

BEFORE THE CENTRAL OTAGO DISTRICT COUNCIL

IN THE MATTER Plan Change 19 to the Operative
Central Otago District Plan

**STATEMENT OF EVIDENCE OF CAMPBELL RONALD HILLS
ON BEHALF OF
CAIRINE HEATHER MACLEOD (#135)
SUBDIVISION AND INFRASTRUCTURE**

16 May 2023

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1. EXECUTIVE SUMMARY¹

- 1.1 With reference to the rationale provided in my evidence, it is my opinion that the proposed re-zoning of **the Site** (being part of Section 57 Block I Bannockburn SD) requested by **the Submitter** (Cairine MacLeod) is appropriate from a subdivision and infrastructure perspective.
- 1.2 The proposed re-zoning is expected to facilitate in the vicinity of 18 residential allotments located immediately adjacent to the southern boundary of Section 52 Block I Bannockburn SD, which is also owned by the Submitter and which is already zoned Large Lot Residential; with assessed potential for 25-30 allotments that would inevitably precede any subdivision of the proposal Site.
- 1.3 The Submitter has made it clear that she does want to secure the requested residential zoning through the PC19 process, as in her view this forms a logical connection of the existing adjoining residential areas and provides some certainty with respect to longer term site use (and therefore shorter term investment).
- 1.4 The Council Bannockburn water network is in close proximity to the proposed re-zoning site, with existing mains immediately adjacent in Hall Road, Lynn Lane and Miners Terrace. As such, there are considered to be multiple water connection options available for servicing the site, including the ability to loop new mains through the site.
- 1.5 The site has multiple connection options to existing gravity wastewater mains and manholes, with one main that cuts through the Submitter's site immediately to the north, and another in Lynn Lane to the east. Based on the site topography, and the existing pattern of gravity wastewater flow in the immediate vicinity, there are not expected to be any issues with provision of future development wastewater services connections
- 1.6 With specific reference to this re-zoning proposal, Ms Muir's Section 42A Report on 'Water and wastewater servicing matters' notes:
"This could be serviced for water after 2026 after the main Bannockburn pipeline is upgraded.

¹ My executive summary can be also taken as the optional summary statement which may accompany briefs of evidence as directed in Minutes 1 and 3 by the Hearings Panel.

This could be serviced for wastewater after 2029 after nitrogen removal and increased treatment capacity has been constructed.”²

- 1.7** These timeframes are not considered to detrimentally alter the ability for the site to be re-zoned as part of the current PC19 process. This is particularly considered to be the case given that:
- (a) the Submitter has immediately adjacent land (to the north) that has existing residential zoning, and this would logically be developed first, with an estimated timeframe through to title issuing of at least three years;
 - (b) the achievable yield from the requested re-zoning is so small that it is not considered to place noticeable demand on Council in terms of necessary upgrades; and
 - (c) the calculated water demand and wastewater flow from the theoretical fully developed site is relatively minor (with average daily water demand of 27 cubic metres and average daily dry weather wastewater flow of 13.5 cubic metres).

² Ms Muir, Section 42A Report [table on page 9, under paragraph 49]

2. INTRODUCTION

- 2.1 My name is Campbell Ronald Hills. I am a Licensed Cadastral Surveyor and Director of C Hughes & Associates Limited, and I specialise in the design, consenting, construction administration/supervision, surveying, and general project management associated with residential and rural subdivision development.
- 2.2 I have been engaged by Cairine Heather MacLeod (**Submitter 135**) to provide subdivision and infrastructure evidence in relation to the re-zoning submission for her 97 Hall Road Bannockburn property, under Plan Change 19 (**PC19**) to the operative Central Otago District Plan (**District Plan**).
- 2.3 I hold a Bachelor of Surveying (Hons) degree from the University of Otago. I am a Voting Member of Survey and Spatial New Zealand (S+SNZ) and a member of the Consulting Surveyors division of S+SNZ.
- 2.1 I have been practising as a land surveyor and subdivision development consultant since I began working for C Hughes and Associates in 2014. Prior to this I worked in a similar role for a large multi-disciplinary land development and management company in Australia, following my graduation from the University of Otago in 2012.
- 2.2 During the course of my career at C Hughes in Associates (based in Cromwell), I have been heavily involved in various aspects of residential and rural subdivision in the Central Otago and Queenstown Lakes districts, including:
- (a) initial subdivision potential investigations and feasibility assessments;
 - (b) conceptual and detailed designs of subdivision layouts;
 - (c) preparation of resource consents for subdivision and associated land use;
 - (d) detailed designs of subdivision infrastructure, including three waters and roading/access;
 - (e) administration and supervision of subdivision construction projects;
 - (f) surveys for set-out and as-built of subdivision infrastructure and title boundaries;

- (g) project management throughout full subdivision processes, from initial investigations through to issue of new titles and defects liability, including regular collaboration with other consultants.

