BEFORE THE SELWYN DISTRICT COUNCIL

UNDER the Resource Management Act 1991

AND

IN THE MATTER of Private Plan Change 71: Four Stars Development Limited

and Gould Developments Limited

EVIDENCE OF LISA MARIE WILLIAMS - TRANSPORT

20 January 2022

Anthony Harper

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QUALIFICATIONS AND EXPERIENCE

- 1. My full name is Lisa Marie Williams. I am a transport engineer and planner employed by Novo Group Limited, a Christchurch based resource management and traffic engineering consulting company. I hold the qualifications of a Master of Engineering (Transport) from the University of Canterbury. I have 15 years of experience as a Transport Engineer and Planner in New Zealand. I am a member of the Engineering New Zealand Transportation Group.
- 2. My specific experience relevant to this evidence includes processing and preparing traffic assessments under the Resource Management Act, for notified and non-notified applications on a range of land-use activities. This includes a variety of Plan Change and Outline Plan applications in Selwyn District.
- 3. I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014. I have complied with it in preparing this evidence and I agree to comply with it in presenting evidence at this hearing. The evidence that I give is within my area of expertise except where I state that my evidence is given in reliance on another person's evidence. I have considered all material facts that are known to me that might alter or detract from the opinions that I express in this evidence
- 4. I prepared the Integrated Transport Assessment (ITA) for the Four Stars and Gould Developments provided with Private Plan Change 71 (lodged 10/1/2021) and a transport further information response (dated 21/01/2021).

SUMMARY STATEMENT

- 5. The following statement of evidence includes a summary of the ITA and further information response; a summary and response to transport related submissions; and response to the Council Officers s.42A reports.
- 6. In summary, the key parts of the ITA include:
 - (a) Up to 660 future residential dwellings generating 594 trips in the peak hour (of which 374 are arrivals and 220 are departures in the evening peak and 149 are arrivals and 445 are departures in the morning peak).
 - (b) Proposed primary road connections to Lincoln Rolleston Road, at the future Broadlands Drive extension (via 157 Levi Road, ODP Area 4), and at Branthwaite Drive.

- (c) Proposed secondary road connections to Levi Road at Ruby Drive, Nobeline Drive and Lincoln Rolleston Road (future 'T' Intersection).
- (d) Shared paths for walking and cycling are proposed along the Branthwaite Drive and Broadlands Drive extensions connecting to the future Reserve. All proposed roads will be formed with pedestrian and cycle facilities in accordance with the District Plan¹ road standards.
- (e) Upgrade of frontage roads and construction of proposed roads to an urban standard in accordance with the District Plan road standards.
- 7. Based on the assessment in the ITA, I consider that the ODP has been appropriately designed to integrate with existing and planned transport infrastructure near the site. The shared path connections proposed and network of roads will provide access to existing shared paths and good pedestrian and cycle links to the reserve, toward public transport stops, schools, and the town centre. I also consider the proposal to be generally consistent with the objectives and policies of the operative District Plan.
- 8. The key points in respect of the Further Information Response are:
 - (f) Confirmation of the anticipated urban road design for the extension of Broadlands Drive, irrespective of whether the adjoining land is residential, residential deferred or rural zone.
 - (g) Additional SIDRA analysis and comment on the operation of the proposed road intersection with Levi Road and Ruby Drive.
 - (h) Confirmation that Levi Road and Lincoln Rolleston Road will be upgraded to an urban standard directly adjacent to the site and generally allow for direct property access where this can be safely provided.
 - (i) An amendment to the Outline Development Plan (ODP) to indicate future road (rather than just pedestrian / cycle) connections to the future reserve to the east of the site.

SUBMISSIONS

9. Eight of the ten submissions included transport related matters which are summarised and responded to below.

¹ Either the Operative or Proposed District Plan as applicable at the time of subdivision. It is noted that the difference between the standards of the Operative and Proposed Plan do not vary to an extent material to this evidence as either would achieve appropriate pedestrian and cycle facilities relative to the function of the road.

