

15 February 2019

The Greater Christchurch Partnership Committee

By Email: Tina.VonPein@GreaterChristchurch.org.nz

## Attention: Tina Von Pein

Dear Tina

## G & J MCVICAR - SUBMISSION 056

We act for Mr and Mrs McVicar who lodged a submission on the draft Our Space 2018 – 2048 Greater Christchurch Settlement Pattern Update.

Mr and Mrs McVicar have been allocated a 20 minute slot at 2.20pm on Monday 25 February 2019 in order to speak to their submission.

Mr and Mrs McVicar do not wish to speak to their submission but do wish their submission to be fully considered by the committee.

Mr and Mrs McVicar request that the Settlement Update accommodate a rezoning of the upper portion of lots 10 to 15 on Worsleys Road, Christchurch to Residential Large Lot for approximately 75 meters for each lot from the top of the Worsleys Road boundary. Such a rezoning would be consistent with the current zone for the upper portion of lots 1 to 9 and the relatively large Resident Large Lot zone on the southern side of Worsleys Road.

We **enclose** for the committees' information:

- 1. Statement of Evidence of Graeme McVicar for the proposed Christchurch City Plan hearing;
- 2. Statement of Evidence Malcolm Smith for the proposed Christchurch City Plan hearing;

The committee will note that it is not economic to develop the lots unless each lot can accommodate two residential dwellings.

The hearings panel for the proposed Christchurch City Plan was constrained by the urban boundary Map A in chapter 6 of the CRPS and rezoned each lot to Urban Rural Fringe which only allows one residential dwelling per lot. Yours faithfully HARMANS

Brian Burke

Partner

Email: brian.burke@harmans.co.nz

BRB-204587-36-1001-V1

### BEFORE THE CHRISTCHURCH REPLACEMENT DISTRICT PLAN INDEPENDENT HEARINGS PANEL

IN THE MATTER

of the Resource Management Act 1991 and the Canterbury Earthquake (Christchurch Replacement District Plan) Order 2014

AND

IN THE MATTER

of the Residential Stage 2 Proposal

## STATEMENT OF EVIDENCE OF GRAEME ALAN MCVICAR IN SUPPORT OF SUBMISSION OF G A & J Y MCVICAR (Submission no. 2362)

Dated: 27 August 2015

### Harmans Lawyers

PO Box 5496, Christchurch 8542 DX WP24506 Telephone: (03) 352 2293, Facsimile: (03) 352 2274 Solicitor: B R D Burke Counsel: B R D Burke

Brian.burke@harmans.co.nz

## STATEMENT OF EVIDENCE OF GRAEME ALAN MCVICAR IN SUPPORT OF SUBMISSION OF G A & J Y MCVICAR

## **GRAEME ALAN MCVICAR** states:

- 1. My wife Joy Yvonne McVicar and I jointly own Lot 12 Deposited Plan 26575, Worsleys Road, Christchurch. We have filed a submission seeking that Lots 10, 11, 12, 13, 14 and 15 Worsleys Road, Christchurch on DP 26575 shown on Planning Map 50 to be rezoned from Rural Port Hills to Rural Residential Large Lot. In the alternative we have filed submitted that the lots be rezoned to a residential zone which permits the erection of at least one residential dwelling on each lot. However, we have since been advised that it would not be economical to limit each lot to one residential dwelling on due to the infrastructure costs involved. Our submission is at attachment 1.
- 2. I understand Deposited Plan 26575 was a historical 15 lot subdivision granted by the Heathcote County Council in 1963. A copy of the Deposited Plan appears in our submission. Lots 1 to 9 have been zoned Residential Large Lot in the Christchurch Replacement District Plan. Lots 10 to 15 have been zoned Rural Port Hills. A copy of Planning Map 50 with Lots 10 to 15 identified by number appears in our submission.
- 3. Joy and I purchased Lot 12 in 1979. At the time it was poor quality farmland and was subsequently planted in pines.
- 4. I understand that in 1995 submissions were made seeking a rezoning of Lots 1 to 9 and a large area on the south side of Worsleys Road to Living Hills B. At the time we did not lodge a submission seeking the same zoning for our Lot. As far as I am aware no one submitted that there be a Living Hills B zone for Lots 10 – 15.
- 5. I believe that Christchurch City Council thought that Lots 11 to 15 were part of the forestry estate of McVicar Holdings Limited. I do not believe that in 1995 the Council gave any consideration to the

appropriate zone for Lots 11 to 15 for these reasons. It appears that the Council has carried over the same zoning into the Christchurch Replacement District Plan.

- 6. Each of Lots 10 to 15 are individually owned. Attachment B is a copy of the titles for each of Lots 10 to 15.
- 7. I understand that the owners of Lot 10 Mr and Mrs Poultney, have made their own submission an I do not make this statement on their behalf. I have authority to speak for the owners of Lots 11 to 15 I will provide the panel with their written approval prior to the hearing. Lot 11 is owned by the estate of my late nephew, Gary Neil McVicar. Gary passed away in 2014. Lot 13 is owned by the beneficiaries of the estate of my late brother, Neil McVicar. Neil passed away in 2013. A third share of Lot 13 is owned by Gary's estate, a third share by my niece June Leeming and a third share by my niece Marilynn McVicar.
- Lot 14 is owned by the beneficiaries of the estate of Douglas
  Wildbore. Mr Wildbore used to be a director of McVicar Timber
  Limited. Lot 15 is owned by the trustees of the Commonage Trust.
- 9. Although all of the original owners of Lots 11 to 15 used to have some association with McVicar Holdings Ltd that is no longer the case. Ownership has become fragmented as the Lots pass to the beneficiaries of the estates of the original owners.
- 10. The majority of the pines on Lots 11 15 have recently been felled. The profit from the trees is less than the rates that have been paid by each of the owners over the last 35 years. The owners cannot build a dwelling on the lots. It is not economic to plant further trees on the Lots. Nor are the Lots suitable for farming. The current rateable value of each lot is approximately \$350,000. This would only be supported by allowing for the erection of residential dwellings on the lots.

- 11. I understand that McVicar Holdings Ltd which owns the land beyond Lot 15 has applied for and has been granted Resource Consent to establish an adventure park on its land. Its activities are completely separate from those of the 5 Lot owners. Going forward, Lots 11 to 15 will be surrounded by houses in the Residential Large Lot zone and will not fit in with the activities of McVicar Holdings Limited.
- 12. The owners of Lots 11 to 15 propose that the Residential Large Lot zone be extended to Lot 15 as it applies to Lots 1 to 9. I understand Mr and Mrs Poultney seek the same zoning for Lot 10. The owners of Lots 11 to 15 would be prepared to offer the balance of their land to Christchurch City Council at no cost or alternatively plant the balance in trees with a generous set back from the proposed residential lots.
- 13. If the Council is not prepared to allow for a zoning permitting two residential dwellings per lot the lot owners would like the Council to consider a zoning permitting at least one residential dwelling per lot although this would be less economical.
- 14. In my view if the zoning is not changed to allow for residential dwellings on the lots they will ultimately not be looked after and will possibly revert to scrub.

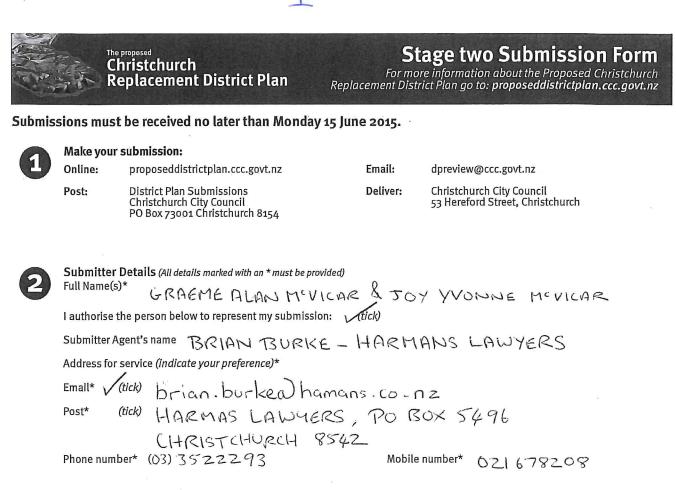
Dated: 27th August 2015

m im

G A McVicar

## Appendix

Attachment 1: Stage Two Submission Form	page 1
Attachment 2: titles for Lots 10 – 15	page 13



#### Privacy Act 1993

Submissions are public information. Information on this form including your name and contact details will be accessible to the public on the Independent Hearings Panel (IHP) or the Council websites and at Council service centres and libraries. The Council is required to make this information available under the provisions of the Canterbury Earthquake (Christchurch Replacement District Plan) Order 2014. Your contact details will only be used by the Council, IHP or IHP Secretariat for the purpose of the District Plan Review process (for example to contact you about hearings and decisions on your submission). The information will be held by the Council, IHP or IHP Secretariat. You have the right to access the information and request any correction.

