

In the Environment Court of New Zealand
Christchurch Registry

I Mua I Te Kōti Taiao o Aotearoa
Ōtautahi Rohe

ENV-2018-CHC-290

Under	the Resource Management Act 1991 (RMA)
In the matter of	an appeal under clause 14(1) of the First Schedule of the RMA in relation to the proposed Second Generation Dunedin City District Plan (2GP)
Between	Otago Regional Council Appellant
And	Dunedin City Council Respondent

Affidavit of Paul James Freeland

Affirmed 22 December 2022

Respondent's solicitors:

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**anderson
lloyd.**

I, **Paul James Freeland** of Dunedin, Principal Policy Advisor, hereby solemnly and sincerely affirm:

- 1 I am a Principal Policy Advisor at Dunedin City Council.
- 2 I have been employed by Dunedin City Council (**DCC**) for over 20 years in a range of planning positions ranging from Consents Planner to acting Policy Manager. I have primarily worked as a Senior Planner through the 2GP process and undertaken public consultation, s32 assessment, drafting, s42A report preparation and presentation, and appeal resolution.
- 3 I have a Masters in Regional and Resource Planning (with Distinction) from the University of Otago.
- 4 I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2014. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Introduction

- 5 This affidavit relates to an appeal by the Otago Regional Council (**ORC**) (DCC reference number 94) that sought to remove the North Taieri (Gordon Road) Spillway from the Hazard 1 (Flood) Overlay Zone and include it in the Hazard 1A (Flood) Overlay Zone, so that natural hazard sensitive activities are prohibited in this area.
- 6 It is my understanding that the main issue the ORC seeks to address through this change is the risk to new natural hazard sensitive activities establishing in the spillway area. This is because the spillway is a designed and engineered flowpath for flood waters and the depth and velocity of flood flows through the spillway area may mean that additional natural hazard sensitive activities are not appropriate.
- 7 This affidavit is in support of a joint request pursuant to section 293 of the RMA to resolve the ORC appeal (DCC Reference number 94) by consulting with the registered landowners and occupiers located within the North Taieri (Gordon Road) Spillway as affected persons and including some or all of the North Taieri (Gordon Road) Spillway in the Hazards 1A (Flood) Overlay Zone to the 2GP.



Background

Current Situation

- 8 The North Taieri (Gordon Road) Spillway area (attached at **Appendix A** to my affidavit) is part of the North Taieri floodways (Area 14B – *Flood hazard on the Taieri Plain (Otago Regional Council, 2015)*) and is zoned Taieri Plain – Rural Zone in the 2GP. The area is also subject to a Hazard 1 (flood) Overlay Zone and is within designation D217 (Otago Regional Council – Lower Taieri Flood Protection Scheme). The majority of the area is also under designation D274 (Dunedin International Airport – Take-off and Approach Fan, Transitional (side) Surface, Horizontal and Conical Surfaces - Airport Approach and Land Use Controls). The North Taieri (Gordon Road) Spillway area to the east of Riccarton Road is also within the 2GP groundwater protection mapped area. Dr Payan explains in his evidence (Gordon Road Spillway and Floodway section) how the North Taieri (Gordon Road) Spillway functions and how it operates as part of the North Taieri Flood Protection Scheme.
- 9 The North Taieri (Gordon Road) Spillway area (**Appendix A** map) is very flat with a slight gradient from the north-east falling to the south-west and includes approximately 327ha of privately-owned land. The Silverstream runs along the southern boundary of the area, with the western boundary being the cut-off stopbank, which is also the eastern boundary of the Upper Pond that is an area designed to fill when the Taieri River overflows. The northern and eastern boundaries of the spillway area are based on modelling and observed flood events on where floodwaters may get to in certain events. Riccarton Road West (including a bridge over the Silverstream to the South) and Dukes Road South provide direct routes to areas with a lower or no flood hazard risk.
- 10 There are 41 existing sites within the spillway area, of which 34 already have residential activity established on them. Of the seven sites without an established activity, four also include land outside the Hazard 1 (flood) Overlay Zone, where the consenting pathway is easier to establish a residential activity. The three remaining sites entirely within the North Taieri (Gordon Road) Spillway area consist of a site of 0.9950ha owned by the Airways Corporation of New Zealand Limited, a 6ha site at 349 Riccarton Road West which has previously been granted resource consent for a residential activity but the consent has now lapsed, and a 0.2663ha site with an existing farm building adjoining a larger site in common owner ownership, which already has an established residential activity on it.