Code of conduct for expert witnesses

- 2.1 While this is not an Environment Court hearing, I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023, and that I agree to comply with it. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise.

Summary of relief sought relevant to this evidence

- 2.2 The primary relief sought (**the proposal**) in the original submission is detailed again below for completeness:
 - (a) That the land legally described as Section 57 Block I Bannockburn SD is rezoned in part from Rural Resource Area to Large Lot Residential, as shown in Figure 1 below (and on the plan that was attached as Appendix A to the original submission). The area sought to be rezoned is approximately 3.5ha.
 - (b) That the entire land area of Section 52 Block I Bannockburn SD zoned by PC 19 as Large Lot Residential, and that portion of Section 57 Block I Bannockburn SD which is requested to be rezoned, has a minimum allotment size for residential activity/residential density of 1200m² and average allotment size of 1500m².
 - (c) That the properties at 50 Domain Road and 24 Terrace Street, zoned by PC19 as Large Lot residential, have a minimum allotment size for residential activity/residential density of 1200m² and average allotment size of 1500m².
 - (d) That rules LLRZ-S1 and SUB-S1 are amended so that the residential density and subdivision site standards in the Large Lot Residential Zone at Bannockburn are 1200m² minimum and 1500m² average.
- 2.3 The proposal is depicted on the plan that was attached as Appendix A to the original submission, and also as depicted on Figure 1 below (with

reference to the existing Central Otago District Council (Council) Operative District Plan zoning).

