

-Existing coloursteel fence to boundary

ROUGH & MILNE LANDSCAPE ARCHITECTS LIMITED DO NOT SCALE, ALL DIMENSIONS TO BE VERIFIED ON SITE PRIOR TO

> CLIENT REVIEW **CLIENT REVIEW** CLIENT REVIEW CLIENT REVIEW RESOURCE CONSENT RESOURCE CONSENT RESOURCE CONSENT RESOURCE CONSENT RESOURCE CONSENT

STATUS

RESOURCE CONSENT RESOURCE CONSENT

supplemented with additional shrubs and groundcovers

Chionochloa flavicans Carex testacea Anemanthele lessoniana Festuca glauca Libertia peregrinans Aciphylla colensoi

Cornus alba 'Sibirica' Lavandula stoechas Phormium cookianum Astelia 'Purple Shadow' Griselinia littoralis Prunus Iusitanica Carpinus betulus

Pachystegia insignis Ophiopogon planiscapus Muehlenbeckia axillaris

Quercus palustris Liquidambar styraciflua Platanus orientalis 'Autum Glory' Fuscospora cliffortioides Libocedrus bidwillii Betula papyrifera European beech (Green + Copper) Fagus sylvatica Sorbus aucuparia

Required	Provided
1/unit 2 managers 1 mobility	16 units 2 managers 1 mobility Total = 19
	Roads 856.9 m2 - 21.2% of property area Units 960m2 - 23.7% of property area Lodge/Unit 17 - 185 m2 - 4.6% of property area Courtyard 75m2 - 1.9% of property area Timber Decks 142m2 - 3.5% of property area
Property Area 4,044 m2	Total 2,218.9m2 54.9% of property area
Property Area 4,044 m2	Landscape Areas 1,825 m2 45.1% of property area
	1/unit 2 managers 1 mobility Property Area 4,044 m2 Property Area

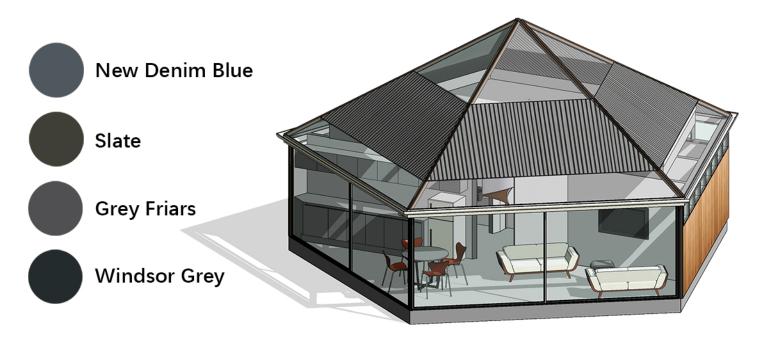
Level 2, 69 Cambridge Terrace	Tel +64 3 366 3268
PO Box 3764, Christchurch 8140	Fax +64 3 377 8287
New Zealand	info@roughandmilne.co.nz
LANDSCAPE CONCEPT	PLAN
SUNSHINE HOUSING	
5 PIONEER DRIVE	
TEKAPO	
JOB No.	17037
SCALE	1:150 @ A1, 1:300 @ A3
DATE	08/05/19
DESIGNED	TM/BM



RESOURCE CONSENT REVISION LC 1.0 SERIES 1 of 1

5 Pioneer Dr Exterior Colour Palette

ROOF COLOUR Dark Grey Range



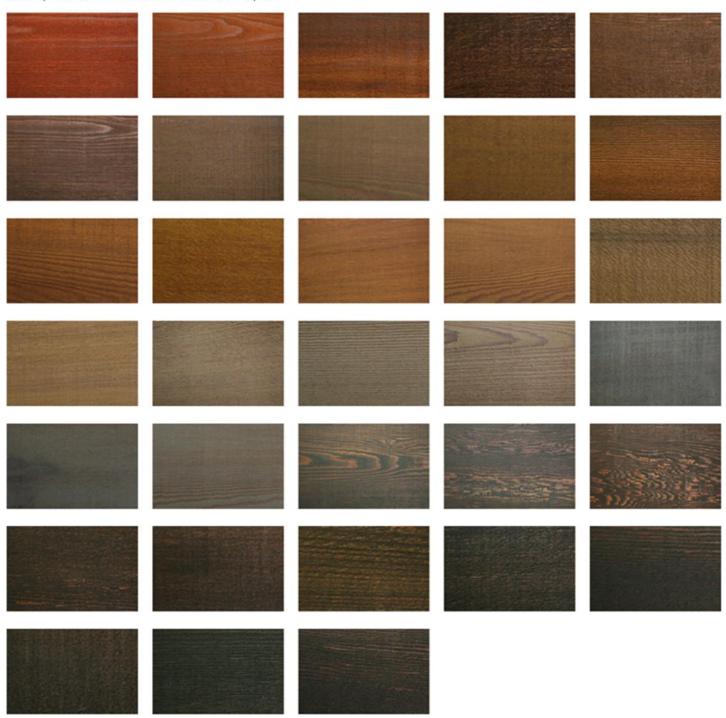
EXTERIOR CLADDING COLOUR

We will select natural-tone colours from the DRYDEN and WoodX pruducts' colour palettes. These are attached on following pages. The Colour of the 16 units may vary.



Dryden Colour Guide

Note: These colours are representative only. Timber colour and quantity of oil applied will determine the final colour achieved. Dryden WoodOil applied in clear will silver and weather naturally. Over 22 colours available, contact us for samples on 0800 379336 or + 64 9 447 3995. Custom, matches and other colours available on request.





A SPLASH OF COLOUR...

If you would like to add a contemporary colour to your project, or just a subtle tint, please ask us for a colour sample on a piece of Cedar or your chosen exterior timber. We would be happy to show you our extensive colour range.

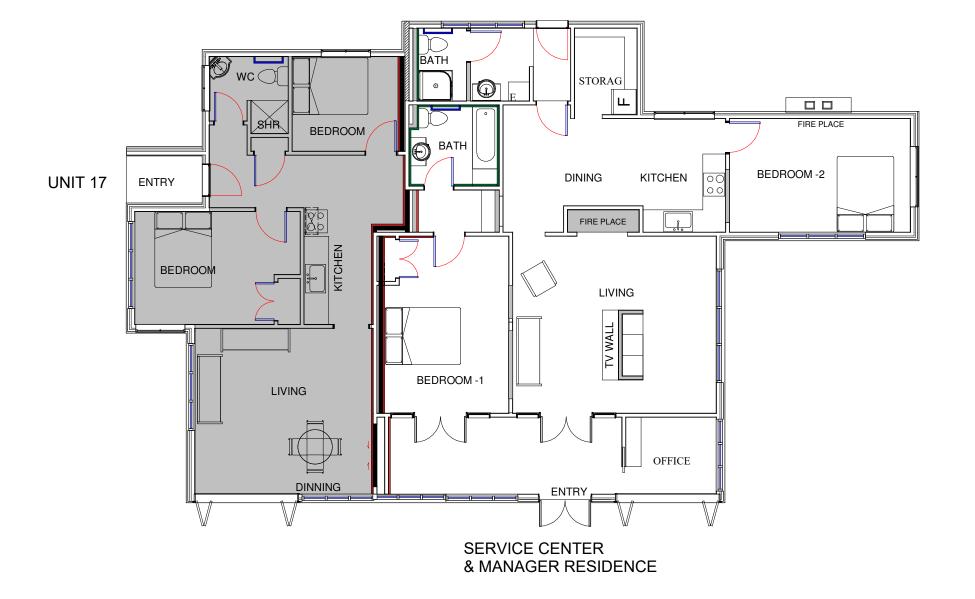
Our colour tones and tints have resulted from extensive research, past field performance and external exposure testing from Resene Paints Colourant Research and Development Lab. Can't find the colour you're looking for? We'll create it for you!



WOOD-X IS EASY TO APPLY...

Providing your timber surface has been prepared appropriately, applying Wood-X wood oils to your exterior timber is simple. Surface preparation is covered in the downloadable pdf data sheet www.wood-x.co.nz/our-product





PROPOSED FLOOR PLAN

SCALE 1:100 @ A3

BUILDING CONSENT



PROJECT: 5 PIONEER DRIVE

DRAWING: PROPOSED FLOOR
PLAN

SCALE: 1:100

DATE: 15/08/2018

DRAWING NO. REVISION DWN BY:
A101 RZ

DRAWING STATUS: FOR INFORMATION FOR TENDER FOR CONSENT FOR CONSENT FOR INFORMATION CONSENT FOR TENDER FOR CONSENT FOR CONSENT FOR TENDER FOR CONSENT FOR CON

INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE COPYRIGHT OF CONG ZHANG. AND IS NOT TO BE REPRODUCED WITHOUT HIS PERMISSION ON SCALE - ALL DIMENSIONS TO BE CONFIRMED ON SITE