2GP and Consultation

- 11 After considerable public consultation, including specific public consultation on the natural hazards topic with ORC staff, the 2GP was notified on 26 September 2015. The residents of the North Taieri (Gordon Road) spillway were specifically notified along with all other landowners living in proposed hazard overlay zones of the proposed changes to the Dunedin City District Plan. The notified 2GP did not include a prohibited activity status for natural hazard sensitive activities in areas of high risk, with the activity status being non-complying.
- 12 The landowners (**Appendix B**) had the opportunity to submit on the 2GP, but none of the North Taieri (Gordon Road) Spillway landowners made a submission. The decision on the 2GP introduced a prohibited activity status for new natural hazard sensitive activities in limited areas where floodwaters are intended to go and floodwaters are at a depth and/or velocity that results in a risk that is more than low.
- 13 ORC provided DCC with technical advice on natural hazards for the 2GP and continues to have the expertise within its organisation to provide the information about the location and characteristics of various natural hazards. At the time of notification of the 2GP, and making decisions on the 2GP, there was insufficient detailed information to justify a prohibited activity status for natural hazards sensitive activities in the North Taieri (Gordon Road) Spillway area.
- 14 In regards to the relevant 2GP provisions, Strategic Objective 2.2.1 (Risk from natural hazards) is as follows:

Objective 2.2.1

The risk to people, communities, and property from natural hazards, and from the potential effects of climate change on natural hazards, is no more than low.

- 15 Policy 2.2.1.3 states:

Policy 2.2.1.3

Identify areas with risk from terrestrial flooding, and include these as follows:

- a. in the Hazard 1A (flood) Overlay Zone, include areas that are part of a flood protection scheme which have a crucial role in the conveyance or storage of floodwater where there may be a high risk to people and property and of transference or exacerbation of risk elsewhere;

Two handwritten signatures in black ink are located at the bottom right of the page. The first signature is a stylized, cursive 'JL' or similar. The second signature is a more complex, cursive signature, possibly 'AF' or similar.

- b. in the Hazard 1 (flood) Overlay Zone, include areas that have a crucial role in the conveyance or storage of floodwater where there may be a high risk to people and property and of transference or exacerbation of risk elsewhere, but where prohibited activity status is not seen as appropriate;

c ...

16 Policy 2.2.1.6 states:

Policy 2.2.1.6

Manage the risk posed by natural hazards, so that it is no more than low, including through rules that:

- a. change the activity status of activities based on the sensitivity of the activity and the level of risk associated with an identified hazard overlay zone;
- b. use performance standards on permitted and restricted discretionary activities, wherever appropriate;
- c. provide for natural hazard mitigation activities where appropriate; and
- d. manage subdivision in a way that considers future land use and development.

17 Objective 11.2.1 states:

Objective 11.2.1

Land use and development is located and designed in a way that ensures that the risk from natural hazards, and from the potential effects of climate change on natural hazards, is no more than low, in the short to long term.

18 This objective is implemented through Policies 11.2.1.1 – 11.2.1.15.

19 Policy 11.2.1.1 requires that natural hazards sensitive activities and natural hazards potentially sensitive activities are avoided in the Hazard 1 (flood) Overlay Zone unless the risk from natural hazards is avoided or is no more than low, and the activity has a critical operational need to locate within the overlay zone and locating outside it is not practicable. This Policy is set out in full as follows:

In the Hazard 1 (flood) Overlay Zone, avoid natural hazards sensitive activities and natural hazards potentially sensitive activities unless:

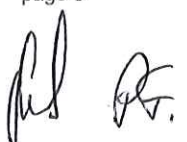
- a. the risk from natural hazards is avoided, or is no more than low; and

Handwritten signatures in black ink, appearing to be initials or names, located at the bottom right of the page.