3	<b>Trade Competition</b> (All details marked with an * must be provided) If you are a person who could gain an advantage in trade competition through making a submission, your right to make a submission may be limited by Clause 6(2) Schedule 1 of the Canterbury Earthquake (Christchurch Replacement District Plan)
	Order 2014. I could gain an advantage in trade competition through this submission.* Y VN If you answered Yes to the above statement please complete the following. I am directly affected by an effect of the proposal that -
	<ul><li>(a) adversely affects the environment; and</li><li>(b) does not relate to trade competition or the effects of trade competition</li><li>Y</li><li>N</li></ul>
4	Notes for Stage one Submitters Refer to submission form guidelines for notes to submitters who made submissions on Stage one. I made a submission on Stage one and Note 4 applies to my Stage one submission. Y
5	Hearing (All details marked with an * must be provided)      I wish to be heard in support of my submission.*      If you answered Yes to the above statement please complete the following:      If others make a similar submission, I will consider presenting a joint case with them at a hearing.      Y    N      Signature of submitter*    Date* 15 - 6 - 15
	Christehurch

**City Council** 

Please use the Stage two submission guidelines to assist you to complete this form.



The Specific Provision that your submission relates to is: (All details marked with an \* must be provided)Please identify the specific provision of the proposal that your submission point relates to by providing the proposal and<br/>clause number or planning map number e.g. Proposal 17 Provision 17.2.2.2 Controlled ActivitiesProposal number\*Provision number and name\*Map Number\*S O

My submission is:* I support I oppose	seek to have the above provision amended	(if applicable)
The decision I seek is that the Be retained Be de		fy your amended wording):
SEE ATTACHE	D SHEET 1	

Reasons for my submission:

SEE ATTACHED SHEET 2

FREEPOST Authority No.178

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District Plan Submissions Christchurch City Council PO Box 73001 Christchurch 8154



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## Attached Sheet 1

### Graeme and Joy McVicar

#### Specific Proposals to which this Submission Applies:

All of the Christchurch Replacement District Plan ("*the Replacement Plan*") but in particular, proposals 8, 14, 17 and planning Map 50.

#### Background

Graeme and Joy McVicar ("*the Submitters*") own a property on Worsleys Road, Christchurch, legally described as Lot 12, Deposited Plan 26575, Christchurch Registry, comprising approximately 4.2 hectares ("*the Site*"). A title search of the site appears as attachment 3.

Deposited Plan 26575 is a historical 15 lot subdivision granted by the Heathcote County Council in 1963. The Submitters have owned the site since 1979. A copy of Deposited Plan 26575 appears as attachment 4.

Lots 1 to 9 in Deposited Plan 26575 have been zoned Residential Large Lot (RLL) in the replacement plan. Lots 10 to 15 have been zoned Rural Port Hills (RuPH) in the replacement plan. A copy of Planning Map 50 with the lots identified by number appears as attachment 5.

#### **Relief Sought**

That Lots 10, 11, 12, 13, 14 and 15 on Worsleys Road, Christchurch legally described in Deposited Plan 26575 and shown on Planning Map 50 be re-zoned from RuPH (Rural Port Hills) to RLL (Residential Large Lot).

In the alternative, that Lots 10, 11, 12, 13, 14 and 15 on Worsleys Road, Christchurch legally described in deposited plan 26575 be re-zoned to a residential zone which permits the erection of a residential dwelling on each lot.

Any consequential, further and/or other amendments to the Replacement Plan in order to be consistent with the above submissions and to give effect to the intent of this submission.

## **Attached Sheet 2**

### Graeme and Joy McVicar

#### **Reasons for Relief Sought**

- 1. For the reasons outlined in Attachment 1;
- 2. The proposed RuPH zoning provides that the erection of a residential dwelling is a noncomplying activity. The lots cannot be economically be used for rural purposes;
- 3. A residential zoning as sought will allow for the owners to use the lots in the most appropriate and efficient way which will achieve the purposes of the Resource Management Act 1991 (the Act);
- 4. A residential zoning of the lots will fit in with the surrounding residential zoning;
- 5. The erection of residential dwellings on the lots will have minor or no adverse visual, traffic or other effects on the environment;
- The proposed zoning has not been properly assessed under section 32 of the Act. No or insufficient analysis have been carried out of the costs and benefits and appropriateness of the proposed zoning and of alternatives;
- 7. The relief sought will better give effect to the strategic directions and other objectives and policies of the Replacement Plan;
- 8. The proposed notified Replacement Plan provisions so far as they relate to the lots are inconsistent with and do not give effect to the Resource Management Act 1991, including Part 2 and Section 32, or other relevant statutory and non-statutory matters including the order and council.

# ATTACHED SHEET 3



## **COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952**

Search Copy

Identifier	<b>CB8F/904</b>
Land Registration District	Canterbury
Date Issued	28 February 1969

**Prior References** CB4B/1205

Estate	Fee Simple
Area	4.2618 hectares more or less
Legal Description	Lot 12 Deposited Plan 26575

**Proprietors** 

Graeme Alan McVicar as to a 1/2 share Joy Yvonne McVicar as to a 1/2 share

### Interests

484663 Transfer creating the following easements	s - 6.8.1958	
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Туре	Servient Tenement	<b>Easement</b> Area	<b>Dominant Tenement</b>	<b>Statutory Restriction</b>
Right of way	Lot 1 Deposited Plan	Blue DP 19089	Lot 12 Deposited Plan	
	19089 - CT CB763/34		26575 - herein	
Water	Lot 1 Deposited Plan	Part	Lot 12 Deposited Plan	
	19089 - CT CB763/34		26575 - herein	

760665 Easement Certificate specifying the following easements - Produced 19.3.1969 at 11.30am and entered 12.5.1969 at 9.00 am

Туре	Servient Tenement	<b>Easement Area</b>	<b>Dominant Tenement</b>	<b>Statutory Restriction</b>
Right of way	Lot 12 Deposited Plan	Yellow DP 26997	Part Lot 2 Deposited	
	26575 - herein		Plan 19221	
Right of way	Lot 12 Deposited Plan	Yellow DP 26997	Part Rural Section	
	26575 - herein		31362	
Water tank and	Lot 12 Deposited Plan	Herein	Lot 1 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 12 Deposited Plan	Herein	Lot 2 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 12 Deposited Plan	Herein	Lot 3 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 12 Deposited Plan	Herein	Lot 4 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 12 Deposited Plan	Herein	Lot 5 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 12 Deposited Plan	Herein	Lot 6 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 12 Deposited Plan	Herein	Lot 7 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 12 Deposited Plan	Herein	Lot 8 Deposited Plan	
pipe-line	26575 - herein		26575	
772087 Transfer cr	reating the following ease	ment - 31.7.1969 at 11	.50 am	
Туре	<b>Servient Tenement</b>	<b>Easement Area</b>	<b>Dominant Tenement</b>	<b>Statutory Restriction</b>