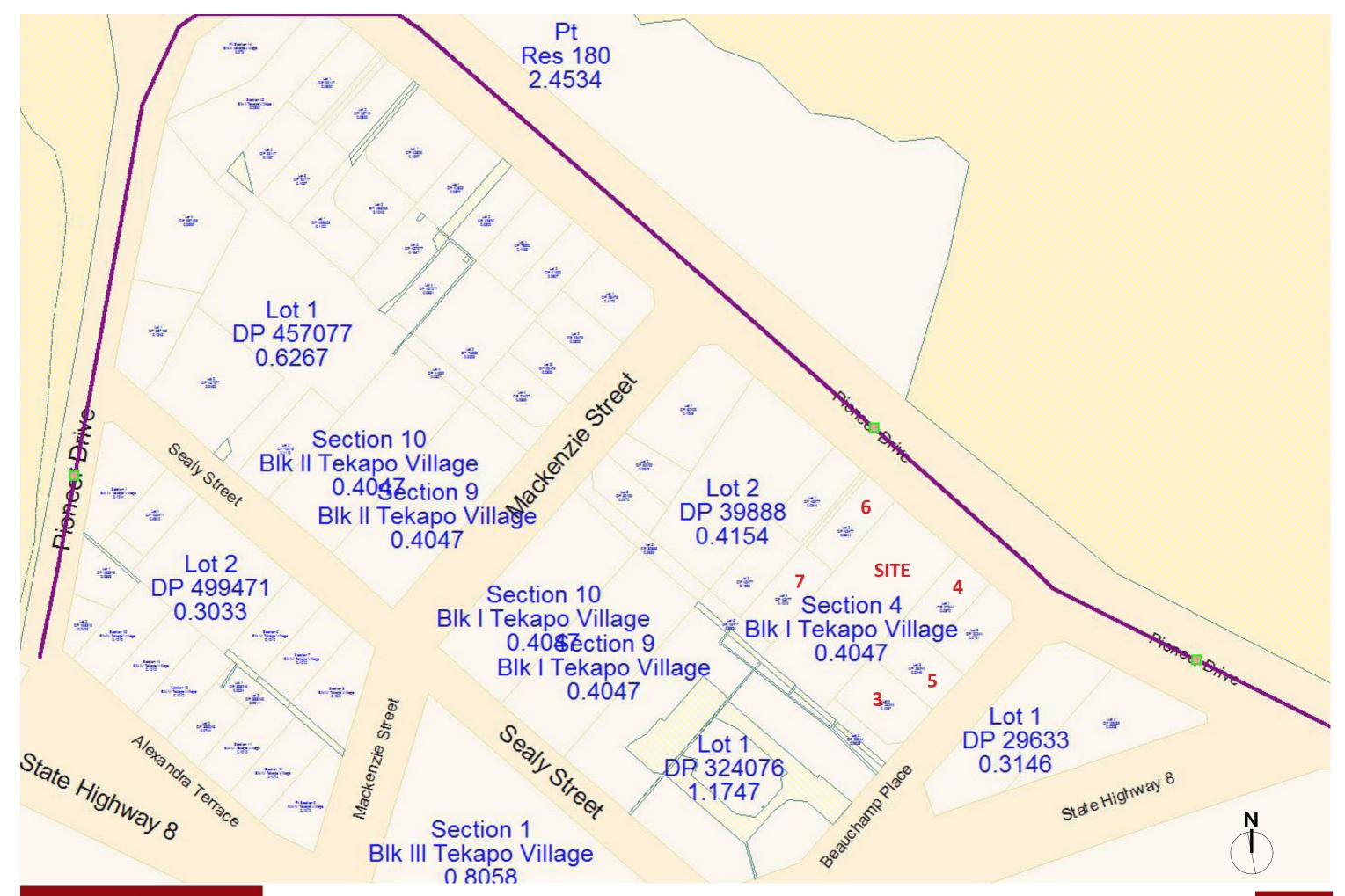


Graphic Attachment to Addendum Report

For Sunshine Housing Dwellings Lake Tekapo

Prepared by Nikki Smetham

October 2019





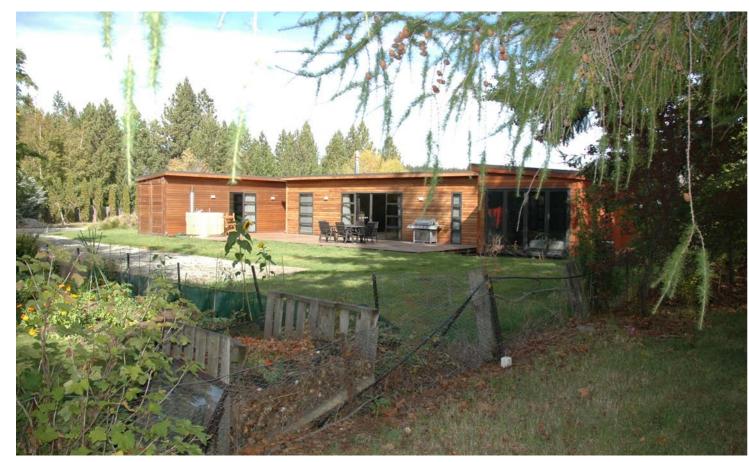








2. Boundary to 4 Pioneer Drive



3. Southeast Middle Lot - 5 Beauchamp Place



4. Boundary to 5 Beauchamp Place



5. Boundary to 5 Beauchamp Place



6. Southeast boundary rear lot - 3 Beauchmap Place



7. Boundary to 3 Beauchmap Place



8. Northwest boundary to 6 Pioneer Drive



09. Northwest boundary fence to 6 Pioneer Drive



10. Northwest boundary to rear lot - 7 Pioneer Drive

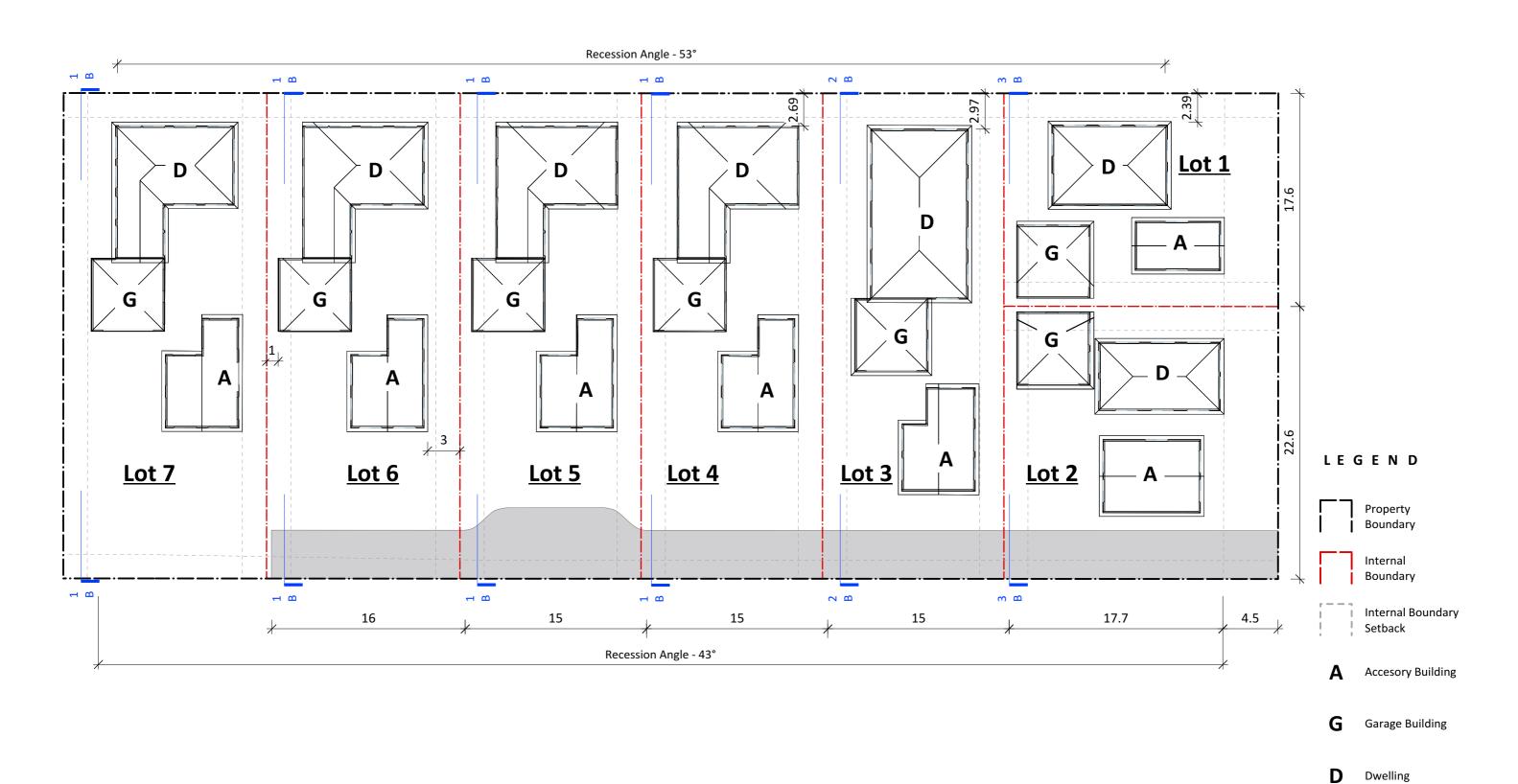


N O R T H W E S T E L E V A T I O N



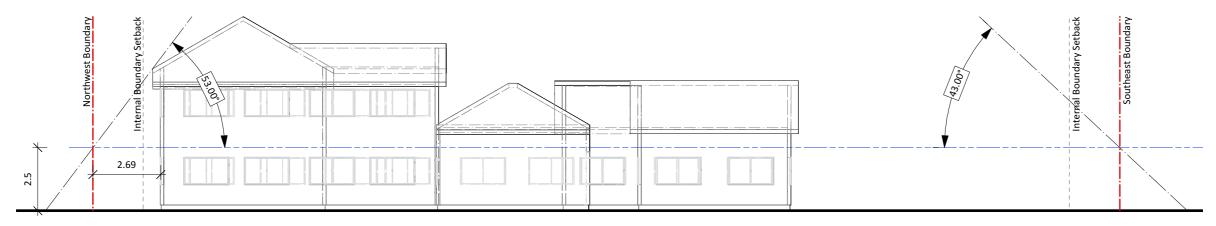
S O U T H E A S T E L E V A T I O N



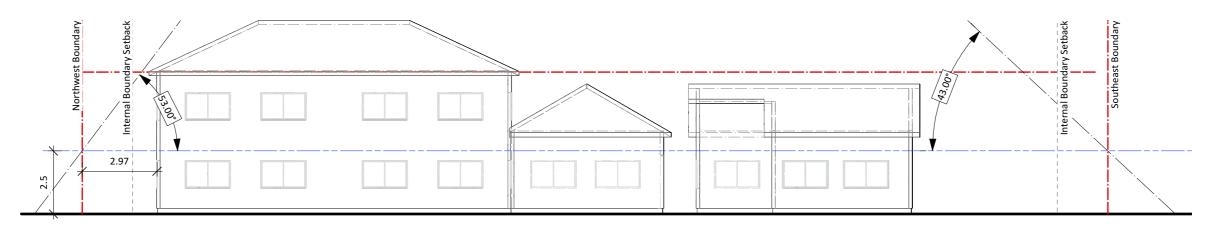


PERMITTED BASELINE PLAN SHEET 7

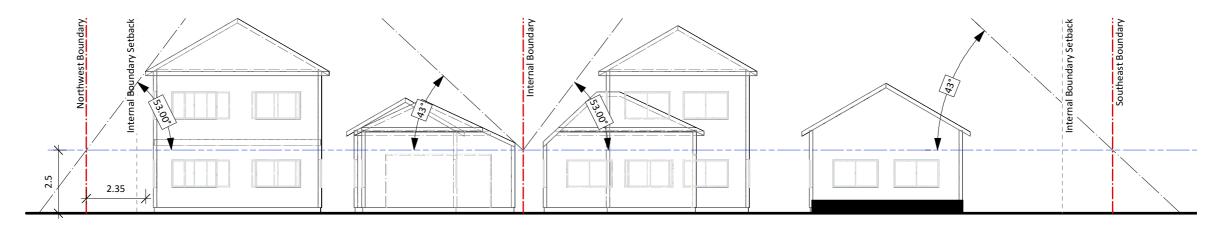
Scale 1:300 @ A3



- Typical Section through Boundary and Lots 4-7 Buildings
 Scale: 1:150



- 2 Section through Boundary and Lot 3 Building
 B Scale: 1:150



Section through Boundary and Lots 1-2 Buildings B / Scale: 1:150

Scale 1:150 @ A3



BASELINE NORTH WEST ELEVATION SCALE 1:250 @ A3



B A S E L I N E S O U T H E A S T E L E V A T I O N S C A L E 1:250 @ A 3



BASELINE NORTH WEST ELEVATION SCALE 1:250 @ A3



B A S E L I N E S O U T H E A S T E L E V A T I O N S C A L E 1:250 @ A 3

Engineering Servicing for 5 Pioneer Drive – Lake Tekapo – Makenzie

Infrastructure Servicing Report

Sunshine Housing Ltd

7 May 2019





Quality Control

Author	D Pinfold	Client	Sunshine Housing Ltd	
Reviewed by	Andrew Tisch	Date Issued	7 May 2019	
Approved by	Andrew Tisch	Revision No.	1	
Doc Name/Location	rpt 190501 pioneer Dr 18039.01 servicing			

Disclaimer

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Project No. 18039.01



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APPENDIX F – ECan Resource Consents (CRC193323, CRC192694, and CRC193455)

APPENDIX G – Conceptual stormwater plan

APPENDIX H – Telecommunications and electricity servicing confirmation

APPENDIX I – MDC RFI Letter

Rev. 1 - 7 May 2019

1 INTRODUCTION

Sunshine Housing Ltd (SHL) has engaged e2Environmental Ltd (e2) to provide a servicing report to support the consent application (RM180111). SHL propose 17 units plus a manager's residence on a 0.4 ha residential block at 5 Pioneer Drive Tekapo. This report covers the following services:

- Water Supply;
- Wastewater;
- Stormwater;
- Power and Telecommunications.

This report also answers questions from a Council RFI letter dated 2 August 2018, see Appendix I.

1.1 Residential 1 Zoning - the Baseline Case

The site is located off Pioneer Drive in the Lake Tekapo Township and is designated as Residential Zone 1 under the Makenzie District Plan. The subdivision rules of the District Plan specify that the net area of subdivided lots should be not be less than:

- 400sg.m for front lots
- 500sq.m for rear lots

Therefore, this site could be subdivided into 7 lots as shown in Figure 1. We have called this the Baseline Case, for servicing. Actual service demand from the proposal by SHL will be compared to this case.

Figure 1 Proposed Development (Left) vs Permitted Baseline Subdivision (Right)

Pioneer Drive

P

2 BACKGROUND

2.1 General Site Description

The block has two existing houses of 220sqm and 90sqm plus a carpark and a shed.

The only access to the site is from Pioneer Drive.

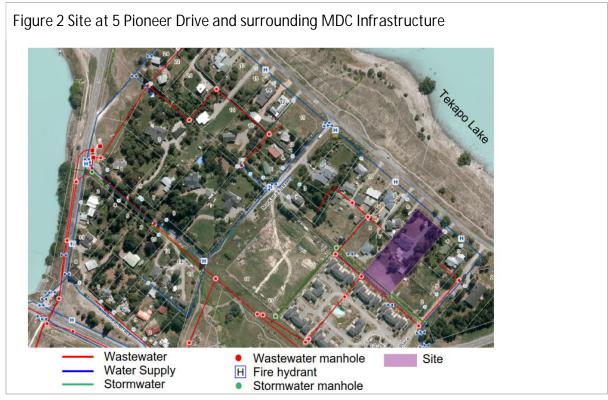
The general fall of the land is from an onsite hill to the north east at a slope of approx 2% and to the south west at 9% (Figure 2).

An existing topographical plan is included in Appendix A.

2.2 Surface Water bodies

The nearest waterbody to the site is Lake Tekapo to the north east (85m from the boundary). Culverts beneath Pioneer Drive direct runoff from the lot before discharging overland towards the Lake edge.





2.3 Existing Site Drainage

There is no private or public drainage infrastructure servicing the site. The site is separated into two catchments delineated by a ridge in the rear third of the site. The front catchment discharges northeast towards Tekapo Lake, and the rear catchment to the southwest as shown in Figure 3. There is no pre-treatment of stormwater runoff.

Figure 3 Existing runoff direction

Existing culvert

Catchment 1
Catchment 2
Overland flow
direction

2.4 Groundwater

ECan's Canterbury Mapping GIS data identifies that the groundwater direction is from south to north towards Lake Tekapo. Within a 1km radius of the site, there are just wells I37/0006 and I37/0007 400m and 500m away (Figure 4). The initial water level of these wells is RL 697.1m and RL 690.6m above Mean Sea Level (Lyttleton Datum) but it is possible that the groundwater level (GWL) on site mimics the lake levels of RL 709.7m-710.9m and the flood level of 713.05m. This is summarised in the following table:

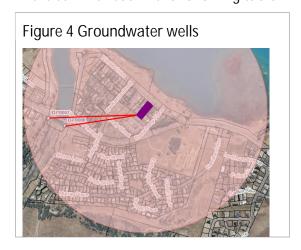


Table 1 Groundwater depth below ground level (bgl), assuming an average site RL of 714.9m.

average site KE of 7 14.7111.					
	RL GWL	GW depth bgl			
Lake typical	709.7-710.9	5.2-4.0			
Lake flood	713.05	1.9			
Well 137/0006	697.1	15.9			
Well 137/0006	690.6	22.8			

The actual groundwater depth would need to be confirmed by installing piezo wells and measuring groundwater levels.

2.5 Soakage and Infiltration

We have no ground soakage information for this site or nearby sites but two bore logs from the wells discussed above show that clay is present in all the layers, which suggests that soakage could be limited¹. See Appendix B for these bore logs.

2.6 Flooding

An ECan flood assessment report, dated 28 August 2018 (Appendix C), reports no historic records of flooding specific to the property.

However, anecdotally there is a flooding nuisance to the rear of the site on the lower lying neighbouring lot. On October 2015 MDC installed a 225mm pipe (Figure 3)² in the area.

As discussed in the Proposed Stormwater section, runoff from the entire site (including roofs, hardstand), and part of



the neighbouring lot (if required), will be piped to Tekapo Lake.

¹ This is echoed by Geoff Horler at MDC who believes that soakage is not possible in the Lake Tekapo township - discussion with Andrew Tisch by phone 12 September 2018

² Discussion between Geoff Horler and Andrew Tisch by phone 12 September 2018

3 WATER SUPPLY ASSESMENT

3.1 Exising Water Supply Reticulation

The MDC service plan identifies that the site has one connection off a 100mm dia uPVC water main (Figure 2).

3.2 Proposed water demand

The water demand for the proposed development is calculated based on the MDC Activity Management Plan (AMP) for Tekapo of 300 Litre/person/day including irrigation. Note that in this district irrigation may account for 50 to 100L per person per day.

We compared the water demand of the proposed plan with permitted baseline as shown in Table 2. This shows a small increase compared to the baseline comparison but we note that the biggest demand comes from firefighting - as discussed in the next section.

Table 2 Proposed water demand

Table 2 Froposed Water demand					
	Permitted baseline	Proposed plan	Unit		
Residential flow(AMP MDC)	300	300	L/p/d		
Household (AMP MDC)	3.29*	2.29	p/lot		
Number of dwellings	7	18			
Ave. volume	6909	12366	L/d		
Ave. water flow	0.08	0.14	L/s		

^{*}Assuming 2.29 people per large dwelling and 1 per minor unit.