- Potential for increased peak hour traffic volumes exiting the site via Nobeline Drive² and impacts on property access to Levi Road³. Frontage road upgrades required on Nobeline Drive⁴ and Levi Road⁵.
- 10. As outlined below, I agree with the Council Officers' recommendations to upgrade Nobeline Drive to a Local Major Road standard. The proposed internal ODP road layout is intended to be designed to avoid use of Nobeline Drive for through traffic, it would primarily provide for property access to Lots located at the southern end of the ODP. This can be further supported by the internal road design at the time of subdivision.
- 11. Levi Road is anticipated to be upgraded to an urban standard in accordance with the District Plan rules, and the Councils Engineering Code of Practice⁶. Levi Road is classified as an arterial road and is anticipated to accommodate higher traffic volumes associated with trips to and from Rolleston and the surrounding areas. The Council have a planned upgrade to the Lincoln Rolleston Road / Levi Road / Lowes Road / Masefield Drive intersection to assist with easing congestion along this route. This is likely to include traffic signals which may create some bunching of traffic flow and may therefore create gaps for vehicles exiting properties adjoining Levi Road.
 - Clarification of ODP roads⁷
- 12. The primary and secondary roads are shown on the ODP. As a guide, the extension of Broadlands Drive and Branthwaite Drive would be similar to that of the existing sections of these roads (although it is acknowledged that such detail is determined at subdivision stage). The secondary roads would generally be narrower than the primary roads. All internal roads will be formed / designed in accordance with the District Plan requirements⁸ and Councils Engineering Code of Practice.
 - Multi-modal / sustainable transport options considered through design / encouraged
 as part of the ODP⁹. Existing public transport routes are distant from the site and travel
 times to Christchurch via public transport are longer relative to private vehicle travel¹⁰.

² #1 Paula (46 Nobeline Drive)

³ #2 Alistair Grant (148 Levi Road) and #11 Blaine Morch

⁴ #1 Paula (46 Nobeline Drive)

⁵ #2 Alistair Grant (148 Levi Road) and #11 Blaine Morch

⁶ https://www.selwyn.govt.nz/property-And-building/resource-consent/subdivision/code-of-practice

⁷ #5 Ivan and Barbara Court (285 Lincoln Rolleston Road)

⁸ Refer to Appendix E13 of the Township Volume of the District Plan (note the Proposed Plan standards, as notified are similar).

⁹ #6 Waka Kotahi NZTA and #8 Environment Canterbury

¹⁰ #7 Christchurch City Council

Future patronage / planning for public transport services¹¹. Related implications for access to employment¹².

- 13. The site is well located in respect of the potential to access jobs, services, and other destinations within the Rolleston Town Centre by walking and cycling. As Rolleston continues to grow, additional business to support demand and associated employment opportunities can be anticipated locally.
- 14. The northern end of the Plan Change area is within close walking distance of existing shops and all of the Plan Change area is within comfortable cycling distance. Access via cycle is further facilitated by the proposed shared path connections within the ODP, connecting to the existing shared path on Lincoln Rolleston Road. All frontage and internal roads will be provided with footpaths.
- 15. Overall, in respect of encouraging use of active modes, the site is well located and appropriate infrastructure is proposed which will facilitate walking and cycling trips. Noting this, the Plan Change encourages walking and cycling trips to the extent that it is possible to do so at this time.
- 16. In respect of public transport, it is noted that in addition to the park 'n' ride on Kidman Street there is also a park 'n' ride at Foster Park which includes the #85 bus route providing an express service to Christchurch hospital and the Central Exchange. The site is within comfortable cycling distance of both Park and Ride facilities (between 1.5 and 3.5 km).
- 17. Integration with future public transport services will require a collaborative approach and to the extent that this can be facilitated, at this time, it is noted that the submission area is close existing Park and Ride services, will provide additional population to support increased patronage generally and has well connected primary roads that would be capable of accommodating any future extension of public transport routes¹³. To the extent possible, at this stage in the process, the proposal is considered to support future travel by public transport.
 - Wider road network capacity / analysis and revisions of the Rolleston Transport Model¹⁴.
- 18. The assessment in the ITA was based on the Councils 2028 Rolleston Transport Model (administered by Abley Consultants) which was the only model available at the time. Since this time, Councils 2033 version of this model has been made available which I understand

¹¹ #8 Environment Canterbury

¹² #7 Christchurch City Council

¹³ Should service provides consider that appropriate.