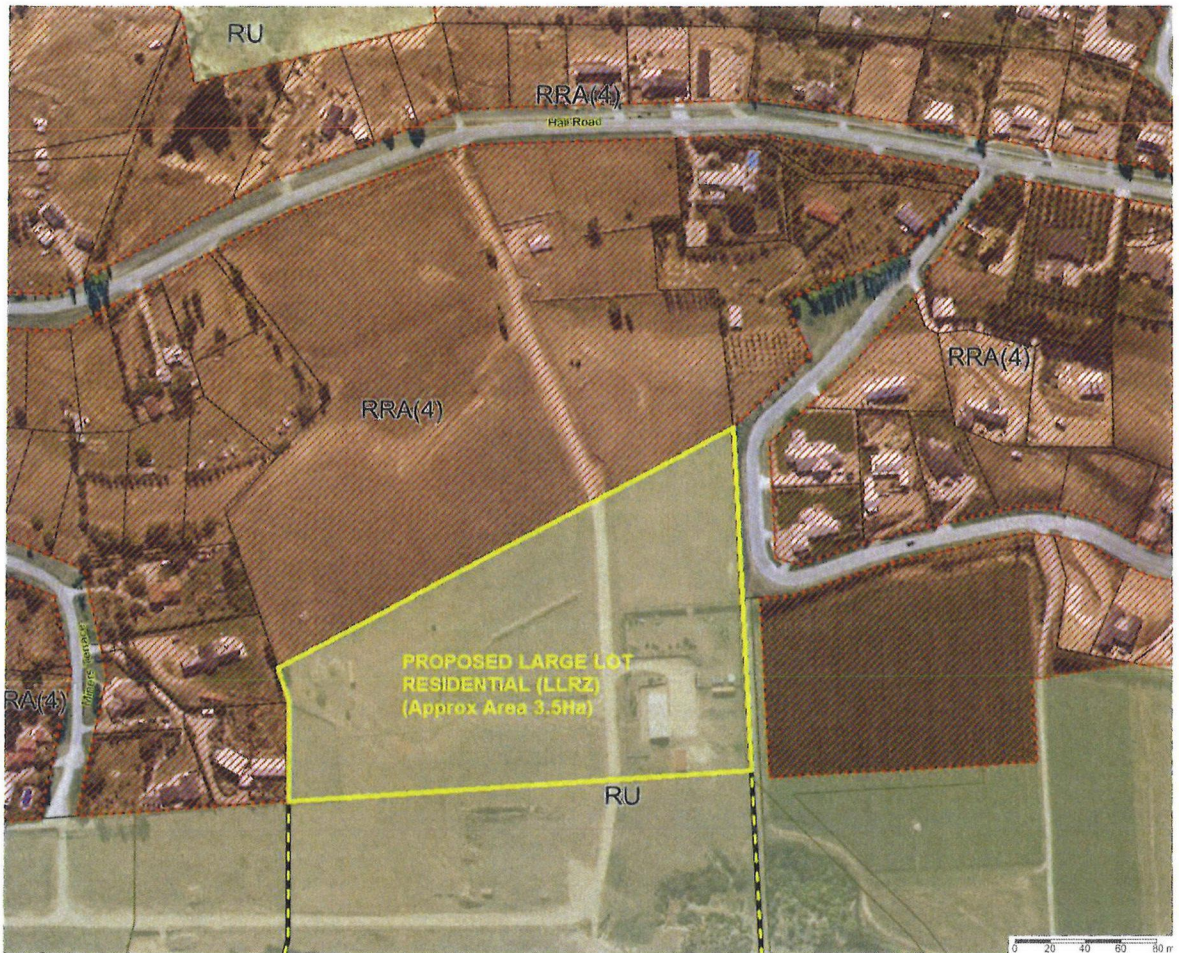


Figure 1: Proposed LLRZ re-zoning for area enclosed in yellow, being approximately 3.5 hectares and currently zoned Rural Resource Area under the Operative District Plan, with adjoining RRA(4) zoning

3. SCOPE OF EVIDENCE

3.1 My evidence addresses the following matters:

- (a) Consideration of achievable subdivision development and timeframes.
- (b) Consideration of potential water demand and wastewater flows associated with the proposed re-zoning.
- (c) A description of the existing water and wastewater services in the vicinity of the site.

- (d) Discussion of the relevant key matters raised in the Council Section 42A Reports, being:
 - (i) Water and wastewater servicing/capacity
 - (ii) Bannockburn Township Boundary

3.2 In preparing this evidence, I have read and considered the following documents:

- (a) The Plan Change 19 documentation including the notified text and zone maps;
- (b) The Cromwell Spatial Plan;
- (c) The Council Stage 1 Section 42A report on the Plan Change 19 text, prepared by Ms Liz White;
- (d) The Council Stage 2 Section 42A report on the Plan Change 19 zoning, prepared by Ms Liz White;
- (e) The Council Stage 2 Section 42A report on water and wastewater servicing matters, prepared by Ms Julie Muir
- (f) The submission documents lodged on behalf of the Submitter
- (g) The letter from Checketts McKay Law with respect to Water & Reverse Sensitivity
- (h) The draft evidence prepared by Mr Craig Barr for the Stage 2 hearing of Submission #135

4. ACHIEVABLE SUBDIVISION DEVELOPMENT AND TIMEFRAMES

4.1 Based on initial subdivision concept consideration, the proposed re-zoning of a portion of Section 57 Block I Bannockburn SD is expected to facilitate somewhere in the vicinity of 18 residential allotments. This is in addition to the estimated 25-30 residential allotments that might first be developed over Section 52 Block I Bannockburn SD, which is already zoned residential; being RRA(4) under the Operative District Plan.

4.2 The Submitter does want to secure the requested residential zoning at the present time, as this forms a logical connection between, and boundary to, the existing/adjacent residential areas, and it provides some certainty with respect to longer term site use (and therefore shorter term investment).

5. POTENTIAL WATER DEMAND AND WASTEWATER FLOWS

- 5.1** For the purpose of calculating water and wastewater servicing demands, I have used the following values.
- 5.2** The domestic water demand requirements for the full development as per the re-zoning proposal are determined as follows (in accordance with Section 6.11.5 of the Council Addendum to NZS 4404:2004):
- (a) Based on a daily consumption of 500 litres per person per day;
 - (b) with a peak day factor of 3;
 - (c) a peak hour factor of 5;
 - (d) and an average number of people per residential unit of 3;
 - (e) The average daily demand calculates at 27 cubic metres, being approximately 0.31 litres per second;
 - (f) The peak daily demand calculates at 81 cubic metres;
 - (g) Peak instantaneous demand calculates at 4.7 litres per second.
- 5.3** The wastewater demand requirements for the full development as per the re-zoning proposal are determined as follows (in accordance with Section 5.3.5.1 of NZS 4404:2004):
- (a) Based on an average daily dry weather flow of 250 litres per person per day;
 - (b) with a dry weather peak day factor of 2.5;
 - (c) a wet weather peak factor of 2;
 - (d) and an average number of people per residential unit of 3;
 - (e) The average daily dry weather flow calculates at 13.5 cubic metres, being 0.16 litres per second;
 - (f) The peak daily dry weather flow calculates at 33.75 cubic metres, being 0.39 litres per second;
 - (g) The peak daily wet weather flow calculates at 67.5 cubic metres, being 0.78 litres per second.

6. EXISTING WATER AND WASTEWATER SERVICES

Water Services

- 6.1** The Council Bannockburn water network is in close proximity to the proposed re-zoning site, with existing mains immediately adjacent in Hall

Road, Lynn Lane and Miners Terrace; and with the latter main extending through the Submitter's 36 Miners Terrace property to service Quartzville Road and Jocelyn Road. As such, there are considered to be multiple water connection options available for servicing the site, including the ability to loop new mains through the site.