### Identifier

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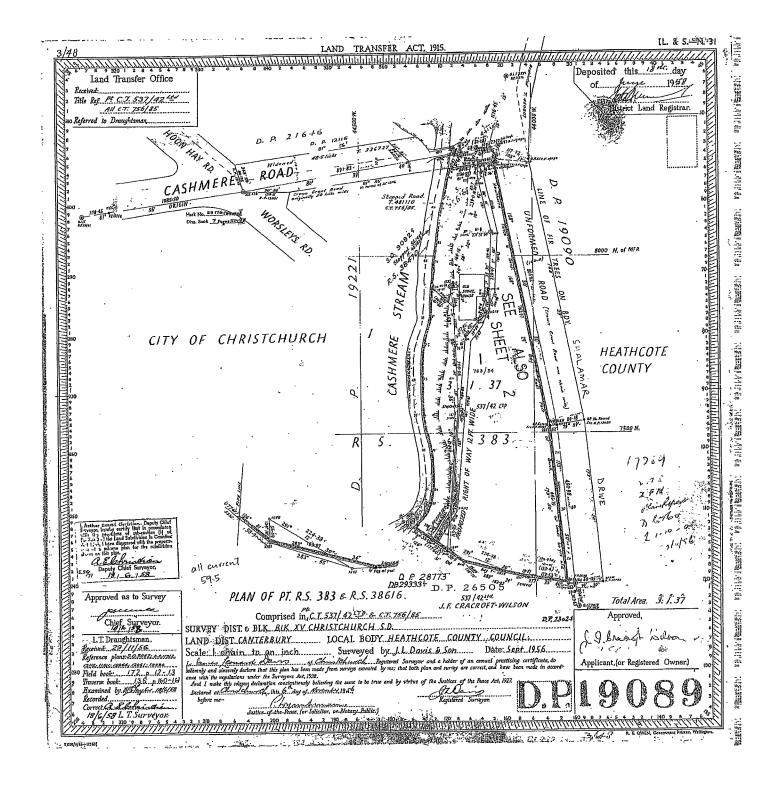
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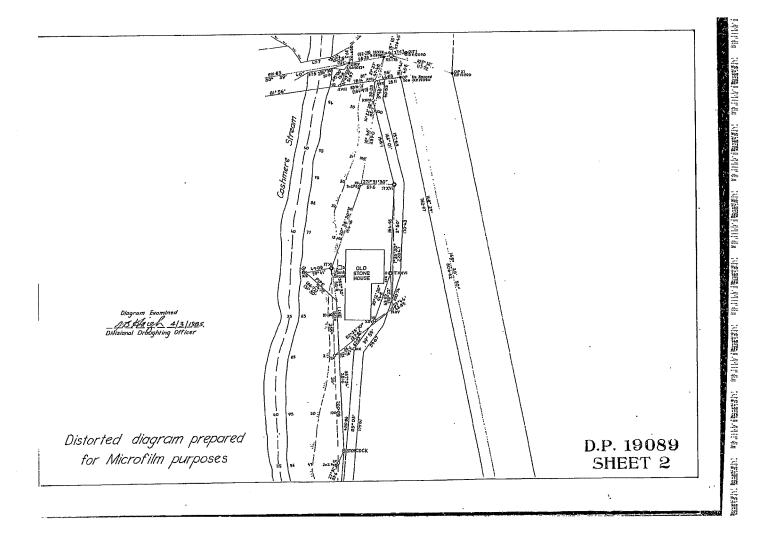
Water tank and pipe-line

**CB8F/904** 

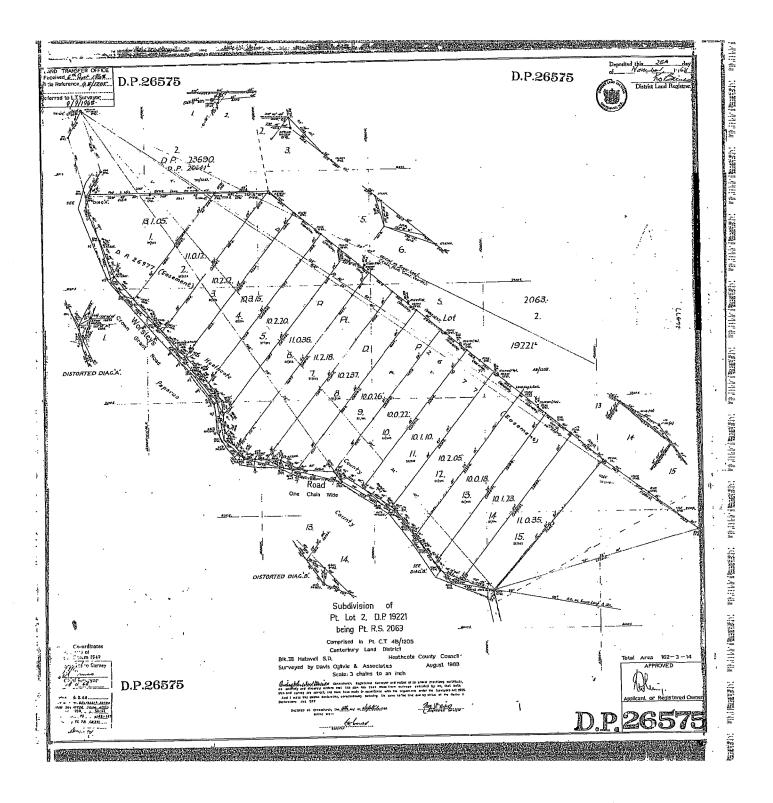
Lot 12 Deposited Plan Part herein 26575 - herein

Lot 9 Deposited Plan 26575 - CT CB8F/901

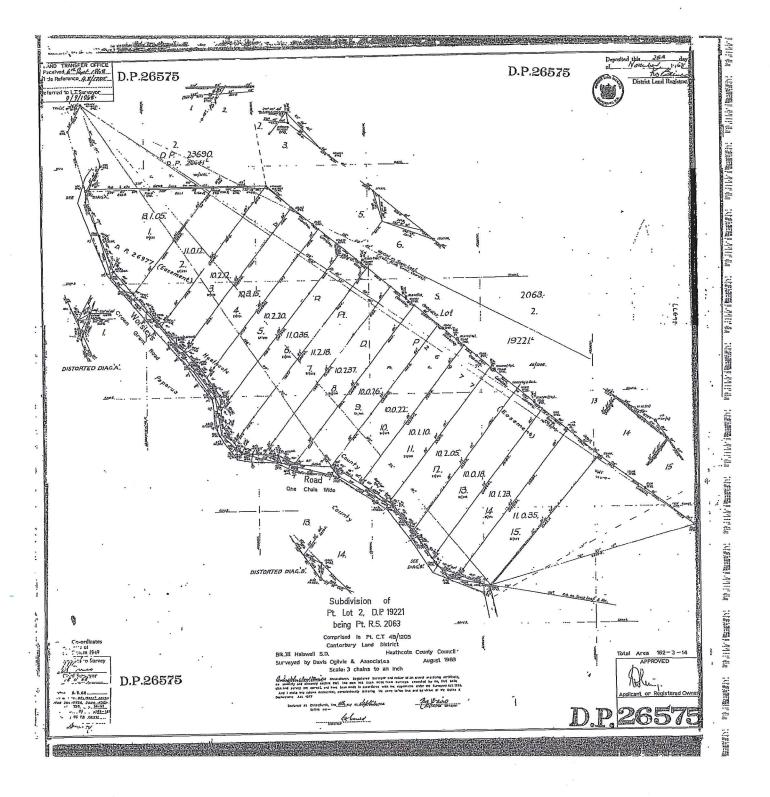




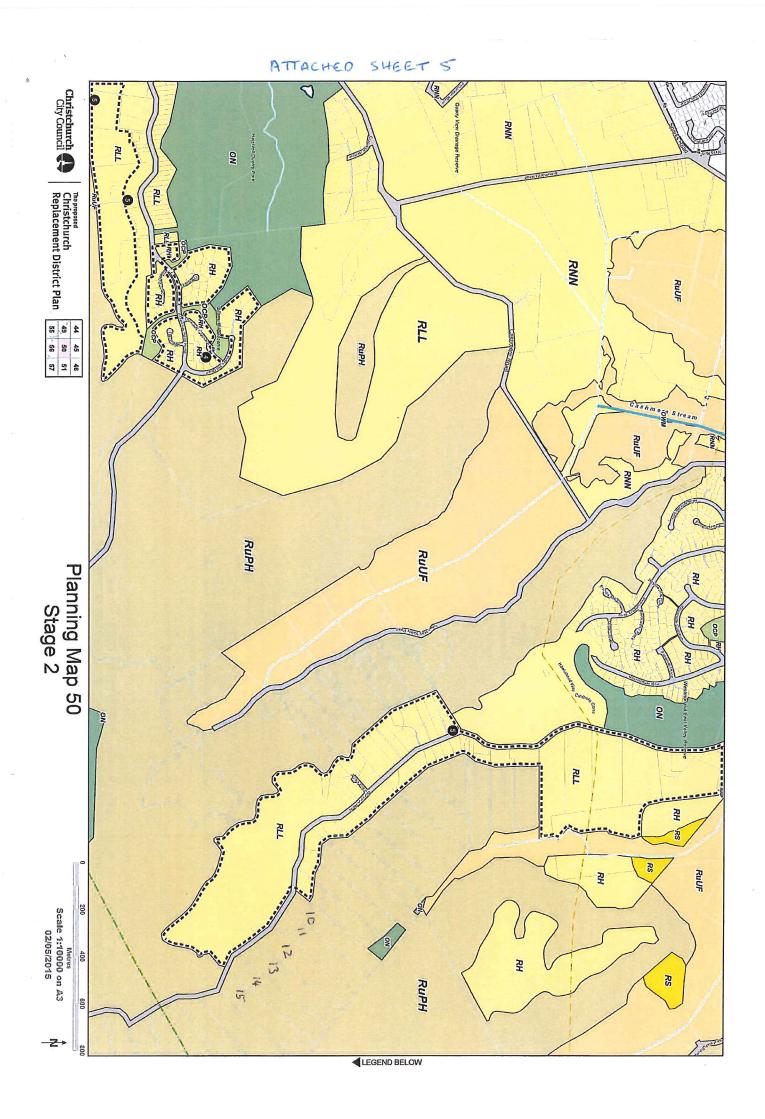
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ATTIACHED SHEET 4