A DN60mm connection to the 100mm main on Pioneer Drive will provide supply to metered manifolds each servicing their own unit on individual supply lines.



There are two fire hydrants on Pioneer Drive as shown in Figure 5. One is 20m from the east boundary and another is located 40m from the west boundary.

The MDC AMP classifies Non Sprinklered Housing as FW2. Using SNZ PAS 4509³-2008 the required firefighting flow is 25 L/s which can be drawn from two hydrants, one within 135m and the second within 270m. A minimum 12.5 L/s is required from each hydrant. A residual pressure of 10m head is required within the water supply network to overcome the hydrant losses.

Opus International Consultants Ltd have supplied us with results from the town wide water model for the 100mm diameter water supply main in Pioneer Drive (Figure 6 and Appendix D).

The modelling results confirm an average available pressure of between 59 and 62m. They show a pressure drop to approximately 40m if a fire demand is simulated in the west of Tekapo. Opus have not provided model results for a simulated fire in Pioneer Drive, however we have assumed that the Council system will have been designed to meet firefighting pressure requirements.

3.4 Emergency Vehicle Access

The proposal will include a new hydrant adjacent to the site entry off Pioneer Drive to comply with the SNZ PAS 4509³ 2008 requirements for the minimum hydrant distance of 20m from a hardstand area.



³ NZ Fire Service Firefighting Water Supplies Code of Practise

Figure 5 Hydrants Serving 5 Pioneer Drive Figure 6 Modelled Pressure from Town Wide Model Node TEKAWN0025 Cairns development updated 00:00 17/3/2009 Pressure 06:00 12:00 18:00

Engineering Servicing for 5 Pioneer Drive Tekapo Sunshine Housing Ltd

3.5 Conclusions

There is adequate flow and pressure in the MDC 100mm dia network in Pioneer Drive to service the proposal for firefighting.

The two existing hydrants are within 135m and 165m respectively of the southern site boundary, and therefore comply with the distance requirements of SNZ PAS 4509-2008.

We conclude therefore, that the site firefighting requirements (under SNZ PAS 4509-2008) can be met by the existing 100mm diameter water supply main and existing hydrants.

4 WASTEWATER ASSESSMENT

4.1 Existing Wastewater reticulation

Wastewater from the site currently discharges to the existing 150mm dia uPVC wastewater line on the rear of the site (Figure 2). The pipe flows to the west to the Sealy street pump station then to the Tekapo wastewater treatment ponds.

The existing wastewater lateral is located at the south east corner of the site.

4.2 Proposed wastewater servicing

The applicant intends to service the site by a gravity wastewater network as shown conceptually in Appendix E.

Based on NZBC Clause G13, we have calculated total discharge units (DU) from the current architectural concept drawings. Our design assumes that the 150mm dia will cut into the existing manhole to service the majority of the dwellings with the balance discharging to the existing lateral.

4.2.1 Design Discharges

Using GD06 (Auckland Regional Council's proposed wastewater design manual which will replace TP58) parameters of 200L/person/day and a population density of 2.29 persons per large dwelling and 1 person per minor unit, we calculate an Average Sewer Flow (ASF) of 0.1 L/s and a Maximum Flow (MF) of 0.48 L/s.

Table 2 compares the wastewater load of the proposal with the permitted baseline.

Table 3 Wastewater Demand

	Permitted baseline	Proposed plan	Unit
Residential demand	200	200	L/p/d
Household	Household 3.29		p/lot or unit
Number of dwellings	7	18	
Ave. wastewater 4,606 flow (ASF)		8,244	L/d
Ave. sewer flow (ASF)	0.05	0.10	L/s
MF	0.25	0.48	L/s

4.3 Conclusions

MDC have confirmed⁴ that there is capacity in the system to cope with the anticipated additional discharge.

⁴ Geoff Horler discussion with Andrew Tisch by phone 12 September 2018



5 STORMWATER ASSESSMENT

5.1 Consent/ Council Requirement

Construction stormwater, operational stormwater, and earthworks consents have been issued by ECan to construct the outfall and discharge stormwater into Lake Tekapo. See Appendix F for the following approved consents from ECan:

- CRC193323: To undertake earthworks;
- CRC192694: To discharge operational stormwater to land and water; and,
- CRC193455: To discharge construction phase stormwater to land.

5.2 Existing stormwater servicing

We assume that the existing two buildings discharge roof runoff over land and that the rest of the site runoff discharges as discussed in Section 2.3.

5.3 Proposed Stormwater Servicing

A conceptual stormwater plan is included in Appendix G. In summary:

- Stormwater main to have capacity for up to 2% AEP (50yr) runoff
- Overland flow paths for the 2% AEP (50yr) will be provided from the front catchment
- Swales will provide treatment of runoff from the vehicle areas prior to discharge to Tekapo Lake via pipe a piped outfall.
- The proposed stormwater system will accept excess runoff from part of the lower lying neighbouring lot area, south west of the rear site catchment, to mitigate the existing flood nuisance in the area.

5.4 Secondary Flow Paths

The primary (piped) system has been designed to convey secondary peak flows up to 2% AEP (50yr) storm event, 20 minute duration from both the front and rear catchments.

The front catchment has a secondary flow path to Pioneer Road.

No formal secondary network exists for the rear catchment, however we offer the following mitigation:

- The primary network is sized for the 50 year event rather than the 10 year which would be a typical level of service
- 2. the low area at the rear neighbouring site is served by an existing pipe

5.5 Conclusions

We confirm that it is feasible to discharge the stormwater from two catchments to the lake via a proposed pipeline whose discharge is consented by ECan

Swales provide stormwater treatment prior to discharge near Lake Tekapo through a single pipe servicing both the rear and front catchment.

The proposal will have a positive effect on mitigating an existing flood nuisance in lower lying land southwest of the site by providing a secondary flow path for existing public drainage infrastructure.



Engineering Servicing for 5 Pioneer Drive Tekapo

Sunshine Housing Ltd

6 POWER AND COMMUNICATIONS ASSESSMENT

We have received email confirmation from Chorus that they are willing and able to service the proposal with telecommunications.

Alpine Energy have confirmed in their email that they are unable to supply the electrical needs for the site without remedial work being done to their existing infrastructure.

These emails are attached to Appendix H of this report.

APPENDICES

APPENDIX A – Existing topographical plan

APPENDIX B – Bore logs

APPENDIX C – ECan Flood Report

APPENDIX D – Water supply model for Tekapo, March 2009

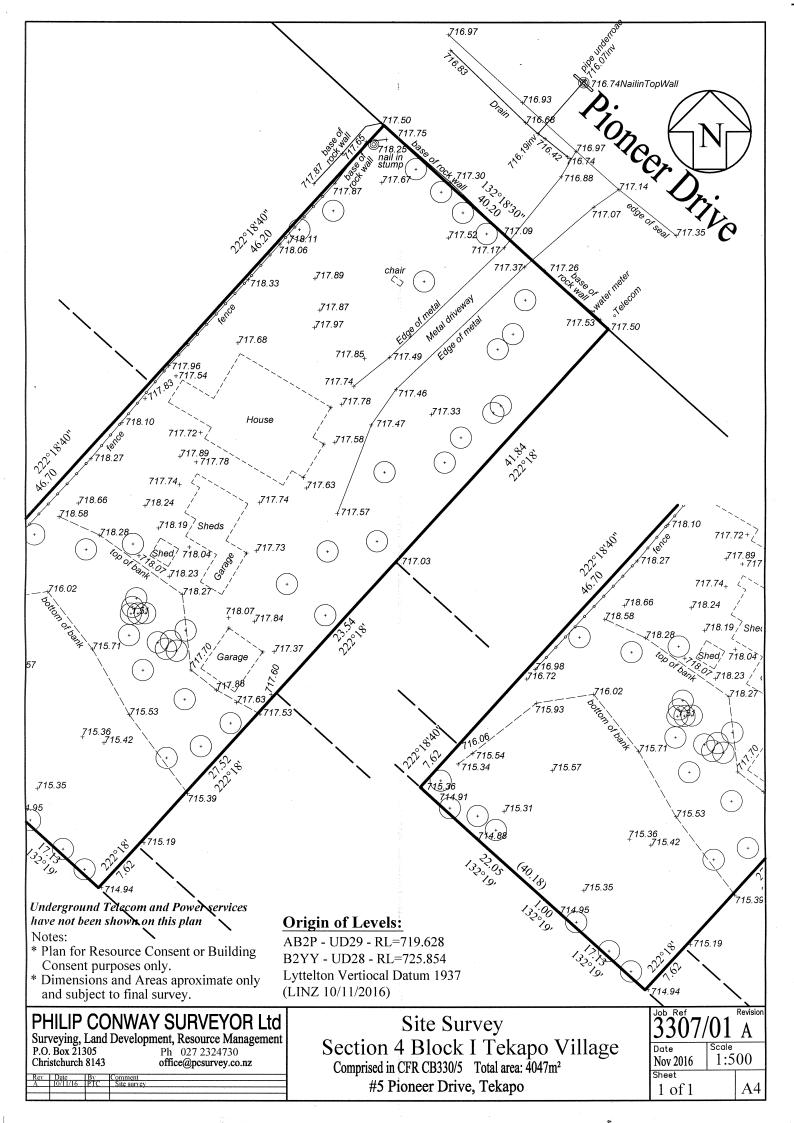
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APPENDIX I – MDC RFI Letter



Borelog for well I37/0006

Grid Reference (NZTM): 1398064 mE, 5124279 mN

Location Accuracy: 10 - 50m

Ground Level Altitude: 713.0 m +MSD Accuracy: < 0.5 m

Driller: McNeill Drilling Co. Ltd Drill Method: Rotary/Percussion

Borelog Depth: 25.0 m Drill Date: 18-May-1998



2010		20.0 111	Drill Date: 18-May	1555	
Scale(m)	Water Level	Depth(m)		Full Drillers Description	Formation Code
		4.00	200000 200000 200000 200000 200000 200000 200000 200000	Large Cobbly Gravel	
		1.80m 1.80m	0_83_2_ -	Large Cobbly Gravel Clay with less fine Gravel	
		3.59m		Clay with less line Graver	
		3.59m	000000	Clay with less fine Gravel Boulders	
Ц		3.90m 3.90m	0-0-0	Boulders	
5		5.80m _	-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	Cobbly Claybound Gravel	
		5.80m	00000000000000000000000000000000000000	Cobbly Claybound Gravel Fine Gravel with rare cobbles	
		7.09m	000000	Fine Gravel with rare cobbles Coarse Gravel	
		7.40m _ 7.40m	<u>ਨਜ2,</u> ਜ	Coarse Gravel Coarse Claybound Gravel	
				Social Supposition Staves	

Borelog for well I37/0007

Grid Reference (NZTM): 1397974 mE, 5124319 mN

Location Accuracy: 10 - 50m

Ground Level Altitude: 712.7 m +MSD Accuracy: < 0.5 m

Driller: McNeill Drilling Co. Ltd Drill Method: Rotary/Percussion

Borelog Depth: 25.0 m Drill Date: 14-May-1998



			Dim Dute. 14 Ma	-	Enmetic -
Scale(m		Depth(m)		Full Drillers Description	Code
Scale(m	Water i) Level	Depth(m) 1.20m 1.20m		Full Drillers Description Coarse Gravel and Clay Coarse Gravel and Clay Clay Fine Gravel	Formation
5		6.09m 6.09m		Clay Fine Gravel	
- 1		0.03m	200000	Coarse Gravel	
		6.50m 6.50m	<u> </u>	Coarse Gravel	
				Fine Gravel and Clay	
		8.39m = 8.39m	000000 00000 00000 00000	Fine Gravel and Clay Coarse Gravel (boulder)	
		9.10m 9.10m	000000	Coarse Gravel (boulder)	
			200000	Coarse Gravel	
			00000		I



28 August 2018

Andrew Tisch e2environmental Ltd PO Box 31159 Christchurch 8444 75 Church Street PO Box 550 Timaru 7940

P. 03 687 7800 F. 03 687 7808 E. ecinfo@ecan.govt.nz

Customer Services P. 0800 324 636 www.ecan.govt.nz

Dear Andrew

Flood Hazard Assessment – Proposed Subdivision 5 Pioneer Drive, Lake Tekapo, Section 4 Block I Tekapo VILL, Valuation no: 25311 128 00

This 0.41 ha property is located on the southwest side of Pioneer Drive between the Mackenzie Street and Beauchamp Place intersections and approximately 75 m from the Lake Tekapo shore.

Environment Canterbury has no historic records of flooding specific to the property.

Anecdotal comments from long term residents of the area indicate that the lake has raised to a level at which parts of Pioneer Drive (particularly at the northwest end around the church and carpark) have been inundated. I do not have any information on the historic frequency of such an occurrence. None information Environment Canterbury holds indicates flooding at this property though information is very limited.

The flood risk from the Lake is entirely linked to height above mean sea level.

The maximum control level for the operation of Lake Tekapo ranges from 709.7 metres to 710.9 metres above mean sea level (Lyttleton Datum) depending on the time of year.

The Design Flood Level for the Lake is 713.05 metres above mean sea level. This could be considered a very extreme flood occurrence.

Environment Canterbury does not have specific survey information for the area. The property does rise steadily away from Pioneer Drive and toward the rear boundary. You may be able to confirm the site elevations.

I understand sections of Pioneer Drive and parts of some of the properties along this road are below 113.05 metres above mean sea level and therefore may be flooded at slightly lower levels than the Design Flood. Because the land is generally rising the flooding experienced may in most cases be limited to the property frontages closer to the road.

Environment Canterbury does not have any information on local runoff that may affect the area although Mackenzie District Council may have other information.

Key Ref:

18165

Contact:

Chris Fauth

I hope this information is of assistance. Please do not hesitate to contact me if you require any clarification.