- b. the activity has a critical operational need to locate within the Hazard 1 (flood) Overlay Zone and locating outside it is not practicable.
- 20 Policy 11.2.1.2 requires that natural hazards sensitive activities are avoided in the Hazard 1A (flood) overlay zone.
- 21 A natural hazards sensitive activity is defined in the 2GP as a land use activity *"where people are regularly present and often in a vulnerable state because they sleep there, require medical treatment, or require extra assistance to evacuate and/or which may create a significant public health issue if damaged as a result of a natural hazard event."* Natural hazards sensitive activities include residential activities, hospitals, schools, landfills and cemeteries.
- 22 The North Taieri (Gordon Road) Spillway area is mapped as a Hazard 1 (Flood) Overlay Zone meaning that natural hazards sensitive activities (as well as natural hazards potentially sensitive activities) are deemed non-complying activities. Changing the overlay over this area would mean that natural hazards sensitive activities become prohibited in this area.
- 23 The key rules for the Taieri Plain Rural Zone relevant to establishment of natural hazards sensitive activities in this area are: the minimum site size for a first residential activity is 25ha (Rule 16.5.2.1.g.i), and for a second residential activity is 80ha (Rule 16.5.2.1.g.ii). Family flats in association with each standard residential activity that meets the performance standard for density, are also permitted.
- 24 Rule 16.3.6.3 provides for up to 60m² of new ground floor area as additional development within any two calendar-year period on sites where existing natural hazards sensitive activities have been lawfully established as a restricted discretionary activity in Hazard 1A (Flood) and Hazard 1 (Flood) overlay zones (Consent Order, ENV-2018-CHC-290, DCC Reference number 65, dated 5 August 2021).
- 25 The minimum site size for subdivision of new sites in the Taieri Plain Rural Zone is 40ha.
- 26 Rule 16.3.6 of the notified 2GP applied a non-complying status for sensitive activities in the Hazard 1 Overlay Zone.

Submission and decision

- 27 ORC's submission on the 2GP sought that Rule 16.3.6 be amended so that sensitive activities are prohibited instead of non-complying in the Hazard 1 (Flood) Overlay Zone at several locations, including the North Taieri



(Gordon Road) Spillway. ORC considered that the characteristics of the flood hazard in the area (e.g., depth, duration, frequency, isolation of community) mean that additional sensitive development is not appropriate.

- 28 In response to a request from the Natural Hazards Hearings Panel (the Panel), ORC and DCC undertook joint conferencing on the Hazard 1 Overlay Zones, including in the area of the North Taieri (Gordon Road) Spillway. The Joint Expert Witnessing Conferencing Statement dated 19 October 2017 notes that the two parties disagreed over the activity status for sensitive activities in the North Taieri – Gordon Road Spillway Area 14B.
- 29 In an Expert Witnessing Conferencing Statement (19 October 2017) Council officers proposed a non-complying activity status for sensitive activities pending a potential future plan change, commenting that, *“while a prohibited activity status for sensitive activities may be appropriate for a sub-set of this area, for natural justice reasons we consider that imposing prohibited activity status now is unjust.”*¹ Due to the number of residents in the area, it was considered that a future plan change would be a more appropriate way of considering prohibited activity status. Further, Council noted that ORC was in the process of analysing data gathered from a 2017 flood event which would assist in determining a potential sub-set of the area where a prohibited activity status may be appropriate. ORC noted that the Gordon Rd spillway *“has a critical function in directing floodwaters”* and, because it is *“difficult to determine a sub-set of conveyance, as this can vary with the scale of a flooding event”*², sensitive activities in the area should be prohibited.
- 30 The Hearing Panel accepted ORC’s submission in part and included an amendment which created the new Hazard 1A (Flood) overlay zone, where new natural hazards sensitive activities are prohibited. However, the North Taieri (Gordon Road) Spillway area remained in the Hazard 1 (Flood) Overlay Zone. Although the Natural Hazards Decision Report does not explicitly state the reasons for not applying a Hazard 1A (Flood) Overlay Zone to the North Taieri (Gordon Road) Spillway area I assume that the Panel thought a potential future plan change was the appropriate response.