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The District boundary is as defined in the Resource Management Act, which uses the definition from the Local Government Act. The line on these maps representing the District boundary is indicative and for information purposes only. The actual boundary is as defined in the legislation. Determining rights and obligations under the District Plan where the District boundary is relevant may require a formal survey. The cadastre and coastine shown on the planning maps is not part of the information in the biotistic Plan. It has been provided on the planning maps as an additional function to enhance navigability and search capability. District Plan I has been provided for overlays extending into the Coastal Marine Area. The Coastal Marine Area is as defined in the Resource Management Act. The cadestre was based on the most recent information held by the Council at the date the map was produced. Establishing compliance or otherwise with the plan may require a formal survey. Land Use Zones COR Ruw RUUF Ruph RuBP RuQ RSS RBP NO OCH RMC R Rural Urban Fringe **Residential Bach** Open Space Water and Margins Open Space Natural Open Space McLeans Island Open Space Metropolitan Facilities Open Space Community Parks Guest Accommodation Commercial Fringe Commercial Core Specific Purpose Wigram Specific Purpose Styx Mill Transfer Station Specific Purpose Hospital Rural Waimakariri **Rural Templeton Rural Quarry** Residential Suburban Residential New Neighbourhood Residential Banks Peninsula ndustrial Park ndustrial Office ndustrial Heavy ndustrial General Commercial Local Commercial Banks Peninsula Specific Purpose Tertiary Education Specific Purpose School Specific Purpose Golf Resort Specific Purpose Cemeteries Rural Port Hills Rural Banks Peninsula Residential Small Settlement Residential Suburban Density Transition Residential Large Lot **Residential Hills Residential Character** ransport over Open Space Water and Margins Zone and Waterways **lesidential Medium Density** apakainga ransport **Other Notations** .... やまましたる 6 0 0 0 - <u>58</u>--.... 5A\_\_\_\_ 0 **160m Contour Line** 66 KV High Voltage Transmission Line 220 KV High Voltage Transmission Line Medium Density (Higher Height Limit and Individual Site Density) Overlay Residential Large Lot Density Overlay Kainga Overlay Area 2 Kainga Overlay Area 1 Character Area Category 2 Character Area Category 1 Scheduled Activity (refer to the label on the maps for the schedule number) Upstream Waterway Downstream Waterway (Mona Vale) Downstream Waterway Environmental Asset Standing Water Body Amenity Tree Planting 1.8m Contour Buffer Christchurch International Airport Protection Surfaces Aircraft Engine Testing Area Air Noise Contour High Quality Gravel Resources Overlay Existing Rural Hamlet Overlay (to be removed in Stage two) (New Brighton Area to be removed in Stage two) Residential Hills Density Overlay Spencerville Overlay Environmental Asset Waterway Accommodation and Community Facilities Overlay Designations Information Only N C N 1201000000 Christchurch City Council Important Ridgeline Banks Peninsula - Significant Landscape **Outstanding Natural Feature or Landscape** Zoning to be determined through future Railway Lyttelton Tunnel Road **District Boundary** Area of Outstanding Natural Character in the Coastal Area of at least High Natural Character in the Coastal Stage one only Banks Peninsula shown) Environment (only Banks Peninsula shown) Environment (only Banks Peninsula shown) notification or other process

The District Plan planning maps are at a scale of 1:10000 and 1:50000. Use at any other scale than specified on each map is for Information purposes only, and does not form part of the District Plan.



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Theproposed Christchurch Replacement District Plan

Legend Stage 2

02/05/2015





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## **COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952**

Search Copy



CB36A/361 Identifier Land Registration District Canterbury 04 June 1992 **Date Issued** 

**Prior References** CB8F/902

Fee Simple Estate 4.1025 hectares more or less Area Legal Description Lot 10 Deposited Plan 26575

**Proprietors** 

Grant Osborne Poultney, Susan Deane Poultney and James Hurren Martin Dawson

### Interests

181662 T

	484663 Transfer cr	eating the following easer	nents		
	Туре	Servient Tenement	<b>Easement Area</b>	<b>Dominant</b> Tenement	Statutory Restriction
	Right of way	Lot 1 Deposited Plan	Blue DP 19089	Lot 10 Deposited Plan	b.
		19089 - CT CB763/34		26575 - herein	
	Water	Lot 1 Deposited Plan	Part	Lot 10 Deposited Plan	
		19089		26575 - herein	
	760665 Easement (	Certificate specifying the f	ollowing easements		
	Туре	Servient Tenement	Easement Area	<b>Dominant</b> Tenement	Statutory Restriction
	Right of way	Lot 10 Deposited Plan	Yellow DP 26977	Lot 1 Deposited Plan	5
		26575 - herein	÷	42834	
	Right of way	Lot 10 Deposited Plan	Yellow DP 26977	Lot 2 Deposited Plan	
(		26575 - herein		42834	
1	Light of way	Lot 10 Deposited Plan	Yellow DP 26977	Lot 3 Deposited Plan	
		26575 - herein		42834	
	Water tank and	Lot 10 Deposited Plan	Part herein	Lot 1 Deposited Plan	
	pipleline	26575 - herein		26575 - CT CB8F/893	
	Water tank and	Lot 10 Deposited Plan	Part herein	Lot 2 Deposited Plan	
	pipeline	26575 - herein		26575 - CT CB8F/894	
	Water tank and	Lot 10 Deposited Plan	Part herein	Lot 3 Deposited Plan	
	pipeline	26575 - herein		26575 - CT CB8F/895	
	Water tank and	Lot 10 Deposited Plan	Part herein	Lot 4 Deposited Plan	
	pipeline	26575 - herein		26575 - CT CB8F/896	
	Water tank and	Lot 10 Deposited Plan	Part herein	Lot 5 Deposited Plan	
	pipeline	26575 - herein		26575 - CT CB8F/897	
	Water tank and	Lot 10 Deposited Plan	Part herein	Lot 6 Deposited Plan	
	pipeline	26575 - herein		26575	
	Water tank and	Lot 10 Deposited Plan	Part herein	Lot 1 Deposited Plan	
	pipeline	26575 - herein		57737 - CT CB34A/420	
	Water tank and	Lot 10 Deposited Plan	Part herein	Part Lot 7 Deposited	
	pipeline	26575 - herein	÷	Plan 26575 - CT	
				CB36A/421	
	Water tank and	Lot 10 Deposited Plan	Part herein	Lot 8 Deposited Plan	
	pipeline	26575 - herein		26575 - CT CB8F/900	

Transaction Id Client Reference

43655207 204587/28

٩. Identifier

## CB36A/361

772087 Transfer creating the following easementTypeServient TenementEasement AreaWater tank andLot 10 Deposited PlanPart hereinpipeline26575 - hereinPart herein

**Dominant Tenement** Lot 9 Deposited Plan 26575 - CT CB8F/901

## **Statutory Restriction**

UI UB8F/901

5108151.3 Mortgage to ASB Bank Limited - 15.11.2001 at 9:00 am



## COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

Search Copy



IdentifierCB8F/903Land Registration DistrictCanterburyDate Issued28 February 1969

**Prior References** CB4B/1205

EstateFee SimpleArea4.1733 hectares more or lessLegal DescriptionLot 11 Deposited Plan 26575

## Proprietors

Gary Neil McVicar

### Interests

484663 Transfer creating the following easements - 6.8.1958

Туре	Servient Tenement	Easement Area	<b>Dominant Tenement</b>	Statutory Restriction
Right of way	Lot 1 Deposited Plan	Blue DP 19089	Lot 11 Deposited Plan	
	19089 - CT CB763/34		26575 - herein	
Water	Lot 1 Deposited Plan	Part	Lot 11 Deposited Plan	
	19089 - CT CB763/34		26575 - herein	

760665 Easement Certificate specifying the following easements - Produced 19.3.1969 at 11.30 am and entered 12.5.1969 at 9.00 am

<b>Type</b> Right of way	Servient Tenement Lot 11 Deposited Plan 26575 - herein	<b>Easement Area</b> Yellow DP 26977	<b>Dominant Tenement</b> Part Lot 2 Deposited Plan 19221	Statutory Restriction
Right of way	Lot 11 Deposited Plan 26575 - herein	Yellow DP 26977	Part Rural Section 31362	
Water tank and pipe-line	Lot 11 Deposited Plan 26575 - herein	Blue DP 26977	Lot 1 Deposited Plan 26575	
Water tank and pipe-line	Lot 11 Deposited Plan 26575 - herein	Blue DP 26977	Lot 2 Deposited Plan 26575	
Water tank and pipe-line	Lot 11 Deposited Plan 26575 - herein	Blue DP 26977	Lot 3 Deposited Plan 26575	
Water tank and pipe-line	Lot 11 Deposited Plan 26575 - herein	Blue DP 26977	Lot 4 Deposited Plan 26575	
Water tank and pipe-line	Lot 11 Deposited Plan 26575 - herein	Blue DP 26977	Lot 5 Deposited Plan 26575	
Water tank and pipe-line	Lot 11 Deposited Plan 26575 - herein	Blue DP 26977	Lot 6 Deposited Plan 26575	
Water tank and pipe-line	Lot 11 Deposited Plan 26575 - herein	Blue DP 26977	Lot 7 Deposited Plan 26575	
Water tank and pipe-line	Lot 11 Deposited Plan 26575 - herein	Blue DP 26977	Lot 8 Deposited Plan 26575	
Туре	eating the following easer Servient Tenement	Easement Area	<b>Dominant Tenement</b>	Statutory Restriction
Water tank and pipe line	Lot 11 Deposited Plan 26575 - herein	Part herein	Lot 9 Deposited Plan 26575 - CT CB8F/901	

## **CB8F/903**

**`Identifier** 

723477.1 Mortgage to Gary Neil McVicar, Colin John Pentecost and David Bruce Anderson - 29.1.1988 at 11.50 am



**Prior References** 

3.

## COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

Search Copy

IdentifierCB8F/905Land Registration DistrictCanterburyDate Issued28 February 1969



CB4B/1205			
Estate	Fee Simple		
Area	4.0924 hectares more or less		
Legal Descriptio	Legal Description Lot 13 Deposited Plan 26575		
Proprietors			
Gary Neil McVicar as to a 1/3 share			
June Kathleen Le	June Kathleen Leeming as to a 1/3 share		
Marilyn Frances I	McVicar as to a 1/3 share		
*			

### Interests

484663 Transfer creating the following easements - 6.8.1958

Туре	Servient Tenement	<b>Easement</b> Area	<b>Dominant Tenement</b>	<b>Statutory Restriction</b>
Right of way	Lot 1 Deposited Plan	Blue DP 19089	Lot 13 Deposited Plan	
	19089 - CT CB763/34	,	26575 - herein	
Water	Lot 1 Deposited Plan	Part	Lot 13 Deposited Plan	
	19089 - CT CB763/34		26575 - herein	

760665 Easement Certificate specifying the following easements - Produced 19.3.1969 at 11.30am and entered 12.5.1969 at 9.00 am

	12.5.1707 at 5.00 a	111			
	Туре	Servient Tenement	Easement Area	Dominant Tenement	<b>Statutory Restriction</b>
r	Right of way	Lot 13 Deposited Plan	Yellow DP 26977	Part Lot 2 Deposited	
<b>.</b> .		26575 - herein		Plan 19221	
	Right of way	Lot 13 Deposited Plan	Yellow DP 26977	Part Rural Section	
		26575 - herein		31362	
	Water tank and	Lot 13 Deposited Plan	Herein	Lot 1 Deposited Plan	
	pipe-line	26575 - herein		26575	
	Water tank and	Lot 13 Deposited Plan	Herein	Lot 2 Deposited Plan	
	pipe-line	26575 - herein		26575	
	Water tank and	Lot 13 Deposited Plan	Herein	Lot 3 Deposited Plan	
	pipe-line	26575 - herein		26575	
	Water tank and	Lot 13 Deposited Plan	Herein	Lot 4 Deposited Plan	
	pipe-line	26575 - herein		26575	
	Water tank and	Lot 13 Deposited Plan	Herein	Lot 5 Deposited Plan	
	pipe-line	26575 - herein		26575	
	Water tank and	Lot 13 Deposited Plan	Herein	Lot 6 Deposited Plan	
	pipe-line	26575 - herein		26575	
	Water tank and	Lot 13 Deposited Plan	Herein	Lot 7 Deposited Plan	
	pipe-line	26575 - herein		26575	
	Water tank and	Lot 13 Deposited Plan	Herein	Lot 8 Deposited Plan	
	pipe-line	26575 - herein		26575	

772087 Transfer creating the following easement - 31.7.1969 at 11.50 am

Servient Tenement Easement Area

a **Dominant Tenement** 

nent Statutory Restriction

Туре

## Identifier

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## CB8F/905

Water tank and pipe-line

Lot 13 Deposited Plan Part herein 26575 - herein

Lot 9 Deposited Plan 26575 - CT CB8F/901



## COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

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IdentifierCB8F/906Land Registration DistrictCanterburyDate Issued28 February 1969

**Prior References** CB4B/1205

EstateFee SimpleArea4.2062 hect

Area4.2062 hectares more or lessLegal DescriptionLot 14 Deposited Plan 26575

Proprietors

Susan Rose Edmeades and Julie Marie Hitchings as Executors

### Interests

484663 Transfer creating the following easements - 6.8.1958

Туре	Servient Tenement	<b>Easement</b> Area	<b>Dominant Tenement</b>	<b>Statutory Restriction</b>
Right of way	Lot 1 Deposited Plan	Blue DP 19089	Lot 14 Deposited Plan	
	19089 - CT CB763/34		26575 - herein	
Water	Lot 1 Deposited Plan	Part	Lot 14 Deposited Plan	
	19089 - CT CB763/34		26575 - herein	

760665 Easement Certificate specifying the following easements - Produced 19.3.1969 at 11.30am and entered 12.5.1969 at 9.00 am

12.J.1909 at 9.00 at	LTT			
Туре	Servient Tenement	Easement Area	Dominant Tenement	Statutory Restriction
Right of way	Lot 14 Deposited Plan	Yellow DP 26977	Part Lot 2 Deposited	
	26575 - herein		Plan 19221	
Right of way	Lot 14 Deposited Plan	Yellow DP 26977	Part Rural Section	
	26575 - herein		31362	
Water tank and	Lot 14 Deposited Plan	Herein	Lot 1 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 14 Deposited Plan	Herein	Lot 2 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 14 Deposited Plan	Herein	Lot 3 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 14 Deposited Plan	Herein	Lot 4 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 14 Deposited Plan	Herein	Lot 5 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 14 Deposited Plan	Herein	Lot 6 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 14 Deposited Plan	Herein	Lot 7 Deposited Plan	
pipe-line	26575 - herein		26575	
Water tank and	Lot 14 Deposited Plan	Herein	Lot 8 Deposited Plan	
pipe-line	26575 - herein		26575	
772087 Transfer cre	eating the following easen	nent - 31.7.1969 at 11.	50 am	
Туре	Servient Tenement	Easement Area	<b>Dominant</b> Tenement	Statutory Restriction
Water tank and	Lot 14 Deposited Plan	Part herein	Lot 9 Deposited Plan	U
pipe-line	26575 - herein		26575 - CT CB8F/901	
L.L.				



## **COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952**

Search Copy



**CB8F/907** Identifier Land Registration District Canterbury 28 February 1969 **Date Issued** 

**Prior References** CB4B/1205

Estate

Fee Simple Area 4.5401 hectares more or less Legal Description Lot 15 Deposited Plan 26575

**Proprietors** 

Ian Robert Jefferis and Peter Wallace Phillips

### Interests

484663 Transfer creating the following easements - 6.8.1958

Туре	Servient Tenement	<b>Easement Area</b>	<b>Dominant Tenement</b>	Statutory Restriction
Right of way	Lot 1 Deposited Plan	Blue DP 19089	Lot 15 Deposited Plan	
	19089 - CT CB763/34		26575 - herein	
Water	Lot 1 Deposited Plan	Part	Lot 15 Deposited Plan	
	19089 - CT CB763/34		26575 - herein	

760665 Easement Certificate specifying the following easements - Produced 19.3.1969 at 11.30am and entered 12.5.1969 at 9.00 am

12.J.1707 at 7.00 a	****				
Туре	Servient Tenement	Easement Area	<b>Dominant Tenement</b>	Statutory Restriction	
Right of way	Lot 15 Deposited Plan	Yellow DP 26977	Part Lot 2 Deposited		
	26575 - herein		Plan 19221		
Right of way	Lot 15 Deposited Plan	Yellow DP 26977	Part Rural Section		
/	26575 - herein		31362		
Water tank and	Lot 15 Deposited Plan	Herein	Lot 1 Deposited Plan		
pipeline	26575 - herein		26575		
Water tank and	Lot 15 Deposited Plan	Herein	Lot 2 Deposited Plan		
pipeline	26575 - herein		26575		
Water tank and	Lot 15 Deposited Plan	Herein	Lot 3 Deposited Plan		
pipeline	26575 - herein		26575		
Water tank and	Lot 15 Deposited Plan	Herein	Lot 4 Deposited Plan		
pipeline	26575 - herein		26575		
Water tank and	Lot 15 Deposited Plan	Herein	Lot 5 Deposited Plan		
pipeline	26575 - herein		26575		
Water tank and	Lot 15 Deposited Plan	Herein	Lot 6 Deposited Plan		
pipeline	26575 - herein		26575		
Water tank and	Lot 15 Deposited Plan	Herein	Lot 7 Deposited Plan		
pipeline	26575 - herein		26575		
Water tank and	Lot 15 Deposited Plan	Herein	Lot 8 Deposited Plan		
pipeline	26575 - herein		26575		
772087 Transfer creating the following easement - 31.7.1969 at 11.50 am					
Туре	Servient Tenement	Easement Area	Dominant Tenement	Statutory Restriction	
Water tank and	Lot 15 Deposited Plan	Part herein	Lot 9 Deposited Plan	J J J J	
pipeline	26575 - herein		26575 - CT CB8F/901		
r-r					