¹⁴ #7 Christchurch City Council and #8 Environment Canterbury

includes all notified Private Plan Changes within Rolleston. This has been discussed in the Council Officers s.42A reports and I agree with the assessment and conclusions in that respect.

- Impact of Broadlands Drive extension on 157 Levi Road and concern relating to only one road connection to Levi Road¹⁵.
- 19. Whilst it is understood the submitter does not wish to have the road traverse the southern point of their site (ODP Area 4) the advice from Council has been that the extension of Broadlands Drive is a key part of the Councils road network to service traffic to and from this area of Rolleston as well as access to the proposed District Park.
- 20. A further low volume local road connection for property access and active mode connectivity can be accommodated as discussed in the following section.

RESPONSE TO S42A REPORT

- 21. The *Transport Hearing Report Flow Transportation Specialists* [the Transport Report] assesses the potential effects, wider network effects and response to submissions, and I generally agree with the assessments provided. Whilst most of the site is outside the anticipated urban area, I note that the ODP is consistent with the extension of a Primary Road through the site, to the District Park, as indicated on the Rolleston Structure Plan Figure 5.2.
- 22. The Transport Report includes a number of recommendations which I have summarised and provided a response to below.
 - The Lincoln Rolleston Road / Broadlands Drive intersection will be formed as a roundabout. I recommend that ODP Area 4 is amended to identify the requirement for a roundabout at this intersection, and that a planning mechanism is included that requires development within ODP Area 14 to be staged to align with the implementation of the roundabout and extension of Broadlands Drive.

Narrative amendments:

"Access and Transport In anticipation of a full residential development for the entire ODP area the extension of Broadlands Drive is to be located within the contour to maximise lot yield, and to provide a more rational design for that longer term proposition shall be constructed in conjunction with development of any adjoining land and shall be based on anticipation of full residential development for the entire ODP.

Development will be staged to align with the formation of a roundabout at the

^{15 #9} Foodstuffs

<u>intersection of Lincoln Rolleston Road and Broadlands Drive, and the extension of Broadlands Drive over ODP Area 4 to ODP Area 14.</u>

Proposed rule wording:

12.1.3.52A In the Living Z Zone within ODP Area 14 as shown in Appendix 38:

....

- (b) no more than xxx allotments shall be created prior to the formation of a roundabout at the intersection of Lincoln Rolleston Road and Broadlands Drive, and the extension of Broadlands Drive over ODP Area 4. This shall not include any reserve allotment or utility allotment created.
- 23. I concur with the amended narrative wording.
- 24. In terms of a District Plan rule, I am of the opinion that staging and appropriate road connections to service each stage of development are best addressed at subdivision stage however if a threshold was required, I note that the ITA¹⁶ assessed up to 152 peak hour trips occurring via the Broadlands Drive intersection. This equates to approximately 169 dwellings¹⁷. As such the traffic associated with the remaining approximately 491 dwellings has already been assessed as using one of the other intersections or having direct property access to an existing road. As such if any threshold was considered necessary, then based on the ITA analysis, as a minimum, 491 dwellings / allotments could be accommodated prior to requiring the upgrade / connection of Broadlands Drive.
 - A roundabout at Levi Road / Ruby Drive (inclusion of text in ODP narrative).
- 25. A roundabout at the intersection of Levi Road and Ruby Drive is able to be accommodated and can be included in the ODP narrative.
 - A shared use path on Lincoln Rolleston Road along the site frontage (eastern side), including provision of safe crossing points to the shared use path on the western side of Lincoln Rolleston Road.
- 26. The shared path on the western side is two way, so there would be little additional benefit arising from a shared path on the eastern side. I would therefore anticipate a footpath on the

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¹⁶ Paragraph 52

 $^{^{17}}$ At the rate of 0.9 trips per dwelling. That is 169 dwellings x 0.9 trips per dwelling = 152 peak hour trips via Broadlands Drive.

eastern side and a safe crossing point near each of the intersections of Broadlands Drive, Branthwaite Drive and Nobeline Drive. The ODP narrative has been updated to reflect this.