Yours sincerely

Chris Fauth

Senior Scientist (Natural Hazards)

cc: Manager Planning and Regulations

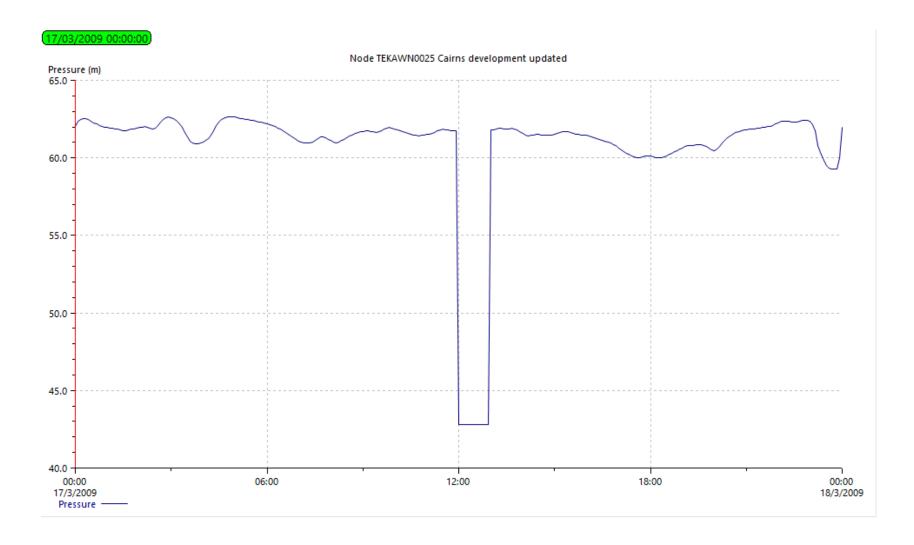
Mackenzie District Council

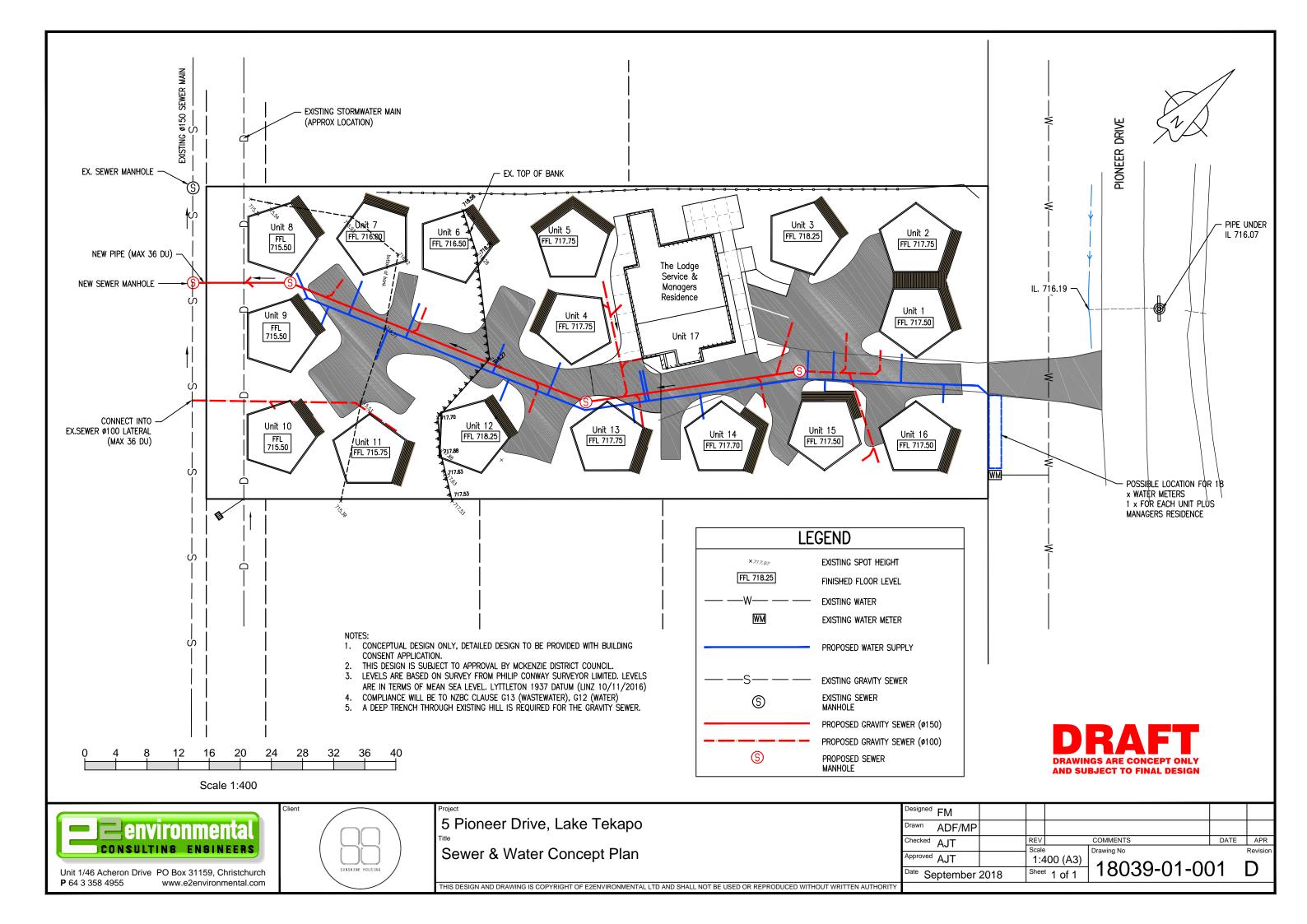
Attachments:

Topographic map showing location of propertyAerial photograph of the property











Sunshine Housing 2016 Limited Attn To: Rong Zhang 5 Wharenui Road Upper Riccarton Christchurch 8041

Customer Services P. 03 353 9007 or 0800 324 636

200 Tuam Street

PO Box 345 Christchurch 8140

E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Dear Sir/Madam

Notice of Resource Consent Decision

Record Number(s): CRC193323

Applicant Name: Sunshine Housing 2016 Limited

Activity Description: To undertake earthworks.

Decision: Granted

Decision

The decision of Environment Canterbury is to grant your application on the terms and conditions specified in the attached resource consent document. The reasons for the decision are:

- 1. The activity is consistent with the policies of the regional plan or national policy statement.
- 2. The activity will achieve the purpose of the Resource Management Act 1991.

Commencement of consent

Your resource consent commences from the date of this letter advising you of the decision.

If you object to or appeal this decision, the commencement date will then be the date on which the decision on the appeal is determined.

Lapsing of consent

This resource consent will lapse if the activity is not established or used before the lapse date specified on your consent document. Application may be made under Section 125 of the Resource Management Act 1991 to extend this period.

Your rights of objection and appeal

Objection to Decision

If you do not agree with the decision of the consent authority, you may object to the whole or any part in accordance with Section 357A(1)(g) of the Resource Management Act 1991 (RMA).

Notice of any objection must be in writing and lodged with Environment Canterbury within 15 working days of receipt of this decision in accordance with Section 357C(1) of the RMA.

Right to Appeal

You may appeal the decision of the consent authority to the Environment Court in accordance with section 120 of the RMA. The notice of appeal must be lodged with the Court within 15 working days of receipt of this decision, at PO Box 2069, Christchurch. A copy of the appeal should also be forwarded to Environment Canterbury within the same timeframe.

If you are in any doubt about the correct procedures, you should seek legal advice.

Objection to Costs

Section 357B of the RMA allows you to object to costs. Your objection must be received **within 15 working days** of the date on which you receive your invoice. Your objection must be in writing and should clearly explain the reasons for your objection as detailed in section 357C of the RMA.

Monitoring of conditions

It is important that all conditions of consent are complied with, and that the consent holder continues to comply with all conditions, to ensure that the activity remains lawfully established.

You can find online Information regarding the monitoring of your consent at www.ecan.govt.nz/monitoringconsent.pdf.

Charges, set in accordance with section 36 of the Resource Management Act 1991, shall be paid to the Regional Council for the carrying out of its functions in relation to the administration, monitoring and supervision of resource consents and for the carrying out of its functions under section 35 of the Act.

Further information about your consent

For some activities a report is prepared, with officer recommendations, to provide information to the decision makers. If you require a copy of the report please contact our Customer Services section. You can find online information about your consent document at www.ecan.govt.nz/yourconsent.pdf.

Queries

For all queries please contact Customer Services Section quoting your CRC number noted above.

Thank you for helping us make Canterbury a great place to live

Yours sincerely

Consents Planning Section

cc: e2Environmental Limited Attn To: Andrew Tisch PO Box 31159 Ilam

Christchurch 8444

RESOURCE CONSENT CRC193323

Pursuant to Section 104 of the Resource Management Act 1991

The Canterbury Regional Council (known as Environment Canterbury)

GRANTS TO: Rong Zhang, Sunshine Housing 2016 Limited

A LAND USE CONSENT (S9): To undertake earthworks.

COMMENCEMENT DATE: 17 Apr 2019

EXPIRY DATE: 17 Apr 2024

LOCATION: 5 Pioneer Drive, Tekapo

SUBJECT TO THE FOLLOWING CONDITIONS:

LIMITS

- The use of land authorised by this resource consent shall be limited to the excavation of land required to develop the site located at 5 Pioneer Drive, Tekapo and the stormwater outfall to Lake Tekapo. Legally Described as Section 4 Block I Tekapo Village labelled as "Site" on Plan CRC193323A, attached to and forming part of this resource consent.
- 2 Excavation authorised by this consent shall only occur at the following locations:
 - a. The site described in Condition (1);
 - b. The road reserve of Pioneer Drive; and
 - c. The area 10 metres from the flood level of Lake Tekapo.

As shown on Plan CRC193323B attached to and forming part of this resource consent.

Advice Note: This resource consent does not authorise:

- a. the dewatering of excavations and any associated discharges; or
- b. the placement of any material (aside from bed material) within the bed of Lake Tekapo.

Advice Note: Any works in the bed of Lake Tekapo or within five metres of the bed of Lake Tekapo must comply with Rules 5.167, 5.168, 5.148 and 5.163 of the Canterbury Land and Water Regional Plan.

3 Excavation authorised under this consent is limited to excavation required to:



Page 2 CRC193323

a. Undertake trenching required for the installation of underground infrastructure;

- b. Construct swales for stormwater treatment;
- c. Grading of the site to achieve finished levels and flow paths for stormwater discharge; and
- d. Construction of paving and landscaping areas.
- e. Construction of the stormwater outfall
- 4 The excavation shall not exceed a maximum depth of 4.5 metres below ground level.
- No excavation works shall be carried out within the exposed water table during times when groundwater levels are higher than the deepest part of excavations.
- If groundwater is encountered during excavation, all excavations at the site shall cease until such time as groundwater recedes. If groundwater does not recede naturally after 48 hours, the excavation shall be backfilled with clean material.

PRIOR TO THE COMMENCEMENT OF WORKS

- At least one month prior to commencement of development at the site, the Consent Holder or their agent shall arrange and conduct a pre-construction site meeting between the Canterbury Regional Council and all relevant parties, including the primary contractor. At a minimum, the following shall be covered at the meeting:
 - a. Scheduling and staging of the works, including the proposed start date;
 - b. Responsibilities of all relevant parties;
 - c. Contact details for all relevant parties;
 - d. Expectations regarding communication between all relevant parties;
 - e. Procedures for implementing any amendments;
 - f. Site inspection;
 - g. Confirmation that all relevant parties have copies of the contents of this consent document and all associated erosion and sediment control plans and methodology; and
 - h. Methods for resolution of non-compliance with the conditions of this consent
- 8 Prior to the works described in Condition (1) the Consent Holder shall ensure that all personnel working on the site are made aware of and have access to this consent document and all associated erosion and sediment control plans and methodology.



Page 3 CRC193323

DURING WORKS

- 9 All practicable measures shall be taken to:
 - a. Minimise soil disturbance and prevent soil erosion;
 - b. Prevent sediment from entering surface water of Lake Tekapo or the stormwater network within the Pioneer Drive road reserve; and
 - c. Avoid placing excavated material in a position where it may enter surface water.

AFTER THE COMPLETION OF WORKS

- All exposed surfaces shall be stabilised once works are completed or if they are not to be worked for a period of 14 days or more.
- All spoil and other waste material from the works shall be removed from the site.
- The Canterbury Regional Council, Attention: Regional Leader Compliance Delivery shall be notified within ten working days after the completion of any works authorised by this consent

UNEXPECTED AQUIFER INTERCEPTION

- In the event of an accidental interception or unanticipated levels of artesian flows, all practicable measures shall be undertaken to remedy or mitigate any change in aquifer pressure, water quality or temperature. This shall include but not be limited to:
 - a. The contractor shall immediately cease all works within the immediate area of excavation that caused the interception of the artesian flows;
 - The contractor shall determine and document whether the flow is constant or increasing, if the turbidity is constant or increasing and if the flow is confined to the excavation;
 - c. The contractor shall notify the site engineer and/or other appropriate personnel to determine the emergency measures required to arrest the artesian flow. Emergency measures shall include, but not be limited to:
 - The installation of a layer of impermeable material to the extent required to reform a capping layer over the aquifer to prevent the upward movement of groundwater through the confining layer; or
 - ii. Inserting a vertical pipe in the aquifer interception point (if practicable) and provide for a secure seal against the pipe to enable the stabilisation of the artesian flow in the pipe, and to determine the above ground water level to



Page 4 CRC193323

assess any further measures.

d. The temporary artesian flow beyond the excavation shall be controlled and mitigated with appropriate erosion and sediment control measures.

- e. The Canterbury Regional Council, Attention: Regional Leader Compliance Delivery shall be notified as soon as practicable but no later than two working days after the interception; and
- f. Upon remediation and arresting of flow from the aquifer interception, the construction methodology shall be reconsidered and, if required, revised to avoid future interceptions of the aquifer.

SPILLS

- No refuelling or maintenance of vehicles or machinery shall occur within:
 - a. 10 metres of any open excavation;
 - b. the banks of Lake Tekapo; or
 - c. the road reserve of Pioneer Drive.
- All practicable measures shall be taken to avoid spills of fuel or any other hazardous substances within the site.
 - a. In the event of a spill of fuel or any other hazardous substance, the spill shall be cleaned up as soon as practicable, the area where the spill occurred shall be inspected and cleaned and measures taken to prevent a recurrence;
 - b. The Canterbury Regional Council, Attention: Regional Leader-Monitoring and Compliance, shall be informed within 24 hours of a spill event and the following information provided:
 - i. the date, time, location and estimated volume of the spill;
 - ii. The cause of the spill;
 - iii. The type of hazardous substance(s) spilled;
 - iv. Clean up procedures undertaken;
 - v. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;
 - vi. An assessment of any potential effects of the spill; and
 - vii. Measures to be undertaken to prevent a recurrence.

