

**BEFORE INDEPENDENT HEARING COMMISSIONERS APPOINTED BY THE
CENTRAL OTAGO DISTRICT COUNCIL**

IN THE MATTER OF

The Resource Management Act 1991 (**RMA** or
the Act)

AND

IN THE MATTER OF

Of the Central Otago Operative District Plan
(**CODP**) and Proposed Plan Change 19 to the
Central Otago District Plan (**PC19**)

AND

IN THE MATTER OF

Applications to the Central Otago District
Council (**CODC**) by **D. J Jones Family Trust**
and N.R Searell Family Trust for subdivision
and land use resource consents for residential
subdivision and development at 88 Terrace
Street, Bannockburn (**RC230398**)

**EVIDENCE OF DAVID GARETH WARD.
ON BEHALF OF D. J JONES FAMILY TRUST AND N.R SEARELL FAMILY TRUST**

Dated: 27 September 2024

Presented for filing by:
Chris Fowler
PO Box 18, Christchurch
T 021 311 784
chris.fowler@saunders.co.nz

INTRODUCTION

- 1 My name is David Gareth Ward.
- 2 I hold a MSC in Land and Water Resource Management and am a Certified Environmental Practitioner. I have 15 years of environmental consultancy experience in New Zealand and Overseas.
- 3 I am currently and have been employed for four years as a Senior Environmental Consultant with ENGE0 Ltd.
- 4 During my career I have undertaken Erosion and Sediment Control Planning and Preliminary and Detailed Site Contamination Investigations for sites in New Zealand and overseas. These contamination investigations have included both brown and greenfield sites with varied end uses including subdivisions, accommodation complexes, residential lots, industrial facilities, schools and recreation facilities.
- 5 My role in relation to the application for resource consent (**Application**) to the Central Otago District Council (**CODC**) by D. J Jones Family Trust and N.R Searell Family Trust (**Trust** or **Applicant**), is as an independent expert witness to the Trust on contaminated land matters.
- 6 The Application was publicly notified and a number of submissions were received in support of, and in opposition to the Application. On 20 September 2024 the CODC released an Officer Report prepared under section 42A of the RMA containing an analysis of the Application and a recommendation in response to the Application (**Officer Report**).
- 7 Although this is not an Environment Court proceeding I have read the Environment Court's Code of Conduct and agree to comply with it. My qualifications as an expert are set out above. The matters addressed in my evidence are within my area of expertise, however where I make statements on issues that are not in my area of expertise, I will state whose evidence I have relied upon. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in my evidence.

SCOPE OF EVIDENCE

- 8 In my evidence I address the following issues:
- (a) The findings of the ENGEO (2021) Combined Preliminary and Detailed Site Assessment for the site.
 - (b) Those submissions in opposition that address matters within scope of my expertise, with particular emphasis on matters where there is a difference of view between myself and the submitter; and
 - (c) Those parts of the Officer Report that address matters within scope of my expertise, with particular emphasis on matters where there is a difference of view between myself and the Officer Report.

CONTEXT

- 9 The Trust has applied for a subdivision and land use resource consent for a residential subdivision comprising residential 20 lots, including the construction of an internal access road and rights of way, recreation reserve and balance lots (**Proposal**) at 88 Terrace Street, Bannockburn, legally referred to as Lot 4 DP339137 (**Site**).
- 10 The Site is 17.6 ha in area and is accessed from the eastern extent of Terrace Street and is characterised as a large undeveloped residential zone allotment located at the edge of the existing Bannockburn township. The site is bounded by Shepherd's creek to the east, Revell's Gully to the north, undeveloped residential land to the west and existing residential land generally to the south. The Site is currently bare, vacant land.
- 11 The Site is zoned Residential Resource Area (4) (**RRA(4)**) in the CODP and is partially within a building line restriction overlay (**BLR**) identified on the CODP maps. A restricted discretionary activity resource consent is required under the CODP for subdivision in the RRA(4) zone and to locate buildings within the BLR.