Notice of appeal

- 31 Otago Regional Council seeks the following relief in its notice of appeal:

¹ Expert Witness Conferencing Statement (ORC, DCC, 19 October 2017) – Para. 3.8.1

² Expert Witness Conferencing Statement (ORC, DCC, 19 October 2017) – Para. 3.8.3

- (a) Natural hazard sensitive activities are prohibited activities in part of area 14B, being the North Taieri (Gordon Road) floodway;
- (b) The rules and planning maps are amended to give effect to this relief; and
- (c) Such other, further and consequential changes to 2GP as are necessary to give effect to this appeal point.

Discussion

- 32 The difficulty in proposing a prohibited status for this area at the time of notification of the 2GP was that the area is already predominantly occupied by residential (natural hazards sensitive activities) buildings on undersized rural-zoned sites, the characteristics of the flood hazard including the extent depth and velocities were not well defined, and the community living in the area had not been consulted about the potential change of activity status.
- 33 It should be noted that community-specific consultation has been undertaken by ORC previously. The ORC has advised that in response to a significant flood in April 2006 it has conducted extensive investigations of engineering solutions to retrospectively attempt to reduce risk created by changes in land use (that is residential development in a flood prone area) rather than remedy any deficiency in the Lower Taieri Flood Protection Scheme. The options included the relocation of Silver Stream floodbanks and of the spillway. These were rejected due to cost. A less extensive option was also proposed (a single bund and swale within the North Taieri (Gordon Road) Spillway area to improve conveyance of floodwater and help contain overland flow). This proposal was included in the ORC 2012/2022 draft Long-Term Plan but was not adopted as submitters were concerned that the works would only have minor beneficial effect in a minor flood and would also increase the impact of a flood on those properties located between the Silver Stream flood bank and the proposed bund.
- 34 ORC has begun a review of the whole of the Lower Taieri Flood Protection Scheme. Initial meetings were held on the 19th and 20th of October 2021 to provide the community with information on the review, the work completed, and the work to be done. I understand that this consultation is ongoing.
- 35 Dr Payan (ORC Manager, Hazards) has recently produced a technical assessment of the extent, depth and velocities of floodwater flows in the North Taieri (Gordon Road) spillway area (Exhibit F(b), Figure 5 of Dr Payan's affidavit). The analysis uses the Australian Rainfall and Runoff guidelines to break the area into different hazard categories, with H1 (generally safe for people, vehicles and buildings) being the lowest risk



category, and H6 (unsafe for vehicles and people, and all building types considered vulnerable to failure) being the highest risk category (refer to Figure 4 to the affidavit of Dr Payan on behalf of ORC).

- 36 While I accept that a prohibited activity status for natural hazard sensitive activities in the majority of the North Taieri (Gordon Road) Spillway area is appropriate given the degree of risk, I consider that there may be areas in the North Taieri (Gordon Road) Spillway area where the floodwaters are neither deep enough or fast enough to warrant a prohibited activity status for natural hazard sensitive activities as the risk is low to moderate. I consider that community consultation will assist in determining which parts of the area should have a prohibited activity status for natural hazard sensitive activities.
- 37 As far as I am aware there have been no new houses built in the North Taieri (Gordon Road) spillway area since the 2GP was notified, and no reported injuries as a result of past flooding events. Post-mediation I have been informed by the ORC that several houses were damaged in the April 2006 flood with gip board and carpets having to be removed.
- 38 The Proposed Otago Regional Policy Statement 2022 (**pORPS**) HAZ-NH-M2 – Local authorities is as follows:

HAZ-NH-M2 – Local authorities

Local authorities must work collaboratively to:

1. assess the level of natural hazard risk in their region or district in accordance with HAZ-NH-P2 and APP6, including by:
 - (a) consulting with communities, stakeholders and partners (Kāi Tahu), including with local authorities in neighbouring regions regarding risk levels thresholds, and
 - (b) developing a Risk Table in accordance with Step 3 of APP6 at a district or community scale,
2. continue to undertake research on the identification of natural hazard risk and amend natural hazard registers, databases, regional plans and/or district plans as required,
3. investigate options for reducing the level of natural hazard risk within areas of existing development to a tolerable or lower level, including by managing existing use rights under Sections 10 and 20A of the RMA,



4. prepare or amend and maintain their regional plans or district plans to take into account the effects of climate change by:
 - (a) using the best relevant climate change data and projections 2115,
 - (b) taking a precautionary approach when assessing and managing the effects of climate change where there is scientific uncertainty and potentially significant or irreversible effects,
 - (c) providing for activities that assist to reduce or mitigate the effects of climate change, and
 - (d) encouraging system resilience.

39 The Risk Table for Step 3 of APP6 is as follows and has the following:

Note:

Table 1 – Risk table

Likelihood	Consequences				
	<i>Insignificant</i>	<i>Minor</i>	<i>Moderate</i>	<i>Major</i>	<i>Catastrophic</i>
<i>Almost certain</i>					
<i>Likely</i>					
<i>Possible</i>					
<i>Unlikely</i>					
<i>Rare</i>					
<i>Green, Acceptable Risk: Yellow, Tolerable Risk: Red, Significant Risk</i>					

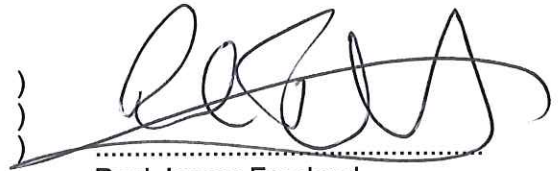
Notes:

Table 8 above has been included as a region-wide baseline. As set out in HAZ-NH-M2(1) local authorities are required to undertake a consultation process with communities, stakeholders and partners regarding risk levels thresholds and develop a risk table at a district or community scale. This region-wide baseline is to be used in the absence of a district or community scale risk table being developed.

- 40 HAZ-NH-M2 1(a) and Step 3 of APP6 of the pORPS both require consultation with the community of interest. I consider that this would best be achieved by undertaking a Plan Change that provides the affected community with the recent technical information provided by Dr Payan, together with an explanation of the ramifications of what a prohibited activity status would mean for landowners.

41 I support the Court directing consultation under section 293 of the RMA or the North Taieri (Gordon Road) Spillway area being included in a Variation to the 2GP promoting a Hazard 1A (Flood) Overlay Zone over part or all of the appeal area.

Affirmed at Dunedin
this 22nd day of December 2022,
before me:



Paul James Freeland


.....
A Solicitor/~~Deputy Registrar~~ of the High Court of New Zealand
~~Justice of the Peace~~