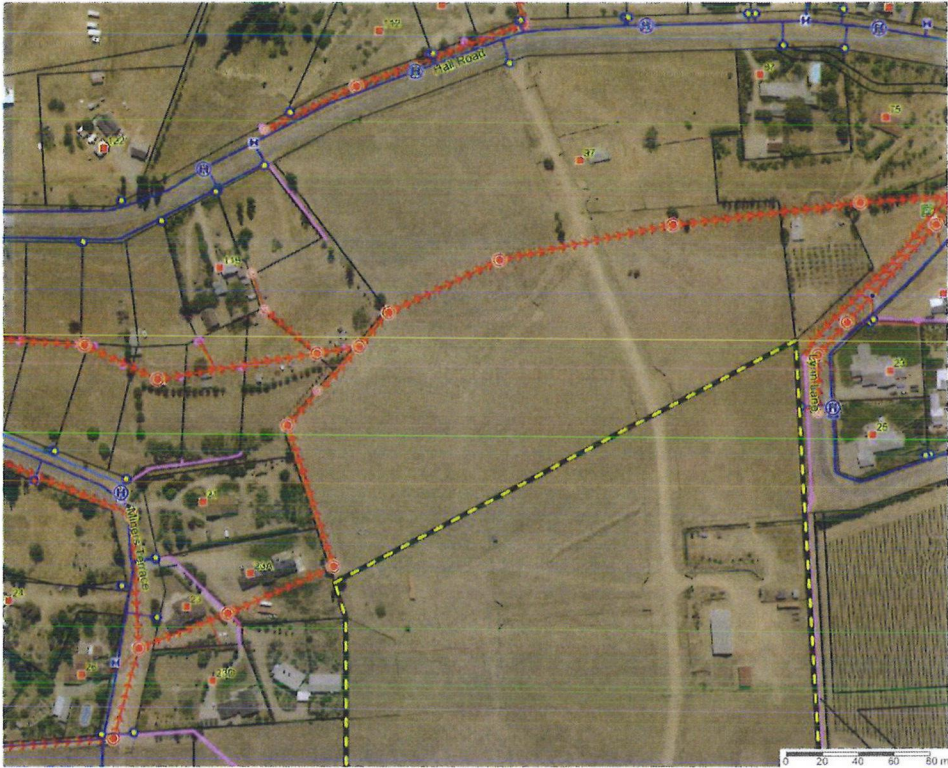


Figure 2: CODC GIS Image (Showing relevant water and wastewater services in the vicinity of the site)

Wastewater Services

6.2 The site has multiple connection options to existing gravity wastewater mains and manholes, with one main that cuts through the Submitter's site (Section 52 Block 1 Bannockburn SD) immediately to the north, and another in Lynn Lane to the east (both as shown in Figure 2 above). Based on the site topography, and the existing pattern of gravity wastewater flow in the immediate vicinity, there are not expected to be any issues with provision of future development wastewater services connections.

7. MATTERS RAISED IN THE S42A REPORT

- 7.1 Having reviewed the Stage 2 Section 42A Reports of Ms Liz White (planning) and Ms Muir (water and wastewater servicing), I consider the key issues raised which require further evaluation are:
- (a) Water and wastewater servicing/capacity
 - (b) Bannockburn Town Boundary

Water and wastewater Servicing/Capacity

- 7.2 General water and wastewater servicing/capacity issues have been identified and noted by Ms Muir in her Stage 2 Section 42A Report, typically applying as wider network constraints and limiting the potential for re-zoning of areas *“requesting increased densities or areas at the extents of the networks”*.⁴
- 7.3 With specific reference to this re-zoning proposal, Ms Muir notes:
*“This could be serviced for water after 2026 after the main Bannockburn pipeline is upgraded.
This could be serviced for wastewater after 2029 after nitrogen removal and increased treatment capacity has been constructed.”*⁵
- 7.4 The timeframes that Ms Muir has noted in relation to the site are not considered to detrimentally alter the ability for the site to be re-zoned as part of the current PC19 process. This is particularly considered to be the case given that:
- (a) The submitter has immediately adjacent land (to the north) that has existing residential zoning, and this would logically be developed first, with an estimated timeframe through to title issuing of at least three years;
 - (b) the achievable yield from the requested re-zoning is so small that it is not considered to place noticeable demand on Council in terms of necessary upgrades; and
 - (c) the calculated water demand and wastewater flow from the theoretical subdivision of the site is relatively minor (with average daily water demand of 27 cubic metres and average daily dry weather wastewater flow of 13.5 cubic metres).

⁴ Ms Muir, Section 42A Report [paragraph 49]

⁵ Ms Muir, Section 42A Report [table on page 9, under paragraph 49]

R Hill

Campbell Hills

16 May 2023