BEFORE THE HEARING PANEL

UNDER	the Resource Management Act
	1991
IN THE MATTER	of submissions and further submissions on Upper Hutt District Council Plan Change 49- Variation 1 to the Operative District Plan Silverstream Spur.
Submitter	GUILDFORD TIMBER COMPANY LTD (Submitter 82, Further Submitter 12).

SUMMARY OF THE STATEMENT OF EVIDENCE OF PHILLIP READ INSTRUCTURE, SERVICES, ROADING & HAZARDS ON BEHALF OF GUILDFORD TIMBER COMPANY LTD

Dated: 28 November 2023

Solicitor Acting: Luke Walker Mallett Partners Level 12 City Chambers 142 Featherston Street, PO Box 10341 Wellington Tel: (04) 472 0022 Email:luke.walker@mallett.co.nz Counsel Acting: PD Tancock Harbour Chambers Level 1, 5 Cable Street PO Box 10-242 Wellington Tel: (04) 499 2684 Email: phernne.tancock@legalchambers .co.nz This is a summary of my written evidence dated 17 November 2023 which is taken to have been read in full.

1.0 Qualifications and Expertise

1.1 My name is Phil Read. I am the Manager of the Land Development Team at Awa Environmental Limited. I confirm that I have the qualifications set out in my evidence in chief and agree to comply with the Environment Code of Practice for expert witnesses.

2.0 Scope of Evidence

- 2.1 My statement of evidence focuses on the infrastructure required for the Southern Growth Area (SGA), as shown in Figure 1 of my evidence, which is provided for as part of variation 1.
- 2.2 The Silverstream Spur Infrastructure is provided for in Variation 1 in a new policy to the Natural Open Spaces Chapter, NOSZ-P6.
- 2.3 The effects of any development of the SGA are managed in accordance with a second new policy, NOSZ-P7, which seeks to protect identified areas of significant indigenous vegetation from adverse effects from development.'

3.0 Infrastructure requirements for the SGA

3.1 The SGA is generally elevated well above the existing residential and rural areas of Silverstream and Pinehaven, and are difficult to access from the existing roading infrastructure due to the steep topography. The SGA also has limited options for reasonable legal access to any public roadway. Some legal access options are possible (i.e., off Wyndham Road) but again topography and the narrow access leg widths make road access to the SGA via these access points difficult or unsuitable. For a development area of this size, several access points would be needed.

- 3.2 The Silverstream Spur provides various alignment opportunities to gain access to the SGA from an existing public road (despite its elevation and topography), in a location where traffic onto the roading network can be better managed and topography is conducive to the construction of a road and supporting infrastructure.
- 3.3 The Spur provides a vital connector route between the SGA, Pinehaven and Silverstream and allows direct connection of services into Council's existing infrastructure networks.
- 3.4 The Spur provides the best option for road access and infrastructure services for future development of the SGA. Council has sought to plan for this corridor via plan Change 49 Variation 1.
- 3.5 The infrastructure needed to service the SGA are recognised in the new proposed rule NOSZ-R15 for road and associated network utility infrastructure, including storage tanks or reservoirs on the Silverstream Spur Natural Area. This provides for infrastructure as a controlled activity where standards as outlined in NOSZ-S4 are met.
- 3.6 I have reviewed these standards and confirm that in my professional opinion, infrastructure can be designed to meet those standards on the Spur.

4.0 Roading and Development of Road Corridor

- 4.1 In terms of roading there are a number of possibilities to access the SGA via the Silverstream Spur. One option for accessing the SGA via the Spur was previously designed by Envelope for the joint application with UHCC to the Infrastructure Accelerator Funding Application in 2022 refer Figure 2 in my evidence. I was not involved in that design, which was done at a time that residential development of the Spur was being proposed. That design was intended to allow for housing that is no longer proposed.
- 4.2 The Envelope design is just one possible roading option to access the site but is a good example showing that it is feasible and achievable to develop roading on the Spur and that there are design

solutions that would meet the proposed standards. As noted by some submitters, other options to access the Spur site exist via the paper road and/or Reynolds Batch Drive. The feasibility of these are yet to be worked through, and would be assessed in more detail and the associated effects assessed as part of a detailed design stage, and would need to go through a resource consent process.

4.3 In my opinion, the standards under NOSZ- S4 can be met by multiple alignment options, and potentially via alternative access locations to the Spur. Specifically, as shown in the Envelope design, a 1:8 maximum gradient can be achieved through earthworks, alignment selection, and by a lowering of the Spur height slightly in some locations (if required).

5.0 Stormwater

- 5.1 A conceptual stormwater management design was previously prepared by Envelope for the possible Spur road corridor showing how this could occur. The design again was one example to demonstrate a possible option to manage stormwater, which utilises GTC land at Kiln Street. This is one of many different schemes that could be designed to meet the requirements.
- 5.2 Natural runoff from the existing natural gullies would be passed beneath the road accessway via appropriately sized culverts.
- 5.3 I am confident that options exist to enable stormwater and runoff design to be managed onsite, to remain hydrologically neutral and to ensure that any effects could be avoided, remedied or mitigated.