### BEFORE THE CHRISTCHURCH REPLACEMENT DISTRICT PLAN INDEPENDENT HEARINGS PANEL

IN THE MATTER of the Resource Management Act 1991 and the Canterbury Earthquake (Christchurch Replacement District Plan) Order 2014

AND

IN THE MATTER of the Residential Stage 2 Proposal

## STATEMENT OF EVIDENCE OF MALCOLM GROVE SMITH ON BEHALF OF G A & G Y MCVICAR (Submission no. 2362)

Dated: 27 August 2015

### Harmans Lawyers

PO Box 5496, Christchurch 8542 DX WP24506 Telephone: (03) 352 2293, Facsimile: (03) 352 2274 Solicitor: B R D Burke Counsel: B R D Burke

Brian.burke@harmans.co.nz

## STATEMENT OF EVIDENCE OF MALCOLM GROVE SMITH ON BEHALF OF G A & G Y MCVICAR

### MALCOLM GROVE SMITH states:

#### Qualifications and Expertise

- 1. I am a consultant specialising in strategic advice and facilitation in the areas of land use, land development and subdivision.
- I have been involved in land development and subdivision activities in New Zealand for the past 33 years. I have particular experience in project management and coordination of new land developments, subdivisions and cadastral surveys for both urban and rural purposes.
- 3. My work includes project management advice on development concepts or proposals, applying for and obtaining statutory consents and approvals, undertaking the physical construction works, attending to the conditions attaching to statutory consents and approvals and completing legal requirements up to and including the issuing of new titles.
- 4. I have worked in the Canterbury Region as well as the South Island Area continuously since 1988, and during this time I have been involved in a large number of projects of varying sizes and complexities. Many of these projects have involved urban type development in areas where typical urban infrastructures are either limited or unavailable.
- 5. I hold the following memberships and qualifications:
  - Bachelor of Surveying with Credit (BSurv) Otago University of New Zealand (1981).
  - Registered professional surveyor (accredited status);
  - Member of the New Zealand Institute of Surveyors;
  - Member of the Consulting Surveyors of New Zealand;
- 6. I have prepared my evidence in accordance with the Code of Conduct for Expert Witnesses (Environment Court Consolidated Practice Note, November 2014).
- 7. The issues in my Statement of Evidence are within my area of expertise except where I state that I am relying on the evidence or advice of another person.
- 8. The data, information, facts and assumptions I have considered in forming my opinion are set out in my evidence below.

- 9. I have not omitted to consider material facts known to me that might alter or detract from the opinions I have expressed.
- 10. The key documents which I have relied on in preparing my evidence are as follows:
  - The Operative Christchurch District Plan;
  - The Stage 2 of the Christchurch Replacement District Plan;
- I have read the relevant parts of the Evidence of Sarah Oliver (Planner), Robert Norton (Planning Engineer – Stormwater), Bridget O'Brien (Environmental Engineer – Water and Waste Water), Andrew Craig (Landscape Architect), Dr Charles Wright (Geotechnical Engineer).

### Scope of Evidence

- 12. In 2014 I was asked by some of the lot owners to carry out an investigation of the development potential of the 5 adjoining forestry blocks at the top end of Worsleys Road which are the subject of Mr and Mrs McVicar's submission. The scope of my evidence relates to the feasibility of a 10 lot subdivision for the subject sites. The exercise comprised the following:
  - (a) Research council services and infrastructure;
  - (b) Review potential planning aspects and requirements relevant to creating some residential activities;
  - (c) Site inspection to view the property, surrounding areas and consider the location and extent of any residential activities;
  - (d) Prepare a conceptual layout plan of the possible dwelling positions and associated allotment extents;
  - (e) Consider access and servicing requirements for the conceptual layout;
  - (f) Consider the range of tasks and activities that would be necessary to undertake the development and indicative costs of the same.
- 13. The present zoning of the allotments under the Operative Christchurch District Plan is Rural Hills. This zoning allows for very low levels of development – typically allotments of 100ha and density of dwellings also of 1 per 100ha. The zoning under the Christchurch Replacement District Plan is Rural Port Hills which provides for the same level of development.
- 14. On the south side of Worsleys Road, the lands are generally zoned Living Hills B under the Operative Christchurch District Plan. This zone provides for low density residential development – allotment sizes of 3000m<sup>2</sup> and a similar density for dwellings. It is of note that this zoning extends over the higher portions of the southern Worsley Spur slopes, and opposite all of the subject area with the exception of the eastern most allotment (Lot 15 DP 26575) although the back

portion of the zone is opposite Lot 15. This area is zoned Residential Large Lot under the Christchurch Replacement District Plan. The same level of development is maintained.

15. The Living Hills B zone under the Operative Christchurch District Plan also extends along the north side of Worsleys Road, however ends one property to the west of the western most allotment (Lot 11 DP 26575). Importantly, the zone only extends generally 75m from the Worsleys Road boundary. Below this is Rural Hills zoned land. This area is zoned Residential Large Lot under the Christchurch Replacement District Plan.

### Subject Site

- 16. Attachment 1 is a copy of Planning Map 50 with the subject area highlighted.
- 17. The typical maximum ground slope of the subject area is 20° to 25°. This equates to 1 in 2.75 gradient (vertical to horizontal).
- 18. The land immediately to the north of Worsleys Road is relatively flat for a small distance, before sloping down in terms of the above gradient. The width of the relatively flat portion varies from 25m or thereabout to 50m or thereabout.
- 19. The track within Worsleys Road has a variable gradient, however the maximum is in the order of 1 in 7.
- 20. There are a number of small rock outcrops about the subject area, and more so close to Worsleys Road. There are a number of smallish boulders/rocks that are sitting on the ground.

### **Proposed Rezoning**

- 21. Attachment 2 is a concept layout plan which outlines ten (10) potential dwelling locations, and corresponding allotments. It then provides a balance land parcel that comprises the residual lands about the subject area. From a surveying point of view, the concept allotments can be made no less than 3000m<sup>2</sup> or greater than 1.015ha if that is regarded as more appropriate. The line below which residential dwellings could not be erected would not have to change.
- 22. From a development point of view I consider that extending the Residential Large Lot zone over the subject area in the same manner as that which applies to Lots 1 to 9 DP 26575 would be consistent with the very low density residential development in the area. Five (5) of the building areas sit at least 20m down from the upper edge of the main hill slope. The remaining five (5) building areas are about the flattish lands immediately beside Worsleys Road.
- 23. The placement of dwelling sites in these locations is in response to visual amenity considerations. The five dwellings located a small distance down the hill slope will ensure that the backdrop is still hillside when viewed from the main City environs. The five dwellings on the flattish lands immediately adjoining Worsleys Road should have established vegetation as a backdrop, and this will then

minimise the perception that they are protruding above the "skyline" when also viewed from the main City environs.

- 24. The proposal would continue the theme of limiting the residential development outcome to the upper northern slopes, and in the vicinity of 75m 100m from Worsleys Road, avoid visually obtrusive housing development at higher densities, and avoid excessive "clustering".
- 25. The proposal avoids shared access (Rights of Way) to building areas. This allows each property to have their own exclusive access that will then be minimalistic in form and less visually obtrusive. It also avoids shared maintenance aspects that can be problematic in the long term.
- 26. There are adequate setbacks of dwellings to boundaries. Road setback is a minimum of 5m 10m and internal setbacks are a minimum of 10m.
- 27. There is an adequate separation of dwellings to the Balance Area for fire hazard avoidance. The Christchurch Replacement District Plan provides for a 30m separation of dwelling to woodlot. I would suggest a 40m to 50m separation. This will particularly apply to the lower slope boundary. Trees could be planted on the lower slopes of the proposed allotments to the Council's specifications.