ADMINISTRATION



Page 5 CRC193323

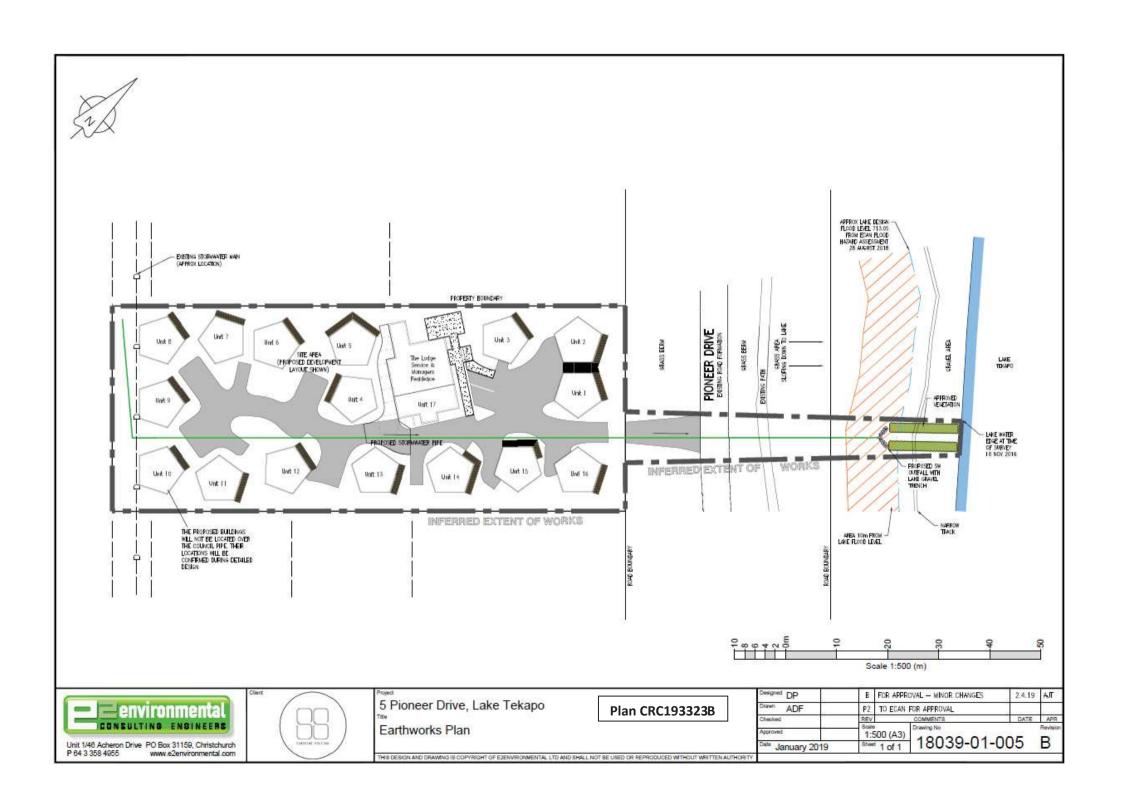
The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent.

Issued at Christchurch on 17 April 2019

Canterbury Regional Council



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Exercising of resource consent CRC193323

It is important that you notify Environment Canterbury when you first start using your consent.

GRANTED TO: Sunshine Housing 2016 Limited

A LAND USE CONSENT (S9): To undertake earthworks. **LOCATION:** 5 Pioneer Drive, Tekapo

Even if the consent is replacing a previous consent for the same activity, you need to complete and return this page.

A consent can only be made active after the activity has commenced and all pre-requisite conditions have been fulfilled e.g. installation of water meter and/or fish screen. If you require further advice, please contact our Customer Services section on 0800 324 636 or by email at ecinfo@ecan.govt.nz.

Providing this information will:

- Validate your consent through to its expiry date
- Minimise compliance monitoring charges
- Help provide an accurate picture of the state of the environment.

If consent CRC193323 is not used before 17 April 2024 this consent will lapse and no longer be valid.

Declaration:				
I have started using this resource consent.				
Action taken (e.g. pasture irrigated, discharge from septic tank/boiler/spray booth etc):				
Date I started using this resource consent (Note: this date cannot be in the future):				
Signed:	Date:			
Full name of person signing (please print):				

Please return to:

Business Support Environment Canterbury PO Box 345 Christchurch 8140

Fax: (03) 365 3194

Email: ecinfo@ecan.govt.nz

File: CRC193323 Customer No: EC389675



Sunshine Housing 2016 Limited Attn To: Rong Zhang 5 Wharenui Road Upper Riccarton Christchurch 8041

Customer Services P. 03 353 9007 or 0800 324 636

200 Tuam Street

PO Box 345 Christchurch 8140

E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Dear Sir/Madam

Notice of Resource Consent Decision

Record Number(s): CRC192694

Applicant Name: Sunshine Housing 2016 Limited

Activity Description: To discharge operational phase stormwater to land and water.

Decision: Granted

Decision

The decision of Environment Canterbury is to grant your application on the terms and conditions specified in the attached resource consent document. The reasons for the decision are:

- 1. The activity is consistent with the policies of the regional plan or national policy statement.
- 2. The activity will achieve the purpose of the Resource Management Act 1991.

Commencement of consent

Your resource consent commences from the date of this letter advising you of the decision.

If you object to or appeal this decision, the commencement date will then be the date on which the decision on the appeal is determined.

Lapsing of consent

This resource consent will lapse if the activity is not established or used before the lapse date specified on your consent document. Application may be made under Section 125 of the Resource Management Act 1991 to extend this period.

Your rights of objection and appeal

Objection to Decision

If you do not agree with the decision of the consent authority, you may object to the whole or any part in accordance with Section 357A(1)(g) of the Resource Management Act 1991 (RMA).

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If you are in any doubt about the correct procedures, you should seek legal advice.

Objection to Costs

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Monitoring of conditions

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You can find online Information regarding the monitoring of your consent at www.ecan.govt.nz/monitoringconsent.pdf.

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Further information about your consent

For some activities a report is prepared, with officer recommendations, to provide information to the decision makers. If you require a copy of the report please contact our Customer Services section. You can find online information about your consent document at www.ecan.govt.nz/yourconsent.pdf.

Queries

For all queries please contact Customer Services Section quoting your CRC number noted above.

Thank you for helping us make Canterbury a great place to live

Yours sincerely

Consents Planning Section

cc: e2Environmental Limited Attn To: Andrew Tisch PO Box 31159 Ilam

Christchurch 8444

RESOURCE CONSENT CRC192694

Pursuant to Section 104 of the Resource Management Act 1991

The Canterbury Regional Council (known as Environment Canterbury)

GRANTS TO: Rong Zhang, Sunshine Housing 2016 Limited

A DISCHARGE PERMIT (S15): To discharge operational phase stormwater to land and water.

COMMENCEMENT DATE: 17 Apr 2019

EXPIRY DATE: 17 Apr 2039

LOCATION: 5 Pioneer Drive, Tekapo

SUBJECT TO THE FOLLOWING CONDITIONS:

LIMITS

- The discharge shall be only stormwater generated from roofs, vehicle parking and manoeuvring areas, hardstand and impervious areas associated with a multi-unit development located at 5 Pioneer Drive, Tekapo. Legally described as Section 4 Block I Tekapo labelled as "Site" on Plan CRC192694A, attached to and forming this consent.

 Advice note: The stormwater system authorised by this resource consent may also convey nuisance ponded stormwater from the neighbouring property at 1 Beauchamp Place.
- The multi-unit development described in condition (1) shall consist of a total vehicle hardstand area not exceeding 1,200m².
- 3 The discharge of roof stormwater shall not arise from:
 - a. Copper building materials; or
 - b. Unpainted galvanised sheet materials.
- 4 Stormwater generated from the site shall be discharged to:
 - a. The bank of Lake Tekapo at or about NZTM 2000 1398599mE, 5124451mN as shown on Plan CRC192694C; and
 - b. Surface water of Lake Tekapo

STORMWATER SYSTEM

The site as described in Condition (1) shall be divided into a northern and southern catchment. A grassed swale shall be constructed to service each catchment, as shown Plan CRC192694B, attached to and forming part of this resource consent.



Page 2 CRC192694

Stormwater shall be discharged to the bank of Lake Tekapo at or about NZTM 2000 1398599mE, 5124451mN via the following stormwater system:

- a. Stormwater from roofs shall be discharged to an underground stormwater pipeline in the centre of the site via a sealed system;
- b. Stormwater from vehicle manoeuvring, parking areas and other hardstand and impervious areas shall be conveyed to one of two grassed swales and directed to a terminal sump within each catchment which collects and conveys stormwater via a sealed system and discharges to the banks of Lake Tekapo.

As shown generally on Plans CRC192694B and CRC192694C attached to and forming part of this resource consent

- The stormwater system, including the grassed swale network, shall be designed and constructed to collect stormwater from all storm events up to and including a two percent Annual Exceedance Probability (AEP) event of 20 minutes duration.
- Where the capacity of the stormwater system in the northern catchment is exceeded, stormwater shall be directed to the road reserve of Pioneer Drive.
- 9 All terminal sumps shall be fitted with submerged outlets, capable of retaining at least 60 litres of hydrocarbons.
- The grassed swales shall:
 - a. Be designed in accordance with Christchurch City Council's Waterways, Wetland and Drainage Guide or the Auckland Regional Council's Technical Publication 10 (TP10);
 - b. Be uniformly vegetated with grass at least 50 millimetres in height but no greater than 150 millimetres in height; and
 - c. Drain into a submerged outlet sump as described in Condition (9) of this resource consent.
- The outlet to the bank of Lake Tekapo shall be designed and constructed with appropriate erosion protection to minimise erosion and scour

CERTIFICATION

- At least 10 days prior to the installation of the stormwater system, the consent holder shall submit to the Canterbury Regional Council Attention: Regional Leader Compliance Delivery, the following documents:
 - a. Design plans of the stormwater system to be installed; and
 - b. A certificate signed by a Chartered Professional Engineer (CPEng) with stormwater system design experience to certify that the stormwater system has been designed in accordance with Conditions (5) to (11) of this consent. This CPEng shall also sign a statement confirming that they are competent to certify the engineering work.



Page 3 CRC192694

Within 20 working days of the installation of the stormwater system, a certificate signed by a Chartered Professional Engineer (CPEng) with stormwater system construction experience shall be submitted to the Canterbury Regional Council, Attention: Regional Leader – Compliance Delivery, to certify that the stormwater system has been constructed in accordance with Conditions (5) to (11) of this consent. This CPEng shall also sign a statement confirming that they are competent to certify the engineering work.

WATER QUALITY SAMPLING

- Following the commencement of the discharge via the stormwater system described in Condition (6), water quality sampling shall be undertaken at the following intervals:
 - a. Twice per year for the first two years following the commissioning of the stormwater system; and
 - b. At five yearly intervals thereafter.
- 15 Samples taken in accordance with Condition (14)(a) and (b) shall be taken:
 - a. Following a rainfall event of:
 - i. No less than 8 millimetres in depth; and
 - ii. No greater than 15 millimetres in depth.
 - b. From the mixing zone limit in Lake Tekapo as shown on Plan CRC192694D, attached to and forming part of this resource consent.

Samples shall be taken as soon as practicable after the initiation of the rainfall event and commencement of the discharge to obtain representative samples of first flush concentrations.

Advice Note: If there is no rainfall even that meets the range specified in condition (15)(a), the consent holder shall not be graded non-compliant.

- Samples collected in accordance with Condition (15) shall be analysed for the following contaminants:
 - a. Total copper;
 - b. Total lead;
 - c. Total Zinc; and
 - d. Total Suspended Solids.
- 17 The stormwater discharge shall not:
 - a. Cause conspicuous oil, grease films, scums, foams, floatable or suspended material excluding those of natural origin;
 - b. Result in a noticeable visual change in colour or the land and/or result in degradation of the natural colour by more than 5 Munsell units or 20% change in visual clarity as measured using the black disc method;



Page 4 CRC192694

c. Result in the lake water at the mixing zone limit, as shown on Plan CRC192694D, to exceed the following concentrations:

Limit	Concentration
Total Copper	0.001 milligrams per litre
Total Lead	0.001 milligrams per litre
Total Zinc	0.0024 milligrams per litre
Total Suspended Solids	50 milligrams per litre

- a. Result in the following changes in lake water at the mixing zone limit, as shown on Plan CRC192694D:
 - i. A change in water temperature of more than two degrees Celsius; or
 - ii. pH of lake water being beyond the range of 6.5 to 8.5.
- a. Result in the following changes in lake water at the mixing zone limit, as shown on Plan CRC192694D:
 - i. A change in water temperature of more than two degrees Celsius; or
 - ii. pH of lake water being beyond the range of 6.5 to 8.5.
- Should the results of sampling undertaken in accordance with Condition (16) show that the discharge exceeds the concentration limits specified in Condition (17) of this consent and the discharge is still occurring, the consent holder shall:
 - a. Cease the discharge and undertake changes to the treatment system to reduce the concentration of contaminants in the discharge; and
 - b. Notify Canterbury Regional Council, attention Regional Leader Compliance Delivery within 24 hours of receiving the results.
 - Undertaken further investigations to determine whether the exceedances are as a
 result of the discharges of stormwater from the site and identify the risks to the
 environment from the exceedances; and
 - d. Undertake mitigation measures and actions to prevent further exceedances.
- A report shall be provided within one month of the identification the exceedances to the Canterbury Regional Council, attention Regional Leader Compliance Delivery, which includes but is not limited to information demonstrating the outcomes of investigations and actions undertaken in accordance with Conditions (18)(c) and (d).
- Water quality samples taken in accordance within Conditions (17), (18) and (19) shall be collected and analysed as follows:
 - a. All water quality sampling shall be undertaken by a suitably qualified person with water quality sampling experience or a person trained by a suitably qualified and experienced person:
 - b. Samples provided for laboratory testing shall be analysed using the most appropriate method and by a laboratory that is accredited for that method of analysis by International Accreditation New Zealand (IANZ); and



Page 5 CRC192694

 All results and observations shall be retained by the consent holder and forwarded to the Canterbury Regional Council, attention Regional Leader – Compliance Delivery on request.

