessing an arterial road. As outlined in the ITA, there are options to ensure the intersections operate safely and efficiently, including providing a right-left stagger or a four-legged roundabout, and flexibility as to the form of the intersections should be retained at this stage.
- 24 I consider that there needs to be a coordinated approach to access to the land on each side of Rangiora Woodend Road. I would be happy to participate in expert conferencing for relevant traffic experts if that would assist the Panel.

Conclusion

- 25 With the Rangiora Woodend Road / Golf Links Road intersection upgraded to an urban standard with a safe crossing point over Golf Links Road, and a connection to the existing shared path on the northern side of Kippenberger Avenue in place, development of the Site will be well-connected for travel by walking, cycling and public transport.
- 26 Development is expected west of Golf Links Road and south of Rangiora Woodend Road, and connections for local travel will be possible. A safe and convenient crossing point over Rangiora Woodend Road to the existing Rangiora – Woodend path will be possible as part of a new intersection design.
- 27 Travel distances along Kippenberger Avenue to shops and schools make active travel modes viable. I reiterate that the Site is closer to the town centre than existing and planned residential development in the west of Rangiora, ensuring a consolidated approach to development of Rangiora.
- 28 Safe and efficient vehicle access to Rangiora Woodend Road is possible. As I have outlined, I consider there is a need for a coordinated approach to vehicle access to new development areas on both sides of Rangiora Woodend Road.

Dated 2 August 2024

Andrew Francis Leckie