SHONA MICHELLE SQUIRES
SOLICITOR
DUNEDIN

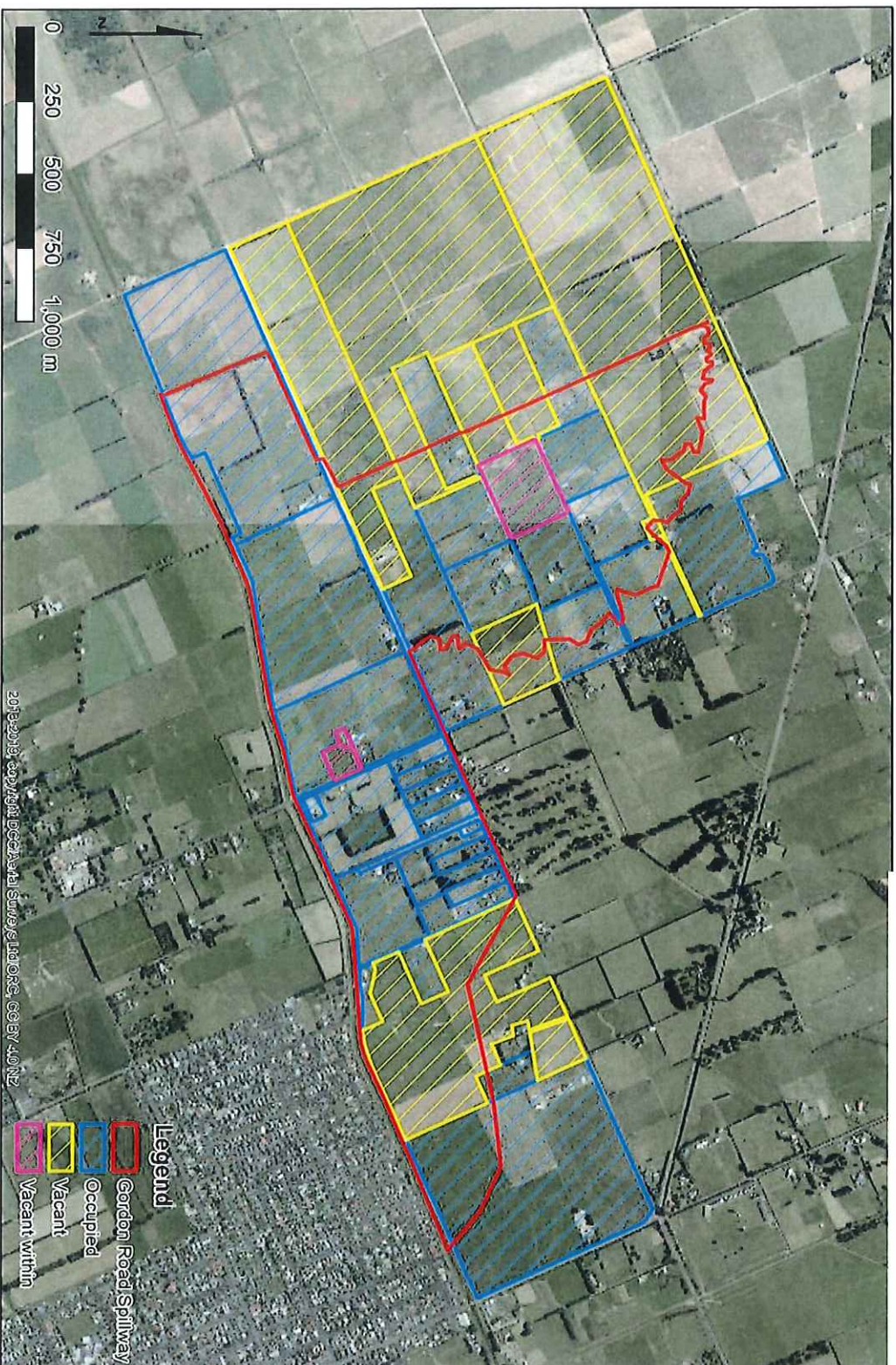
Appendix A - North Taieri (Gordon Road) Spillway area

EXHIBIT NOTE

This is the annexure marked "A" referred to in the within affidavit of Paul James Freeland and ~~sworn~~/affirmed at Dunedin this 22nd day of December 2022 before me:

Signature: 
A Solicitor of The High Court of New Zealand
(Solicitor to sign part on Exhibit)