INSPECTION AND MAINTENANCE

- The stormwater system shall be maintained by:
 - a. Inspecting the grassed swales, terminal sumps and outlet to the banks of Lake Tekapo at least once every six months;
 - b. Removing any visible hydrocarbons, debris or litter within five working days of the inspection;
 - c. Removing any accumulated sediment in the grassed swale within five working days of the inspection;
 - d. Removing any accumulated sediment in terminal sumps when the sediment occupies more than one quarter of the depth below the invert of the outlet pipe; and
 - e. Repairing any scour or erosion within five working days of the inspection.
- The grassed swales shall be:
 - a. maintained so that grass is in a healthy and uniform state with the exception of seasonal browning off;
 - b. replanted where erosion or die-off has resulted in bare or patchy soil cover; and
 - c. mowed regularly or maintained so that grass is at a minimum length of 50-150 millimetres. Mown grass shall be removed from the grassed swales.
- Any material removed from the devices in accordance with Conditions (21) and (22) shall be disposed of at an appropriate location.

SPILLS

- All practicable measures shall be taken to avoid spills of fuel or any other hazardous substances within the site. In the event of a spill of fuel or any other hazardous substance:
 - a. The spill shall be cleaned up as soon as practicable, the stormwater system shall be inspected and cleaned, and measures shall be taken to prevent a recurrence;
 - b. The Canterbury Regional Council, attention: Regional Leader Compliance Delivery shall be informed within 24 hours of a spill event exceeding five litres and the following information provided:
 - i. The date, time, location and estimated volume of the spill;
 - ii. The cause of the spill;
 - iii. The type of hazardous substance(s) spilled;



Page 6 CRC192694

- iv. Clean up procedures undertaken;
- v. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;
- vi. An assessment of any potential effects of the spill; and
- vii. Measures to be undertaken to prevent a recurrence.

ADMINISTRATION

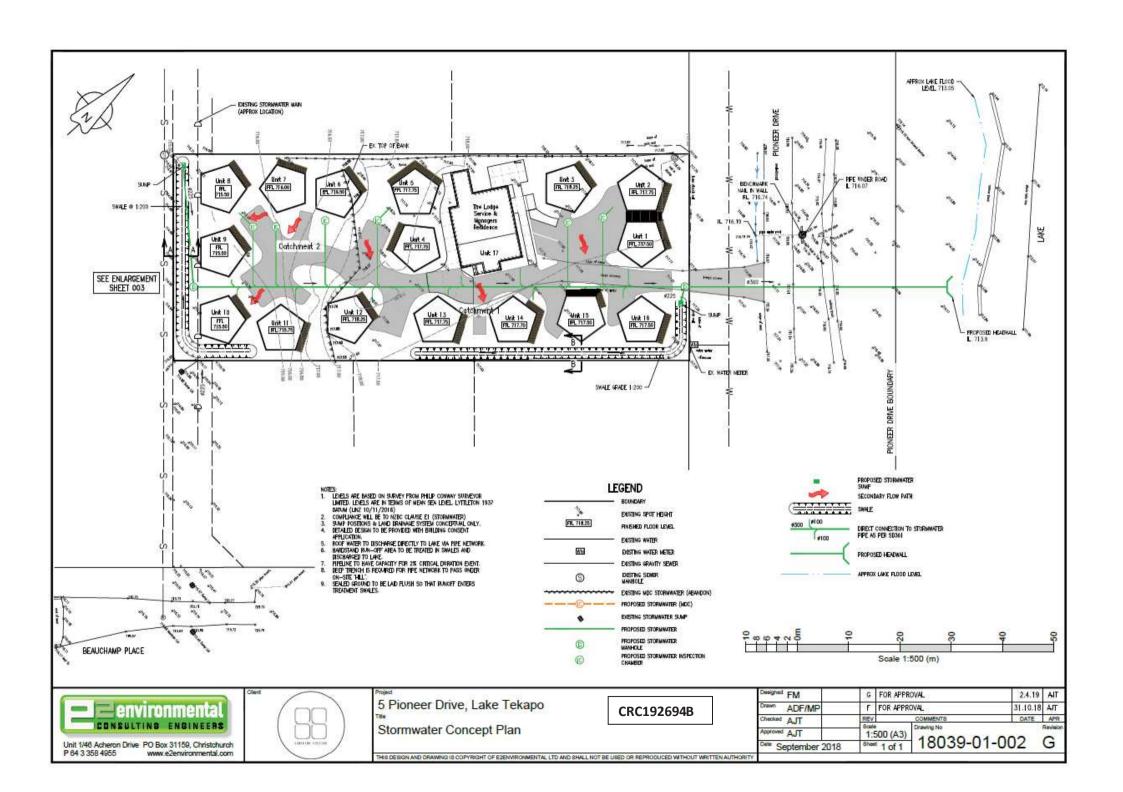
- The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent.
- If this consent is not exercised before 30 June 2024 it shall lapse in accordance with section 125 of the Resource Management Act 1991.

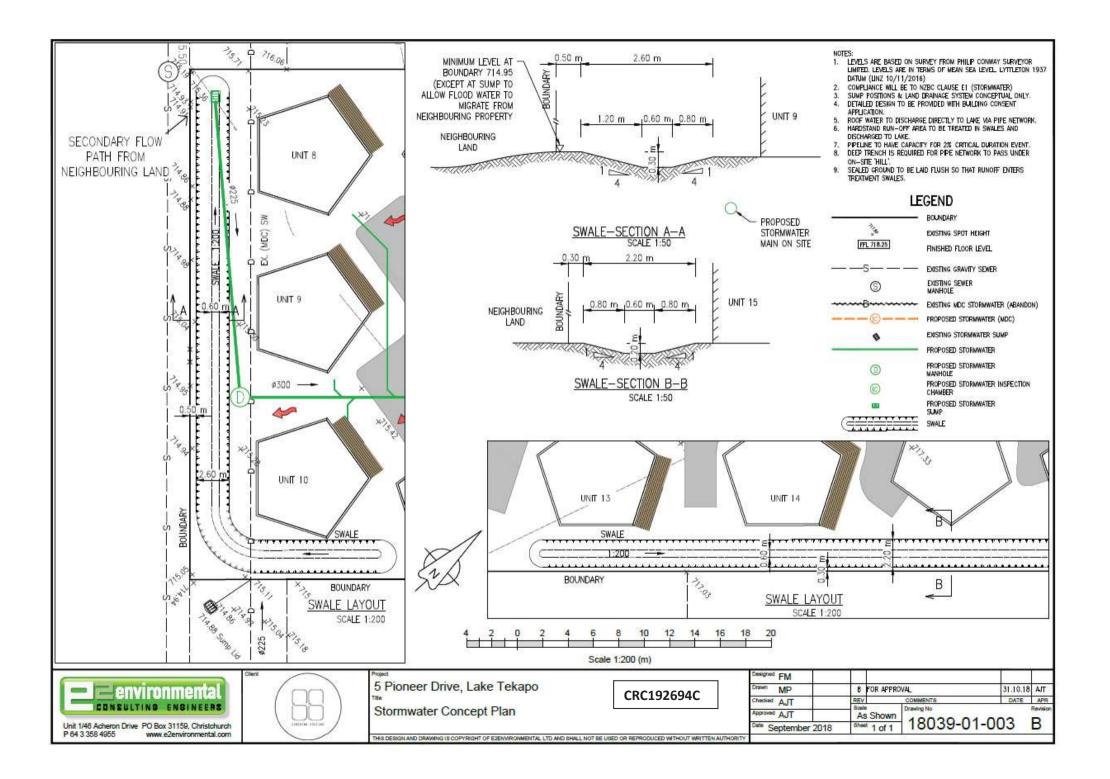
Issued at Christchurch on 17 April 2019

Canterbury Regional Council



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Exercising of resource consent CRC192694

It is important that you notify Environment Canterbury when you first start using your consent.

GRANTED TO: Sunshine Housing 2016 Limited

A DISCHARGE PERMIT (S15): To discharge operational phase stormwater to land and

water.

LOCATION: 5 Pioneer Drive, Tekapo

Even if the consent is replacing a previous consent for the same activity, you need to complete and return this page.

A consent can only be made active after the activity has commenced and all pre-requisite conditions have been fulfilled e.g. installation of water meter and/or fish screen. If you require further advice, please contact our Customer Services section on 0800 324 636 or by email at ecinfo@ecan.govt.nz.

Providing this information will:

- Validate your consent through to its expiry date
- Minimise compliance monitoring charges
- Help provide an accurate picture of the state of the environment.

If consent CRC192694 is not used before 30 June 2024 this consent will lapse and no longer be valid.

Declaration:				
I have started using this resource consent.				
Action taken (e.g. pasture irrigated, discharge from septic tank/boiler/spray booth etc):				
Date I started using this resource consent (Note: this date cannot be in the future):				
Signed:	Date:			
Full name of person signing (please print):				

Please return to:

Business Support Environment Canterbury PO Box 345 Christchurch 8140

Fax: (03) 365 3194

Email: ecinfo@ecan.govt.nz

File: CRC192694 Customer No: EC389675



Sunshine Housing 2016 Limited Attn To: Rong Zhang 5 Wharenui Road Upper Riccarton Christchurch 8041

Customer Services P. 03 353 9007 or 0800 324 636

200 Tuam Street

PO Box 345 Christchurch 8140

E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Dear Sir/Madam

Notice of Resource Consent Decision

Record Number(s): CRC193455

Applicant Name: Sunshine Housing 2016 Limited

Activity Description: To discharge construction phase stormwater to land.

Decision: Granted

Decision

The decision of Environment Canterbury is to grant your application on the terms and conditions specified in the attached resource consent document. The reasons for the decision are:

- 1. The activity is consistent with the policies of the regional plan or national policy statement.
- 2. The activity will achieve the purpose of the Resource Management Act 1991.

Commencement of consent

Your resource consent commences from the date of this letter advising you of the decision.

If you object to or appeal this decision, the commencement date will then be the date on which the decision on the appeal is determined.

Lapsing of consent

This resource consent will lapse if the activity is not established or used before the lapse date specified on your consent document. Application may be made under Section 125 of the Resource Management Act 1991 to extend this period.

Your rights of objection and appeal

Objection to Decision

If you do not agree with the decision of the consent authority, you may object to the whole or any part in accordance with Section 357A(1)(g) of the Resource Management Act 1991 (RMA).

Notice of any objection must be in writing and lodged with Environment Canterbury within 15 working days of receipt of this decision in accordance with Section 357C(1) of the RMA.

Right to Appeal

You may appeal the decision of the consent authority to the Environment Court in accordance with section 120 of the RMA. The notice of appeal must be lodged with the Court within 15 working days of receipt of this decision, at PO Box 2069, Christchurch. A copy of the appeal should also be forwarded to Environment Canterbury within the same timeframe.

If you are in any doubt about the correct procedures, you should seek legal advice.

Objection to Costs

Section 357B of the RMA allows you to object to costs. Your objection must be received **within 15 working days** of the date on which you receive your invoice. Your objection must be in writing and should clearly explain the reasons for your objection as detailed in section 357C of the RMA.

Monitoring of conditions

It is important that all conditions of consent are complied with, and that the consent holder continues to comply with all conditions, to ensure that the activity remains lawfully established.

You can find online Information regarding the monitoring of your consent at www.ecan.govt.nz/monitoringconsent.pdf.

Charges, set in accordance with section 36 of the Resource Management Act 1991, shall be paid to the Regional Council for the carrying out of its functions in relation to the administration, monitoring and supervision of resource consents and for the carrying out of its functions under section 35 of the Act.

Further information about your consent

For some activities a report is prepared, with officer recommendations, to provide information to the decision makers. If you require a copy of the report please contact our Customer Services section. You can find online information about your consent document at www.ecan.govt.nz/yourconsent.pdf.

Queries

For all queries please contact Customer Services Section quoting your CRC number noted above.

Thank you for helping us make Canterbury a great place to live

Yours sincerely

Consents Planning Section

cc: e2Environmental Limited Attn To: Andrew Tisch PO Box 31159 Ilam

Christchurch 8444

RESOURCE CONSENT CRC193455

Pursuant to Section 104 of the Resource Management Act 1991

The Canterbury Regional Council (known as Environment Canterbury)

GRANTS TO: Rong Zhang, Sunshine Housing 2016 Limited

A DISCHARGE PERMIT (S15): To discharge construction phase stormwater to land.

COMMENCEMENT DATE: 17 Apr 2019

EXPIRY DATE: 17 Apr 2024

LOCATION: 5 Pioneer Drive, Tekapo

SUBJECT TO THE FOLLOWING CONDITIONS:

LIMITS

- The discharge authorised under this resource consent shall be limited to the discharge of sediment-laden stormwater from exposed areas during site works within the site located at 5 Pioneer Drive, Tekapo and the stormwater outfall to Lake Tekapo. Legally described as Section 4 Block I Tekapo Village labelled as "Site" on Plan CRC193455A, attached to and forming this consent.
- 2 Construction phase stormwater shall be discharged into land at the site described in Condition (1) as far as practicable.
- Any construction phase stormwater not discharged to land in accordance with Condition (2) above, shall be discharged to:
 - The Mackenzie District Council reticulated stormwater network located within the road reserve of Pioneer Drive;
 - The bank of Lake Tekapo via sealed pipe system located at or about NZTM 2000 1398599mE, 5124451mN

As shown on Plan CRC193455B, attached to and forming part of this resource consent.

- 4 All discharges beyond the site boundary as provided for in Condition (3) shall not at any time result in the production of any:
 - a. Conspicuous oil or grease film, scum or foam;
 - b. Floatable or suspended materials;
 - c. A change in visual clarity (a change shall be defined as a change greater than 5 Munsell units or 20% visual clarity) at the mixing zone limit in Lake Tekapo, as shown on Plan CRC193455C, attached to and forming part of this resource consent.



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In the event water quality samples are required to be taken in accordance with condition (15)(b)(iii) of this consent, the concentration of Total Suspended Solids at the mixing zone limit shall not exceed 50 milligrams per litre.

During works, all practicable measures shall be taken to minimise discharges of construction-phase stormwater run-off, sediment and dust beyond the boundaries of the site.