#### Services

- 28. I foresee the access and infrastructures design activities as being reasonably straight forward albeit there will be a degree of design innovation particularly in respect of Sewage and Stormwater Disposal and High Pressure Water Supply.
- 29. Attachment 3 is a summary of subdivision engineering considerations.
- 30. Sewage could be individually pumped from each dwelling to the urban network Aglaia Place. The sewage disposal will rely on individual allotments pumping their sewage downhill to the City network, and some careful design will be appropriate. However it should be feasible. Note that I have spoken to the supplier of the E/One sewer system and have been advised that this type of system should be suitable for this development proposal.
- 31. HP Water can be provided via the urban network in Worsleys Road, albeit there would be a need to be a pumped supply from the present CCC reservoir opposite Lot 12 DP 26575 to an "upper reservoir", and then a shared submain providing individual supplies to each dwelling.
- 32. Alternately, a pumped supply may be provided directly to each allotment without the need for an "upper reservoir".
- 33. I note also that the water supply needs to provide for firefighting as well as a potable water supply. Both the "upper reservoir" concept and the alternate direct supply option be able to provide for both.

- 34. Stormwater disposal would be via individual systems within each property. Likely a collection facility/tank to take discharges, and then with a "trickle" type disposal network over the land that controls discharge rates in an acceptable manner.
- 35. In general terms, all storm water from the development will have to be collected, treated if it has potential to contain contaminants and then discharged to ground in an appropriate manner. The method of discharge to ground will be important as discharges onto the hillside can lead to scouring and erosion. Therefore, it will be important to carry out the discharge in a careful and controlled manner generally by systems that either "trickle" the discharge over large areas and at slow velocities, or discharge in a contained/concentrated manner however with virtually all of the "water energy" taken out.
- 36. Power and comms would be via standard underground extensions to the present networks. There is overhead power to the western end of the subject area. There is underground communications at least to this point, and possibly running further up Worsleys Road to at least the CCC reservoir opposite Lot 12 DP 26575.
- 37. It should be acceptable to extend vehicle access up Worsleys Road. I envisage that Council will allow an adequate formation within their legal road corridor albeit with construction costs met 100% by the owners. I note that a similar formed access may be required as the lands to the south are developed, and they want to utilise Worsleys Road for access to their properties. In addition, I understand that the recently consented Christchurch Adventure Park project is most likely to require vehicle access to a point above Lot 15 DP 26575. Clearly this will involve a similar formation.
- 38. A formed and sealed access of 4.5m, and with suitable shoulders and side swales to control and dispose surface runoff would be able to be formed. I am satisfied that the vertical gradient of this proposed access will be acceptable.
- 39. Access to all allotments will be via individual driveways. Those to the buildings on the sloping lands will "chase the contour" to a degree and enable suitable gradients.
- 40. Generous separations exist between adjoining buildings approx 30m minimum. This should assist with the sense of very low density and avoidance of visually obtrusive housing at higher densities etc. It should also enable each dwelling to establish a suitable curtilage incorporation generous plantings and the like.
- 41. The lower slope boundary location is somewhat arbitrary, however the intention is to provide a generous separation between the dwellings and the adjoining "Balance Area" so as to deal with fire separations and the like.
- 42. The physical construction works should be reasonably straightforward albeit care will need to be taken to control storm water runoff during the exercise. A sediment and erosion management plan will be required, and this will have to be closely adhered to throughout the works phase.

### Subdivision Costs

- 43. There will be a high level of expense to work through the development process, and then provide appropriate vehicle access and normal urban infrastructures to the proposed allotments. However, some of the cost could be shared with the owners of the RLL zoned land on the south side of Worsleys Road if and as they utilise the infrastructures.
- 44. I have determined an initial and high level development cost for the proposal and my present view is that it will be necessary to achieve a yield of 10 allotments to then have some expectation that the development will be economically viable.
- 45. In my view it may not be economic to provide the necessary infrastructure for the sites for less than ten allotments.
- 46. Notwithstanding, I note that the lot owners have proposed in the alternative a zone which allows for at least one residential dwelling per lot. This may still be economically viable depending on the level of access and infrastructure required for this alternate development scenario.

Dated: 27 August 2015

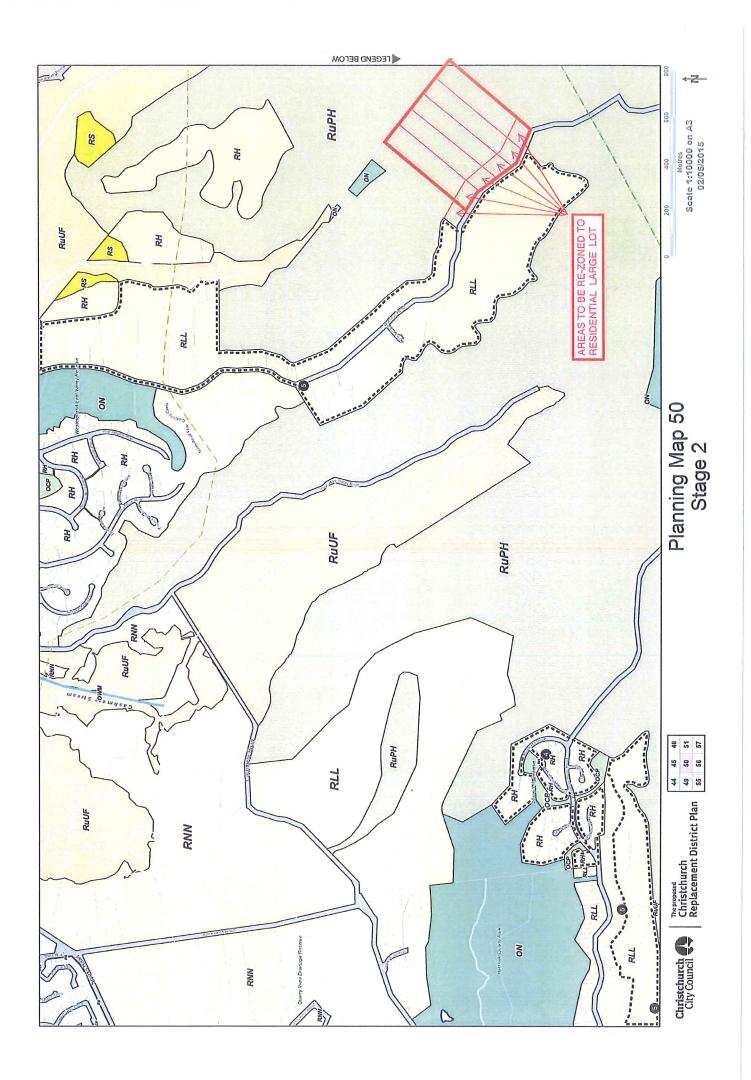
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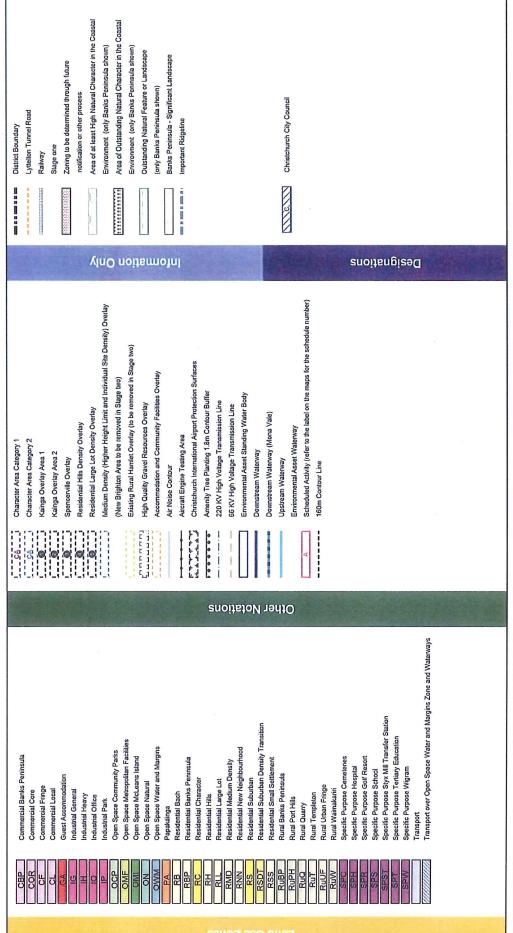
Malcolm Smith

## <u>Attachment 1</u>

Planning Map 50 with the subject area highlighted.

BRB-204587-36-79-V1





The cadeatre and coastline shown on the planning maps is not part of the information in the District Plan. It has been provided in the planning pass as an additional function to enhance navigability and search capability. District Plan rules do not apply for overlay extending into the Coastal Marine Aten. The Coastal Marine Aten is as defined in the Resource Management Act. The cadeatre was based on the most reconstrinormation held by the Council at the date the map was produced. Establishing compliance or otherwise with the plan may require a formal survey.