SUMMARY OF MY INITIAL ASSESSMENT

- 12 I have earlier prepared a contaminated land assessment (Combined Preliminary and Detailed Site investigation) for the Proposal which was included in the Application¹. A copy of my earlier assessment is appended to my evidence at **Appendix A**. In this section I will provide a brief summary of my assessment.
- 13 The site has been used as agricultural land and also has a history of gold mining from the early 1860's and nearby coalmining through to the 1930's. Although the site is associated with historic mining there is no evidence of active mining on the proposed development site itself. The historic water race channels on the site are believed to have carried water used in sluicing areas such as the "Pennyweight Sluicings" at the north-western edge of the site. These water races and sluicing operations are unlikely to have required the use of contaminative materials.
- 14 A site walkover was completed and did not identify visible signs of contamination. From the information collected during the desktop review and the site walkover the following activity included on the Hazardous Activities and Industry List (HAIL) (MfE 2021) has been identified:
- E7: Mining industries (excluding gravel extraction) including exposure of faces or release of groundwater containing hazardous contaminants, or the storage of hazardous wastes including waste dumps or dam tailings.
- 15 Ten soil samples were taken and sent to Hill Laboratories for analysis for the identified contaminants of concern associated with historic gold mining activities; heavy metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc). The sample locations are considered representative of the site, areas where redevelopment workers would come into contact with the material and would also be representative of soils to be disposed of off-site if required.
- 16 No exceedances of the NESCS Recreational, Residential or Commercial / Industrial guideline criteria were identified on-site.

¹ Appendix [x] to the Original Application for a resource consent
Evidence of David Gareth Ward on Behalf of D. J Jones Family Trust and N. R Searell Family Trust
dated 27 September 2024

- 17 The results from one sample was marginally above the expected regional background levels for Arsenic. In sample WRH-ENG21-ENV11 Arsenic was identified at 20 mg/kg against a background level of 12.06 mg/kg. However, as the average in the samples is below the background levels the soils at the site can be considered cleanfill. This should be confirmed with the landfill operator before excavation.
- 18 As the average concentrations of the samples across the site are below expected background levels, I consider that it is highly unlikely there is a risk to human health and the concentrations identified are suitable for the proposed end use. As such I consider that the NESCS does not apply to this site.
- 19 The conclusions and recommendations of this report are limited to the areas / depths of soil sampled. Therefore, there is the potential for unidentified hot spots of contamination to exist at the site. A site management plan (SMP) should be prepared to outline procedures to identify and mitigate exposure to unidentified contamination, if encountered during the redevelopment works.

RESPONSE TO SUBMISSIONS

- 20 Some submissions are opposed to the Application. A range of reasons are given for their opposition, some of which relate to my area of expertise.
- 21 A small number of submitters² requested that an erosion and sediment control plan should be secured by conditions of the consent to manage the effects of development.
- 22 An Erosion and Sediment Control Plan (**ESCP**) will be prepared by a suitably qualified and experienced person and submitted by the developer to Planning and Regulatory Services Manager at CODC for certification.
- 23 One submitter³ requested that an Environment Management Plan be prepared to provide reporting on silt and dust controls during construction.

² Matters raised by submitters Timothy James (06), Bannockburn Responsible Development Incorporated (10), Ka Runaka (31)

³ Submitter Timothy James (06), page 5

- 24 An Environmental Management Plan (**EMP**) will be prepared by a suitably qualified and experienced person and submitted by the developer to Planning and Regulatory Services Manager at CODC for certification.

RESPONSE TO OFFICER REPORT

- 25 The Officer Report recommends acceptance of the Application. A range of reasons are given for their recommendation, some of which relate to my area of expertise.

- 26 At Appendix 1, the Officer report sets out draft conditions of consent. Condition 4(f) states that:

Prior to the commencement of works occurring on site approved by this subdivision consent, the consent holder must:

(f) Prepare an Erosion, Dust and Sediment Control Plan. The Plan must be prepared by a suitably qualified and experienced person and must be submitted to the Planning and Regulatory Services Manager at resource.consent@codc.govt.nz for certification.

- 27 I agree with this condition and note that, as set out above, an Erosion and Sediment Control Plan will be prepared by a suitably qualified and experienced person and submitted by the developer to Planning and Regulatory Services Manager at CODC for certification.

CONCLUSION

- 28 ENGEO undertook a Combined Preliminary and Detailed Site Investigation (PSI/DSI) of the site in 2021. The PSI identified a HAIL activity E7: Mining Industries as having occurred at the site.
- 29 Ten soil samples were taken and analysed for heavy metals, the contaminant of concern associated with historic gold mining activities. No exceedances of the NESCS Recreational, Residential or Commercial / Industrial guideline criteria were identified on-site.
- 30 One sample was marginally above the expected regional background levels for Arsenic. However, as the average concentrations of the samples across the site are below expected background levels, I consider that it is highly unlikely

there is a risk to human health and the concentrations identified are suitable for the proposed end use.

31 As such I consider that the NES does not apply to this site.

32 A summary of my evidence is provided above.

33 Thank you for the opportunity to present my evidence.

D. Gareth Ward
27 September 2024