PRIOR TO THE COMMENCEMENT OF WORKS

- At least one month prior to commencement of each infrastructure project the Consent Holder or their agent shall arrange and conduct a pre-construction site meeting between the Canterbury Regional Council and all relevant parties, including the primary contractor. At a minimum, the following shall be covered at the meeting:
 - a. Scheduling and staging of the works, including the proposed start date;
 - b. Responsibilities of all relevant parties;
 - c. Contact details for all relevant parties;
 - d. Expectations regarding communication between all relevant parties;
 - e. Procedures for implementing any amendments;
 - f. Site inspection;
 - g. Confirmation that all relevant parties have copies of the contents of this consent document and all associated erosion and sediment control plans and methodology; and
 - h. Methods for resolution of non-compliance with the conditions of this consent
- 8 Prior to the works described in Condition (1) the Consent Holder shall ensure that all personnel working on the site are made aware of and have access to this consent document and all associated erosion and sediment control plans and methodology.

EROSION AND SEDIMENT CONTROL PLAN

- The discharges during the construction-phase of the development shall occur in accordance with the Erosion and Sediment Control Plan (ESCP).
 - a. The ESCP shall detail the sediment control measures that will be taken to ensure compliance with this consent.
 - b. The ESCP shall be prepared in accordance with:
 - Environment Canterbury's "Erosion and Sediment Control Toolbox for the Canterbury Region" (ESCT), which can be accessed under http://esccanterbury.co.nz/; or



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ii. An equivalent industry guideline. If an alternative guideline is used, the ESCP shall provide details of the relevant alternative methods used and an explanation of why they are more appropriate than the ESCT.

- 10 The ESCP shall include, but not be limited to:
 - a. A map showing the location of all works;
 - b. Detailed plans showing the location of sediment control measures, on-site catchment boundaries, and sources of runoff;
 - c. Drawings and specifications of designated sediment control measures;
 - d. A programme of works, which includes but is not limited to, a proposed timeframe for each stage of the works and the earthworks methodology;
 - e. The management of any stockpiled material;
 - f. Inspection and maintenance of the sediment control measures;
 - g. Sampling procedures and protocols;
 - h. Defined discharge points where stormwater leaves the site;
 - i. The description of dust mitigation to be used and details of best practicable options to be applied to mitigate dust and sediment discharge beyond the site boundary;
 - j. The methodology for stabilising the site if works are abandoned; and
 - k. The methodology for stabilising the site and decommissioning erosion and sediment control measures after works have been completed.
- The ESCP shall be submitted to the Canterbury Regional Council, Attention: Regional Leader Compliance Delivery, at least ten working days prior to works commencing, for certification that it complies with Environment Canterbury's Erosion and Sediment Control Toolbox for the Canterbury Region and the conditions of this consent.
 - a. The discharge shall not commence until certification has been received from the Canterbury Regional Council that the ESCP is consistent with the ESCT and the conditions of this resource consent.
 - b. Notwithstanding Condition (11)(a), if the ESCP has not been reviewed and/or certified within ten working days of the Regional Leader Compliance Delivery receiving the ESCP, the discharge may commence.
- 12 The ESCP may be amended at any time. Any amendments shall be:
 - a. Only for the purpose of improving the efficacy of the erosion and sediment control measures and shall not result in reduced discharge quality; and
 - b. Consistent with the conditions of this resource consent; and



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c. Submitted in writing to the Canterbury Regional Council, Attention: Regional Leader Compliance Delivery, prior to any amendment being implemented.

DISCHARGE SAMPLING AND PROTOCOL

- During a discharge of construction phase stormwater, where a discharge to the bank of Lake Tekapo is occurring, the discharge point to Lake Tekapo shall be visually assessed for any sheen, oil, grease, odour or water clarity change at least twice per day when a construction phase stormwater discharge is occurring from the site.
- If the visual assessment and observations taken in accordance with Condition (13) indicates a sheen, oil, grease, odour or decrease in water clarity the consent holder shall undertake water quality monitoring in accordance with Condition (15) to ensure compliance with Conditions (4)(c) and (5).
- 15 Sampling required under Condition (14) shall be conducted using the following protocol:
 - a. The change in visual clarity shall be measured outside of the mixing zone and at the mixing zone limit, as shown on Plan CRC193455C. The samples shall be compared and the absolute percentage change in clarity between the two samples recorded.
 - b. If the reduction in water quality is greater than 20 percent or 5 Munsell Units:
 - i. The consent holder shall cease the discharge of construction phase stormwater to the bank of Lake Tekapo;
 - ii. The consent holder shall identify the cause of the reduction in water clarity and improve erosion and sediment control measures to remediate the source of sediment. A further water clarity measurement shall be taken in accordance with Condition (15)(a) following remediation; and
 - iii. If the second water clarity measurement is greater than 20 percent or 5 Munsell Units, a sample shall be taken at the mixing zone limit, as shown on Plan CRC193455C, and analysed for Total Suspended Solids in accordance with Condition (17) and assessed against Condition (5).
 - c. A record shall be kept that includes the following information:
 - i. The time the samples were taken;
 - ii. The water clarity samples and percentage change between the sampling sites outside of the mixing zone and at the mixing zone limit; and
 - iii. Any laboratory test results obtained.
- Should the results of sampling undertaken in accordance with Condition (15)(b)(iii) show that the discharge exceeds the concentration limits specified in Condition (5) of this consent and the discharge is still occurring, the consent holder shall:



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 a. Cease the discharge and undertake changes to the treatment system to reduce the concentration of Total Suspended Solids in the discharge to that specified in Condition (5); and

- b. Notify Canterbury Regional Council, attention Regional Leader- Compliance Delivery within 24 hours of receiving the results; and
- c. Undertake further comparative analysis until compliance with the limits can be achieved.
- 17 Water quality samples taken in accordance within Conditions (15) shall be collected and analysed as follows:
 - a. All water quality sampling shall be undertaken by a suitably qualified person with water quality sampling experience;
 - b. Samples provided for laboratory testing shall be analysed using the most appropriate method and by a laboratory that is accredited for that method of analysis by International Accreditation New Zealand (IANZ); and
 - All results and observations shall be retained by the consent holder and forwarded to the Canterbury Regional Council, attention Regional Leader- Compliance Delivery on request.

DURING CONSTRUCTION WORKS

- 18 Erosion and sediment control measures shall be inspected at least once per day, as well as following any rainfall event that results in more than five millimetres of rainfall at the site. Any accumulated sediment shall be removed, and repairs made, as necessary, to ensure effective functioning of devices. Records of any inspections shall be kept and provided to the Canterbury Regional Council on request.
- If the consent holder abandons work on-site, adequate preventative and remedial measures shall be taken to control sediment discharged exposed or unconsolidated surfaces. These measures shall be maintained for so long as necessary to prevent sediment discharges from the earth worked areas.
- The erosion and sediment control measures shall not be decommissioned until the site is stabilised and the stormwater system for the developed site is functioning.

 Decommissioning measures shall be undertaken in the following order:
 - a. All disturbed areas shall be stabilised and/or re-vegetated as soon as practicable following completion of the works;
 - b. Any visible debris, litter, sediment and hydrocarbons shall be removed from all sediment control measures; and



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c. Erosion and sediment control measures shall be removed.

SPILLS

- All practicable measures shall be taken to avoid spills of fuel or any other hazardous substances within the site.
 - a. In the event of a spill of fuel or any other hazardous substance, the spill shall be cleaned up as soon as practicable, the area of the spill shall be inspected and cleaned and measures taken to prevent a recurrence;
 - b. The Canterbury Regional Council, Attention: Regional Leader-Compliance Delivery, shall be informed within 24 hours of a spill event and the following information provided:
 - i. The date, time, location and estimated volume of the spill;
 - ii. The cause of the spill;
 - iii. The type of hazardous substance(s) spilled;
 - iv. Clean up procedures undertaken;
 - v. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;
 - vi. An assessment of any potential effects of the spill; and
 - vii. Measures to be undertaken to prevent a recurrence.

ADMINISTRATION

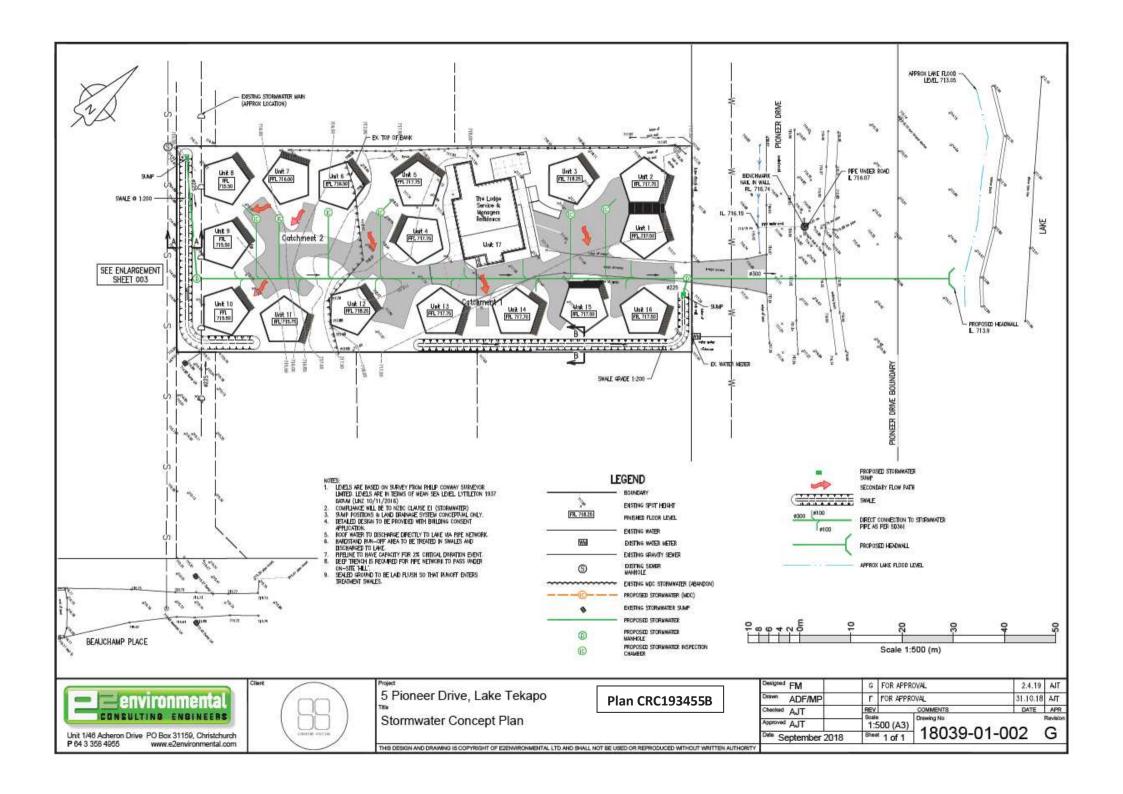
The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent.

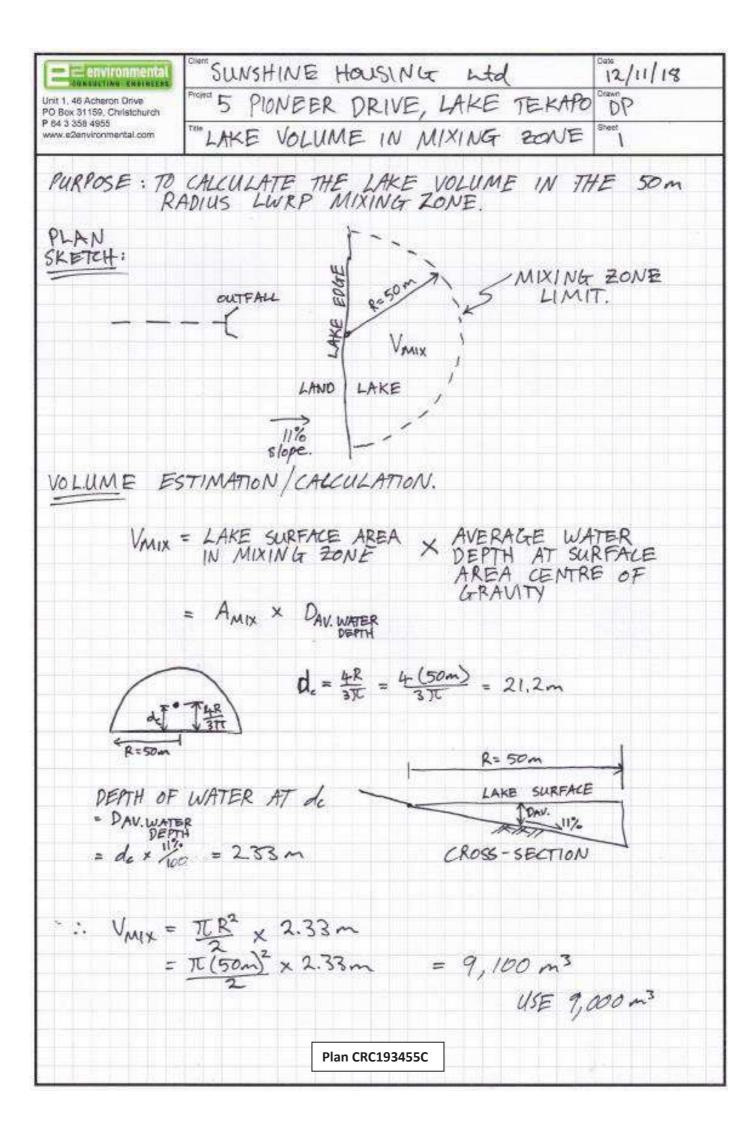
Issued at Christchurch on 17 April 2019

Canterbury Regional Council



4		Information has been derived from various organisations, including Environment Contenbury and the Centerbury Maps partners. Boundary information is derived under license from LINZ Digital Cadastral Database (Crown Copyright Reserved). Environment 0 0,0095	0.019 0.0285 0.038
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Exercising of resource consent CRC193455

It is important that you notify Environment Canterbury when you first start using your consent.

GRANTED TO: Sunshine Housing 2016 Limited

A DISCHARGE PERMIT (S15): To discharge construction phase stormwater to land.

LOCATION: 5 Pioneer Drive, Tekapo

Even if the consent is replacing a previous consent for the same activity, you need to complete and return this page.

A consent can only be made active after the activity has commenced and all pre-requisite conditions have been fulfilled e.g. installation of water meter and/or fish screen. If you require further advice, please contact our Customer Services section on 0800 324 636 or by email at ecinfo@ecan.govt.nz.