6.0 Network utility infrastructure – services

6.1 Water, wastewater (sewer), power and communication network services would be laid within the proposed road corridor across the Spur and connect into the extended networks at Kiln Street. Constraints for such systems exist (topography, water courses, and soil permeability) and will dictate the development scheme as part of future processes.

7.0 Storage tanks or reservoirs

- 7.1 A new water reservoir is likely to be required to service the SGA. This infrastructure is referred to in the proposed provisions.
- 7.2 Water demand reduction measures are envisaged by way of individual Lot rainwater harvesting tanks. This will reduce the demand on Council's supply network, and in turn assist with a reduction to stormwater discharge.

8.0 Earthworks

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- 8.1 Earthworks will be required to develop infrastructure. These can be designed to reduce any adverse effects and conditions imposed at resource consent stage to manage effects during construction. This is standard practice with all earthworks. Earthworks are also subject to other consents in the district and regional plans.
- 8.2 Overall, in terms of earthworks and infrastructure within the Spur, I am confident that the new standards and rules provided will allow a framework to allow the necessary infrastructure to be provided while ensuring the effects of that roading and infrastructure are properly managed.

9.0 Issues Raised by Submitters

- 9.1 Several issues relating the road access and infrastructure across the Spur were raised by various submitters. I responded to these more fully in my evidence but will now briefly note and respond to these.
 - In relation to a design of the Spur Road not being provided to Council, my understanding is that this is a plan change process and not a resource consent process, and simply

seeks to provide a pathway for a particular design to be developed and go through a consent process in the future.

- Notwithstanding this, a previous design by Envelope was provided, but related to an earlier scheme that contained housing that will no longer be feasible. There are various other design options depending upon the nature and final form of the development proposed and access corridor chosen which are not likely to be at that scale.
- (ii) In relation to the point that "a gradient no steeper than 1:8 will require a long windy road with a lot of earthworks that will impact the Natural Open Space and Significant Natural Areas."
 - I noted that the minimum road length of 880m would require some meandering and cut/fill earthworks, however this is typical of access roads in the Wellington region, and that:
 - A less direct alignment facilitates better public access to a greater portion of the Silverstream Spur for recreational use.
- (iii) In relation to: "Increased (stormwater) runoff from the road impacting surrounding properties".
 - Any increase in runoff from a road up through the Spur can be mitigated by appropriate measures to provide hydraulic neutrality. Flood modelling can also be undertaken to confirm that any effects are less than minor during a 1 in 100-year storm event.
 - It should be noted that the scenario where stormwater is managed in conjunction with development of the Spur, this will provide better control of runoff and debris associated with forestry operations, preventing blockage of downstream infrastructure and the resulting flood risk this poses.
- (iv) In relation to *The Silverstream Spur not being critical to* enable access to the Southern Growth Area, (and that) there are ample alternative options for access"

- As previously mentioned, the SGA has limited legal access to any public roadway, it is in a sense landlocked. Some legal access options are possible but again topography and the narrow access leg widths make road access to the SGA via these access points difficult.
- The Silverstream Spur provides various access point and alignment opportunities to gain access from an existing public road despite its elevation and topography and can be better accommodated by the traffic network in those locations. GTC is currently investigating those.
- However, flexibility is what Council (and GTC) recommend as part of Variation 1, to ensure that the wide range of engineering aspects, protection of indigenous vegetation, and effects on Council's wider infrastructure are all able to be well considered.
- In short, road access and infrastructure services for future development of the SGA would be best achievable via the Silverstream Spur.

(v) In relation to stability of the Spur from a geotechnical perspective:

- The 2020 district wide assessment by Coffey's for the proposed plan change 47 assessed the site as having a 'High Slope Risk (refer **Figure 4** in my evidence).
- Coffey noted that areas having a high slope risk will require a specific geotechnical assessment.
- This is a typical approach for most developments in the Wellington region.

10.0 Conclusion

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10.1 In my expert opinion, I support the recommendation that Plan Change 49 Variation 1 provides for a public road and infrastructure corridor to service development of the future Southern Growth Area SGA), with the amendments sought in the evidence of Dr Keesing and Mr Hall.

- 10.2 The most practical and constructable (engineering wise) access to the SGA is via the Council owned Spur, via either Kiln Street or Reynolds Bach Drive. A suitable alignment is able to be constructed at a maximum gradient of 1:8. Stormwater effects will be able to be adequately mitigated and managed to ensure hydraulic neutrality is achieved and impacts on the downstream properties of future development are less than minor.
- 10.3 There are a number of access points and alignments over the Spur site which can be engineered to meet the proposed policies (NOSZ-P6, P7), rules (NOSZ-R15 1 and 2) and standards (NZOA-S4).
- 10.4 New water supply and wastewater extensions to Council's network are feasible and will be required to service the SGA. An associated new water reservoir will have a positive effect on Council's resilience of supply.

Phil Read

Phillip Read
Dated 27 November 2023