SHONA MICHELLE SQUIRES
SOLICITOR
DUNEDIN



Appendix B – Landowners within the North Taieri (Gordon Road) Spillway area

Property Address	Owners
69 Dukes Road Sth Taieri	Darren Stanley Palmer and Melanie Rae Palmer
101 Dukes Road Sth Taieri	James Robert Reid and Jillian Moirene Reid
113 Dukes Road Sth Taieri	Geoffrey Philip Thompson and Jenny-Lee Burt and O N D Trustees Limited
115 Dukes Road Sth Taieri	Jonathan Francis Rout and Bernadette Maria Rout
117 Dukes Road Sth Taieri	Jennifer Ann Quelch and Richard Aidan Quelch and Kam Niak Trustee Company Limited
127 Dukes Road Sth Taieri	John William McLaren and Ronda Margaret Owens and Albert Alloo and Sons Trustee Company Limited
133 Dukes Road Sth Taieri	Abraham Oskam and Dini Jeanette Irene Oskam
137 Dukes Road Sth Taieri	Craig Andrew Struthers and Julie Struthers
145 Dukes Road Sth Taieri	Allan John Ross
147 Dukes Road Sth Taieri	Raymond Alexander Wilson and Janice Heather Wilson and Downie Stewart Trustee Limited
149 Dukes Road Sth Taieri	Garth Alexander Thomson and Christine Ann Oliver
155 Dukes Road Sth Taieri	Brian Alister Bennett and Jill Anna Bennett
161 Dukes Road Sth Taieri	Jason Alan Breen and Lisa Jane Breen
169 Dukes Road Sth Taieri	Margaret Eileen Pollitt and Terence Vincent Pollitt
209 Dukes Road Sth Taieri	Pamela Joan Bain
269 Dukes Road Sth Taieri	Philipp Daniel Haas and Preston Russell Trustees (No 3) Limited

EXHIBIT NOTE

This is the annexure marked "B" referred to in the within affidavit of Paul James Freeland and sworn/affirmed at Dunedin this 22nd day of December 2022 before me:

SHONA MICHELLE SQUIRES
SOLICITOR
DUNEDIN

Signature: 
A Solicitor of The High Court of New Zealand
(Solicitor to sign part on Exhibit)

Property Address				Owners
270 Dukes Road Sth Taieri				Henderson Hunter Cook and Fiona Daphne Cook and G C A Legal Trustee 2012 Limited and Others.
257 Gordon Road Mosgiel				Total Harvesting Limited
234	Riccarton	Road	West Mosgiel	Earthworx Limited
245	Riccarton	Road	West Mosgiel	Airways Corporation of New Zealand Limited
248	Riccarton	Road	West Mosgiel	Ivan Walter Glass and Belinda Christine Elizabeth Glass
255	Riccarton	Road	West Mosgiel	Belinda Jane Horne and Franklin Ferguson Horne and Carey John Weaver
264	Riccarton	Road	West Mosgiel	Mark Kerry Jenkins and Rebekah Marie Jenkins
293	Riccarton	Road	West Mosgiel	Alice Frances Sinclair
323	Riccarton	Road	West Mosgiel	Shayne William King and Andrina Irene King
325	Riccarton	Road	West Mosgiel	Andrew Clive Maydon and Sarah Rachael Maydon
327	Riccarton	Road	West Mosgiel	Stephen Robert Watkins and Nicola Jane Grant
331	Riccarton	Road	West Mosgiel	Kristen Leigh Slocombe and Lee Ann McGuirk
345	Riccarton	Road	West Mosgiel	Andrew James Stout

Property Address				Owners
347	Riccarton	Road	West Mosgiel	Rey Graham Murphie and Katherine Murphie
349	Riccarton	Road	West Mosgiel	Gilbert Noel Black and Judith Isobel Black and Samuel Richard Crush
351	Riccarton	Road	West Mosgiel	Black Kestrel Trustees Limited
353	Riccarton	Road	West Mosgiel	Bronwyn Anne Miles and Laurence William Ashworth
355	Riccarton	Road	West Mosgiel	Barry Patrick Dougherty and Cindy Jane Davies and Anthony Samuel Davies and Janet Heather Davies
357	Riccarton	Road	West Mosgiel	Samuel George Smith and Freya Margaret Smith and Cook Allan Gibson Trustee Company Limited
359	Riccarton	Road	West Mosgiel	Eric Patrick Johnston and Moyra Jane Johnston and Practice Management Trustee Limited
371	Riccarton	Road	West Mosgiel	Gail Carol Heenan and Arthur McNicoll Heenan
383	Riccarton	Road	West Mosgiel	Southern Light Farms Limited
389	Riccarton	Road	West Mosgiel	Nicola Jayne Brown and Timothy Robert Brown
413	Riccarton	Road	West Mosgiel	Gary John Reed and Lorraine Elizabeth Anne Reed