- A shared use path on Levi Road along the site frontage, including provision of a safe crossing point at the Lincoln Rolleston Road / Levi Road roundabout to connect with the existing shared use path on Lowes Road.
- 27. The ODP narrative has been updated to include provision of a shared path along the Levi Road site frontage. Crossing points at the Lincoln Rolleston Road and Levi Road intersection would be anticipated as part of the planned Council upgrade. I understand this is now anticipated to be traffic signals which would be able to include signal phasing for pedestrians and could include cycle lanes or shared pedestrian and cycle crossings. The Council upgrade of this intersection is planned for 2025 /26 and noting the time required to undertake subdivision and construction, it is unlikely that construction of interim crossing facilities would be worthwhile. As such I consider this aspect would be best considered through the subdivision consent once timing of staging is known.
 - A north/south cycle route through ODP Area 14
- 28. Such a connection is largely anticipated through local road and reserve connections and the ODP has been amended to confirm this.
 - Identify in the Movement Network narrative that Primary Roads are expected to be Collector Roads, and that other road typologies are subject to confirmation of compliance with Council's Engineering requirements.
- 29. The recommended ODP narrative in Appendix 2 of the Officers s.42A report hasn't included these matters and I consider this is best undertaken at the time of subdivision where there is ample scope to achieve this. As outlined above, it is anticipated that the construction of Broadlands Drive and Branthwaite Drive would be generally consistent with the existing sections of these roads.
 - Clarify in the Movement Network narrative that cycling and walking will be contained within the road corridor rather than within the road carriageway.
- 30. I agree with this recommendation and the associated change as shown in Appendix 1 and 2 of the Officers s.42A report.
 - Narrative amendments for existing road frontage upgrades:

"Lincoln-Rolleston Road and Levi Road frontages are to be upgraded to an urban standard in accordance with the Engineering Code of Practice. Nobeline Drive including the intersection with Lincoln Rolleston Road is to be upgraded, including vesting of frontage where needed, to a Local Major Road standard in accordance with the Engineering Code of Practice."

- 31. This intention was confirmed in the RFI response and as such I concur with the additional ODP narrative text as above (from Appendix 1 and 2 of the Officers s.42A report).
 - Narrative amendments for Nobeline Drive:

"Nobeline Drive including the intersection with Lincoln Rolleston Road is to be upgraded, including vesting of frontage where needed, to a Local Major Road standard in accordance with the Engineering Code of Practice."

- 32. I concur with the additional ODP narrative text as above (from Appendix 2 of the Officers s.42A report).
- 33. In addition to the above transport recommendations, the *Urban Design and Landscape Hearing Report* recommends an additional road intersection to Levi Road. In my opinion, this should only provide for property access and walking and cycling connectivity to avoid creating a vehicular shortcut through the ODP between Lincoln Rolleston Road and Levi Road. As such this could be accommodated on the basis of it being a very low volume local road without direct vehicular through connections to the Primary Roads whilst still accommodating direct cycle and pedestrian connections (through reserve areas).
- 34. The location of this road intersection would need to be carefully considered to avoid conflict with the existing intersections of Strauss Drive, Bellbird Pace and Goldrush Lane. A separation distance of 123m from Strauss Drive could be achieved (complying with the District Plan requirement) and that would allow for approximately 100m separation to the Goldrush Lane intersection. However, to enable suitable lot sizes along the eastern boundary of the ODP any road may need to be further towards the west. I would suggest that this achieves a minimum distance of 70m from the Goldrush Lane intersection. Goldrush Lane is also a low volume 'T' intersection and is located on the opposite side of Levi Road therefore I consider 70m separation would be adequate to avoid confusion or turning conflicts at these intersections. This location is illustrated in Figure 1 below.



Figure 1: Possible location of low volume local road connection to Levi Road [Source: Canterbury Maps]

CONCLUSION

- 35. The proposed rezoning is anticipated to achieve around 660 Lots including the proposed deferred zone. I consider that the amended ODP, including the changes adopted in response to the Council Officers' reports as outlined above, provides good access to the site for pedestrians, cyclists, and vehicles. The site is well located in respect of pedestrian or cycle access to public transport stops, schools, and the town centre.
- 36. The proposed transport network and frontage upgrades are able to be well integrated with the existing and planned road network in the vicinity of the site.
- 37. The proposal is generally consistent with the transport related objectives and policies of the Operative District Plan. It also achieves the extension of a Primary Road through the site to the future District Park as indicated on the Rolleston Structure Plan.
- 38. Overall, I consider the proposed rezoning to be appropriate from a transport perspective.