The District boundary is as defined in the Resource Management Act, which uses the definition from the Local Government Act. The line on these maps representing the District boundary is indicative and for information purposes only. The actual boundary is as defined in the legislation. Determining rights and obligations under the District Plan where the District boundary is relevant may require a formal survey. The District Plan planning maps are at a scale of 1:10000 and 1:50000. Use at any other scale than specified on each map is for information purposes only, and does not form part of the District Plan.

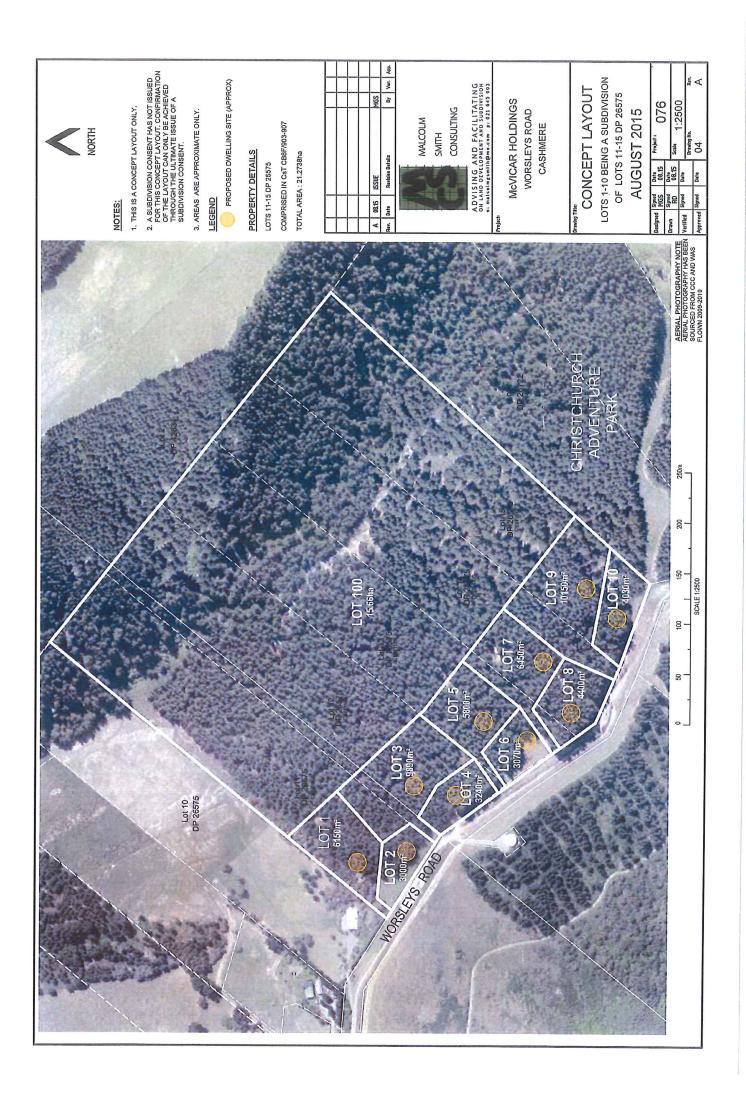
Christchurch Christchurch Christchurch Replaced

Legend Stage 2

02/05/2015

<u>Attachment 2</u>

Conceptual Layout Plan.



<u>Attachment 3</u>

Summary of Subdivision Engineering Considerations.

~

BRB-204587-36-79-V1

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MALCOLM SMITH CONSULTING

DVISING AND FACILITATING IN LAND DEVELOPMENT AND SUBDIVISION

## Memorandum

Proje	Project: McVicar and Others: Worsleys Road, Port Hills		Reference: 076	
To:	Copy:	Name:	Organisation:	Location:
1		File		
From: Malcolm Smith		colm Smith	Date: 26 August 2015	Total pages: 3

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Subject:	Subdivision	Engineering	Considerations

### ACCESS

1.

- Allow 150m of upgrade to the existing sealed road.
  - Widen existing seal by 1.5m
  - · Create a S/W swale along the side of the widened seal
- 2. Allow 450m of new sealed road.
  - · 4.5m sealed surface with a full crossfall.
  - Presume we need 0.150 AP65 and then 0.150 AP40 sitting above a prepared subgrade.
  - · Formed and metalled shoulders on both sides.
  - · S/W swale on one side to take surface runoff.
- Allow for 10 vehicle entrances as per the main access carriageway, at 3m long and 3m wide. З.
- Allow for a three-point turn at the top of the main access turning for rubbish truck etc. 4.
- 5. No pedestrian access footpath required at this stage - pedestrians can use the main access road.

### SEWAGE RETICULATION

- Allow for a total of 1,050m of pressure main to be laid in the main access road and discharge to the 6. existing pumping main at intn of Worsleys and Aglaia Place.
  - 1,050m of pressure main in trench at 0.8m depth.
  - · Connection into the existing pressure main at intn of Worsleys and Aglaia Place.
  - 10 non-return valves.
  - 10 lateral lines into the net areas allow an average length of 10m each.

### HIGH PRESSURE WATER

#### Option A

- 7. Allow for 4 lateral connections from the existing 150dia water main. To service the four lower allotments below the existing reservoir.
  - 4 by 150/25 joints
  - allow 4 by 10m laterals @ 25dia.
  - Allow 4 meter boxes and fittings.
- For the six allotments above the reservoir, pump from a lower tank to an upper tank. Then provide a 8. gravity supply from the upper tank to the six allotments.



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- 1 connection to a lower tank.
- Lower tank at 10,000 litres.
- Pump within lower tank including power supply.
- Allow 350m of pump line from lower tank to upper tank. Underground at 0.8m depth.
- Upper tank at 50,000 litres.
- Allow 300m of gravity line from upper tank to six allotments. Underground at 0.8m depth.
- · 6 connections with meter boxes and fittings.

#### Option B

- 9. For all ten allotments, pump from a lower tank to an upper tank. Then provide a gravity supply from the upper tank to the ten allotments.
  - 1 connection to a lower tank.
  - Lower tank at 10,000 litres.
  - Pump within lower tank including power supply.
  - Allow 350m of pump line from lower tank to upper tank. Underground at 0.8m depth.
  - Upper tank at 50,000 litres.
  - Allow 500m of gravity line from upper tank to ten allotments. Underground at 0.8m depth.
  - 10 connections with meter boxes and fittings.

### POWER RETICULATION

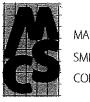
- 10. Allow for 400m of new underground power cable from the end of the existing overhead supply. Underground at 0.8m depth.
  - 400m of low voltage cable underground at 0.8m depth.
  - Pole mounted transformer to reduce from 33KV to std low voltage.
  - Provide 5 new boundary boxes (each serving two allotments).

### COMMUNICATIONS RETICULATION

- 11. Allow for 400m of new underground comms cable from the end of the existing underground supply (assume it terminates about the water reservoir). Underground at 0.8m depth.
  - 400m of 50pair cable in a duct at 0.8m depth.
  - Provide 5 new upstands (each serving two allotments).

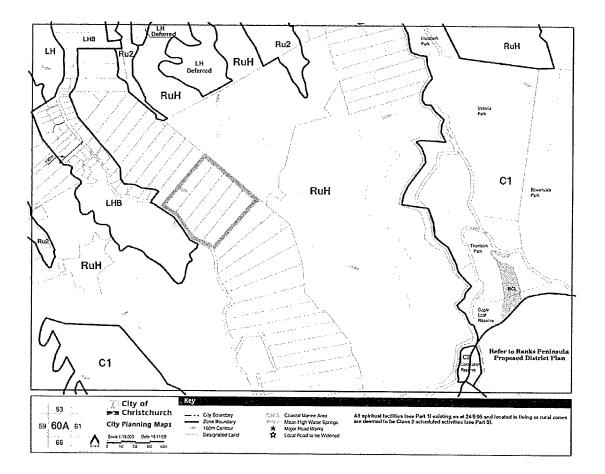
### STORMWATER

- 12. Assume that each allotment will be serviced via individual and on-site stormwater systems. So each allotment incorporates an on-site storage chamber and then a "trickle" type disposal field that allows stormwater to discharge to the existing ground at a concentration and rate that replicates a natural and pre-development scenario.
- 13. However, the main access road will need to be suitably drained and this will incorporate a number of sumps within the roadside swale, and then discharge systems from each to a suitable natural watercourse close by. Assume one sump and disposal system each 100m of main access road. So a total of 7?
  - · Allow for 7 sumps.
  - Allow for 30m of piping per sump.
  - Allow for each disposal system to have an energy dissipation mechanism (bouldered apron etc) at the lower end.



Malcolm Smith Consulting

#### ADVISING AND FACILITATING ON LAND DEVELOPMENT AND SUBDIVISION



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