Providing this information will:

- Validate your consent through to its expiry date
- Minimise compliance monitoring charges
- Help provide an accurate picture of the state of the environment.

If consent CRC193455 is not used before 17 April 2024 this consent will lapse and no longer be valid.

Declaration:							
I have started using this resource consent.							
Action taken (e.g. pasture irrigated, discharge from septic tank/boiler/spray booth etc):							
Date I started using this resource consent (Note: this date cannot be in the future):							
Signed:	Date:						
Full name of person signing (please print):							

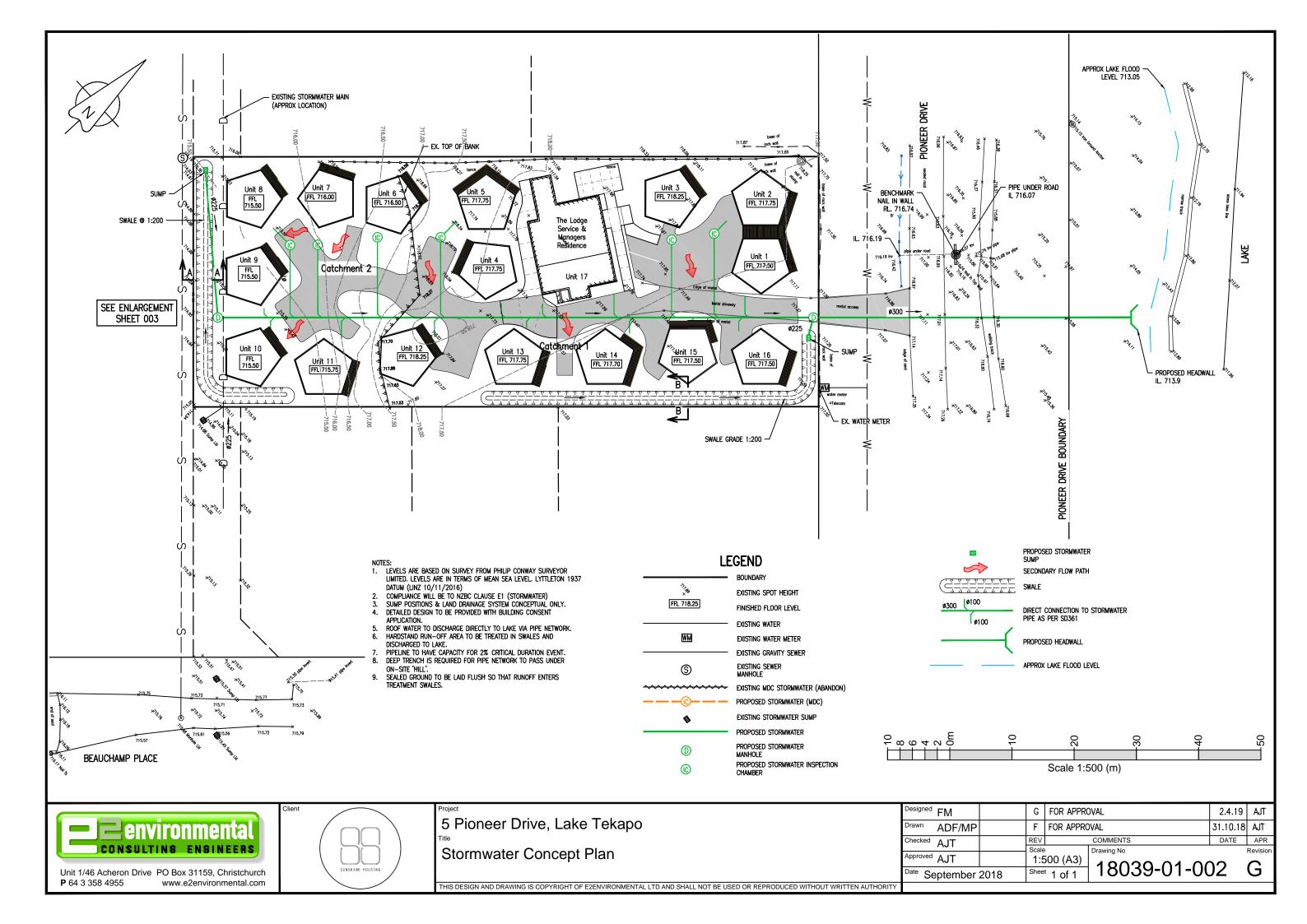
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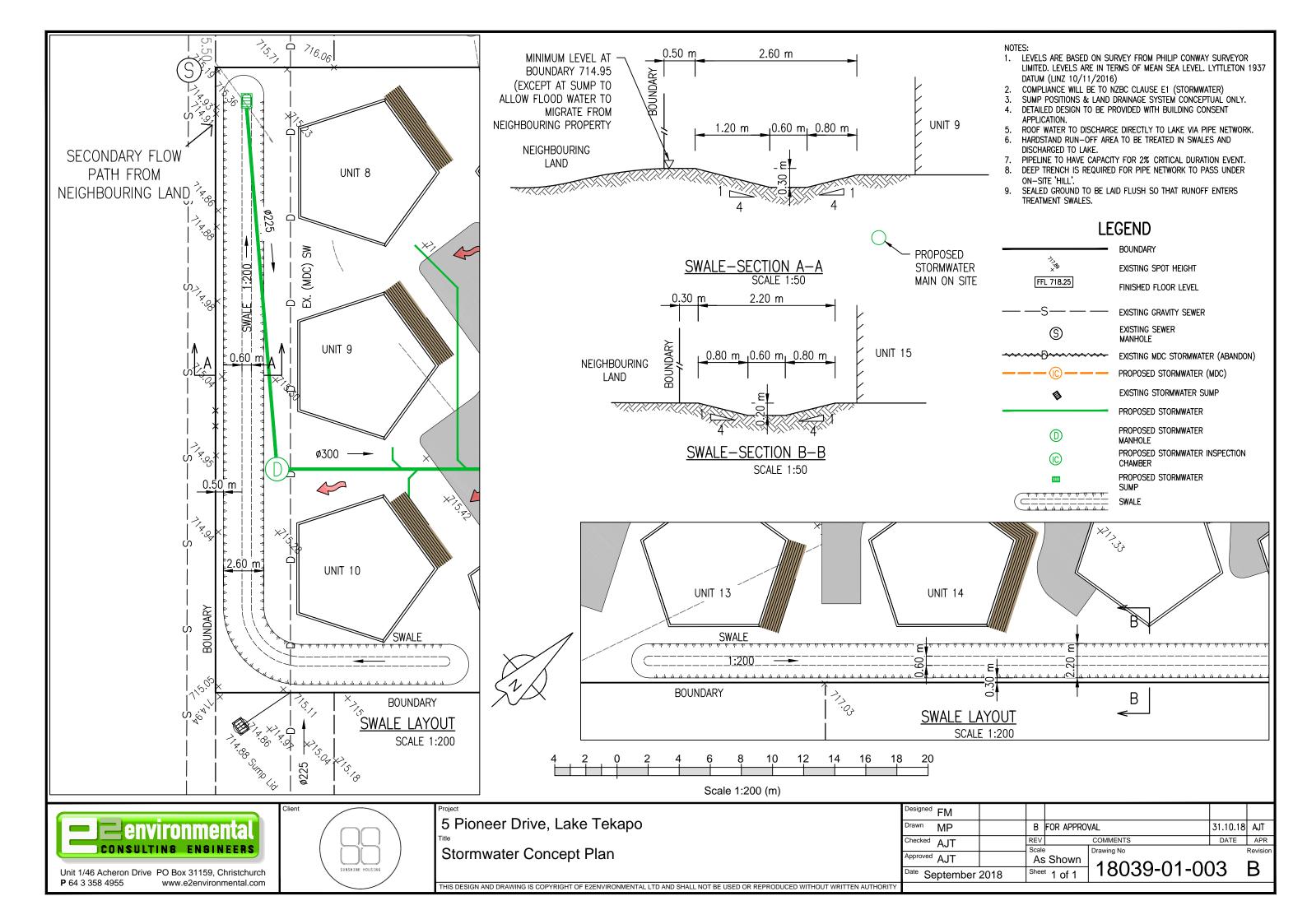
Business Support Environment Canterbury PO Box 345 Christchurch 8140

Fax: (03) 365 3194

Email: ecinfo@ecan.govt.nz

File: CRC193455 Customer No: EC389675





TSG <TSG@chorus.co.nz> From:

Sent: Wednesday, 29 August 2018 2:09 p.m. farah.mehr@e2environmental.com To:

Chorus Simple Estimate | LTK48057 - LTK: 5 Pioneer Drive, Lake Tekapo. 18 Subject:

Units

Good afternoon Farah.

Thank you for providing an indication of your development plans in this area. I can confirm that we have infrastructure in the general land area that you are proposing to develop. Chorus will be able to extend our network to provide connection availability. However, please note that this undertaking would of course be subject to Chorus understanding the final total property connections that we would be providing, roll-out of property releases/dates and what investment may or may not be required from yourselves and Chorus to deliver the infrastructure to and throughout the site in as seamless and practical way as possible.

The cost involved would be a minimum of our current standard fee of \$1200 per unit excluding GST. This cost can only be finalised at the time that you are ready to proceed with the 1st stage.

Chorus is happy to work with you on this project as the network infrastructure provider of choice. What this ultimately means is that the end customers (business and home owners) will have their choice of any retail service providers to take their end use services from once we work with you to provide the physical infrastructure.

Please reapply with a detailed site plan when you are ready to proceed.

Thanks,

Matt Lock

Network Services Coordinator

T 0800 782 386 (opt. 1) E TSG@Chorus.co.nz

PO Box 9405 Hamilton www.chorus.co.nz













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From: Richard Webb [mailto:Richard.Webb@alpineenergy.co.nz]

Sent: Monday, 27 August 2018 1:23 p.m.

To: 'Farah Mehr' <farah.mehr@e2environmental.com>

Cc: Damon Smith < damonsmithy@gmail.com>; Hayden Darling < Hayden.Darling@alpineenergy.co.nz>

Subject: RE: b4 6551951 Pioneer Drive

Thanks for your reply. With that information (16 additional 60amp supplies required) Alpine Energy are currently unable to supply this installation without significant remedial work to the infrastructure.

At a quick glance the possible works that appear to be required will include:

An increase in transformer size.

A new low voltage cable will be required to be installed from the transformer to the property boundary A new distribution box(s) will be required.

As the planning / quotation and physical construction can be a lengthy process (3 – 6 months) we invite your client's or their electrician's formal request for power as soon as practical to allow the process to commence.

Kindest regards

Richard.

Richard Webb | Team Leader - New Connections | Network Design and Project Manager Alpine Energy Ltd | 31 Meadows Road | PO Box 530 | Timaru 7940 | New Zealand : +64 3 6874300 | Mobile +64 027 4441222



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Mackenzie District Council

2 August 2018

Sunshine Housing (2016) Limited C/- Novo Group Limited PO Box 365 Christchurch 8140 Attn: Andrew Fitzgerald

Dear Andrew,

REQUEST FOR FURTHER INFORMATION AND REQUEST TO COMMISION A REPORT RESOURCE CONSENT NO: RM180111 SUNSHINE HOUSING (2016) LIMITED

Thank you for your application for a land use consent to construct 16 new visitor accommodation units at 5 Pioneer Drive, Lake Tekao Council reference RM180111.

Pursuant to section 92 of the Resource Management Art 1991 (the Act), the Council now requests further information in respect of your application to help us better understand your proposed activity, its effects on the environment and ways any adverse effects on the environment may be mitigated.

The information required is detailed below:

- 1. A Servicing Plan that outlines the intended method of storm water disposal and how the development will be supplied with connections to Councils reticulated water and wastewater supply, including the expected discharge and additional loading. Mr Andy Hall, a consultant engineer at Davie Lovell Smith has reviewed the application and also has the following questions/comments in terms of servicing;
 - a. What are the storm water and wastewater demands and anticipated disposal;
 - b. Information is required in terms of secondary flow paths;
 - c. What are the water supply demands;
 - d. How will the development be connected to power and telecommunications systems;
- 2. A Fire Management Plan that outlines how the applicant intends to address fire hazards on the site. Can you also provide confirmation that the access is suitable for emergency vehicles in terms of New Zealand Fire Service Guidelines:
- 3. The maximum occupancy of the additional visitor accommodation unit attached to the service centre. A internal layout plan of the service centre and visitor accommodation unit;
- 4. The colour palette to be used for the exterior cladding and roofing;
- 5. The pavement finishes and the standards for the design of pavement depths; and

6. Disabled carparks are to be provided and marked. Mr Hall also has the following questions/comments in terms of carparking and access;

a. Sufficient gueuing and access width is required for each carpark; and

b. Does the main central route allow for cars to pass.

It is noted that if you have any questions in terms of servicing and access could you please contact Mr Hall on the contact details below:

Phone: 021 663 856

Email: Andy.Hall@dls.co.nz

In accordance with section 92(2) of the Act the Council also requests to commission Jeremy Head to peer review the Landscape Assessment prepared by Rough and Milne Landscape Architects Limited. Please note that in accordance with Section 88C of the Act, the processing 'clock' will stop from 2 August 2018, until such time as this request to commission a report and further information has been satisfied.

Responding to this request

Pursuant to section 92A and Section 92B of the Act, within 15 working days from the receipt of this letter you must either:

 provide the requested information and written notice outlining whether the applicant agrees to the commissioning of the report; or

• provide written confirmation that you cannot provide the requested information within the timeframe, but do intend to provide it; or

 provide written confirmation that you do not agree to provide the requested information or agree to the commissioning of a report.

If you cannot provide the requested information within this timeframe, but do intend to provide it, then please provide:

written confirmation that you can provide it, and;

the likely date that you will be able to provide it by.

The Council will then set a revised timeframe for the information to be provided.

If you do not provide the requested information or agree to commission a report, then your application will be publicly notified in accordance with section 95C of the Act.

Please do not hesitate to contact me on the details below if you have any questions or concerns regarding the above request or the further processing of the application.

Kind Regards

Willox

Rachael Willox

RESOURCE MANAGEMENT PLANNER - CONSENTS

REF: RM180111 Phone: (03) 685 9010

Email: rachael@mackenzie.govt.nz

e2environmental Ltd.

46 Acheron Drive
PO Box 31159
Christchurch NZ
http://www.e2environmental.com