BEFORE THE HEARINGS PANEL

IN THE MATTER

of the Resource Management Act 1991

AND

IN THE MATTER

of the Proposed District Plan for Waimakariri District

HEARING STREAM 12E: REZONING - WOODEND

SUMMARY STATEMENT OF EVIDENCE OF JAMES MATTHEW PHELPS HOPKINS (CIVIL SERVICES)

ON BEHALF OF

RAINER AND URSULA HACK (SUBMITTER #201)

15 AUGUST 2024

1. INTRODUCTION

- 1.1 My name is James Matthew Phelps Hopkins. I have previously provided a statement of evidence (dated 5 March 2024) regarding civil services matters relating to the Submitter's request for the rezoning of their site at 110 Parsonage Road, Woodend.
- 1.2 As per the Hearing Panel's instruction, I have prepared this summary statement of evidence to provide an overview of my position, as outlined in my statement of evidence.
- 1.3 I confirm that this summary statement of evidence has been prepared in accordance with the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023.

2. SUMMARY OF EVIDENCE IN CHIEF

- 2.1 Matters addressed in my evidence dated 5 March 2024 included wastewater disposal, stormwater management, flooding, water supply and roading/access.
- 2.2 I understand that this hearing relates to General Residential Zones and Medium Density Residential Zone (MRZ), my previous evidence in chief applies equally to any potential zone that could be applied to the site.

Stormwater Management

- 2.3 Stormwater Management requires stormwater quantity mitigation and stormwater quality control for the site.
- 2.4 The site is underlain with silts which will make stormwater discharge to ground impractical.
- 2.5 The site currently drains via overland flow to the roadside drain in Parsonage Road, which in turn discharges to the McIntosh Drain.
- 2.6 The site will require stormwater attenuation to ensure that the peak discharge to the McIntosh Drain is not increased.
- 2.7 It is proposed that stormwater attenuation is provided via "dry" stormwater pond(s), which typically fully drain within 48 hours of cessation of rain. Modelling shows that a pond with a volume of 636 m³, depth of 1.3m, a top area of 1,100 m² and with an orifice of 190mm is capable of attenuating the

flows from the whole site (i.e. both residential zone and LLRZ) for events up to and including 2% AEP.

- 2.8 The above solution can accommodate the whole site assuming a net yield of up to 32 lots.
- 2.9 Stormwater quality from hardstand areas is proposed to be managed by low impact design solutions, such as rain gardens and swales. These will typically be located close to the source, i.e. beside the road or ROW.
- 2.10 Stormwater discharge quality can easily be managed via modern best practice engineering design including low impact design solutions, for example rain gardens and swales.

Flooding

- 2.1 The site is not subject to area wide flooding in ECan 1:200 flood modelling results.
- 2.2 Standard minor cut to fill operations associated with creating the stormwater management area, roads and allotments, combined with minimum floor levels 400 mm above the road would mitigate flooding risks.

Wastewater Disposal

- 2.3 The site can be served by the existing wastewater pump station located approximately 200 m to the west, on Parsonage Road.
- 2.4 Connection to the pump station for the residential zone is practicable via an extension of the existing gravity network that drains to the pump station.
- 2.5 The estimated wastewater flows from the entire site are:

ADWF = 0.25 L/s

Max Flow = 2.5 L/s

2.6 Given the extremely low flows relative to the existing pump station capacity. The need for an upgrade to the pump capacity at the pump station is unlikely. Waimakariri District Council officers indicated that there is currently enough spare capacity in the pump station to service the proposed 32 lots.

Water Supply

- 2.7 There is no existing reticulated water at the road frontage of the site, but the existing water network could easily be extended approximately 450 m from the existing DN180 PE water main at the corner of McQuillan Avenue.
- 2.8 Extending this water main using DN180 PE pipe would delivered the required flows for residential potable demand and fire fighting requirements with acceptable pressure losses per metre of pipe length.

Roading and access

- 2.9 Parsonage Road carriageway adjacent to the south of the site would need to be upgraded for approximately 130 m to the same standard as the recent upgrade for the adjacent subdivision (McQuillans Rd). The standard of the upgrade can be expected to be the same as the recently upgraded section of road to the west.
- 2.10 A new internal road and associated ROW's would be required to serve the residential zone land
- 2.11 These upgrades can easily be detailed at subdivision consent/engineering design stage.

3. CONCLUSIONS

- 3.1 I confirm my statements made in my original evidence dated 5 March 2024 apply to the potential residential zoning of the site and the site can be adequately serviced by standard best engineering practice solutions for water, wastewater, stormwater, flooding and roading/access.
- 3.2 Overall, I am able to support the requested rezoning to Residential from a civil services perspective.

JAMES HOPKINS

15 August 2024