Applicant Information Form 1aNotified or Non-notified Process



Is this the right application form for me?

This **Applicant Information Form 1a** – Notified or Non-notified Process must be completed for **the following longer term applications** (i.e. not one-off applications):

- Grazing
- Land use: Tenanting and/or using existing DOC facility/structure
- Land use: Use of public conservation land for private commercial facility/structure
- Guiding/Tourism/Recreation: Watercraft activities
- Filming
- Sports events
- Marine reserves application form 11a: Structure in a marine reserve

For other activities use the specific activity application forms that combine applicant and activity information or book a pre-application meeting.

How do I complete this applicant information form?

- Complete all sections of this applicant information form.
- In addition, you must complete the activity application form/s that you wish to undertake.
- DOC encourages electronic applications (e.g. typed Word document), rather than handwritten
 applications. Electronic applications are easier to read and less likely to be returned to you for
 clarification.
- If you need extra space, attach or include extra documents and label them according to the relevant section. Record all attachments in the table at the back of the application information form section
 F Attachments.

How do I submit my application?

Email the following to permissions@doc.govt.nz:

- Completed applicant information form 1a
- Completed activity application form
- Any other relevant attachments.

If I need help, where do I get more information?

Check the <u>DOC webpage for the activity you are applying</u>¹ for.

https://www.doc.govt.nz/get-involved/apply-for-permits/apply-for-a-permit/

- Arrange a pre-application meeting (either face to face or over the phone) by contacting the <u>Department of Conservation Office</u>² closest to where the activity is proposed. You can use <u>DOC maps</u>³ to identify which District Office you should contact. Or arrange a meeting with any of our <u>four offices that process concessions</u>⁴ – choose the one closest to where the activity is proposed.
- If your application covers multiple districts, contact the office nearest most of the locations you are applying for, or nearest to locations you have a specific question about.

What happens next?

Once your application forms are received, your application will be assessed by DOC. If your application is complete, DOC will begin processing.

If your application is incomplete it will be returned to you for more information.

Why does DOC ask for this information?

The questions in this application information form and the activity application form/s are designed to cover the requirements set out in conservation legislation. Your answers allow us to assess:

- Your most up-to-date details so that DOC can contact you about your application.
- Your qualifications, resources, skills and experience to adequately conduct the activity on public conservation land.
- Your creditworthiness will help determine whether DOC should extend credit to you and set up a
 DOC customer accounts receivable credit account for cost recovery. To make this assessment
 DOC will supply your information to a credit checking agency.

Note:

- Personal information will be managed by DOC confidentially. For further information check <u>DOC's privacy and security statements</u>⁵.
- Information collected by DOC will be supplied to a debt collection agency in the event of non-payment of payable fees.

What fees will I pay?

You may be required to pay a **processing fee** for this application regardless of whether your application is granted or not. You may request an estimate of the processing fees for your application. If you request an estimate, DOC may require you to pay the reasonable costs of the estimate prior to it being prepared. DOC will not process your application until the estimate has been provided to you. In addition, if you are granted a guiding concession on public conservation land you may be required to pay annual **activity and management fees**. These fees are listed on the <u>DOC webpage for the activity you are applying</u>⁶ for.

DOC will invoice your processing fees after your application has been considered. If your application is large or complex, DOC may undertake billing at intervals periodically during processing until a decision is made. If you withdraw your application DOC will invoice you for the costs incurred up to the point of your withdrawal.

² www.doc.govt.nz/footer-links/contact-us/office-by-name/

http://maps.doc.govt.nz/mapviewer/index.html?viewer=docmaps

⁴ https://www.doc.govt.nz/get-involved/apply-for-permits/contacts

⁵ https://www.doc.govt.nz/footer-links/privacy-and-security/

⁶ https://www.doc.govt.nz/get-involved/apply-for-permits/apply-for-a-permit/

Your application will set up a credit account with DOC. See the checklist at the end of the form for the terms and conditions you need to accept for a DOC credit account.

Will my application be publicly notified?

Your application will be publicly notified if:

- It is a license with a term of more than 10 years.
- It is a lease.
- After having regard to the effects of the activity, DOC considers it appropriate to do so.

Public notification will increase the time and cost of processing of your application.

What does DOC require if my application is approved?

If your application is approved DOC requires:

- **Insurance** to indemnify the Minister of Conservation against any claims or liabilities arising from your actions. The level of insurance cover will depend on the activity.
- A copy of your safety plan audited by an external expert (e.g. Health and Safety in Employment (Adventure Activity) Regulations 2011 audit or a DOC listed organisation). See the <u>Safety Plan</u>⁷ information on the DOC website for further information.

Note: DOC/Minister can vary the concession if the information on which the concession was granted contained material inaccuracies. DOC may also recover any costs incurred.

https://www.doc.govt.nz/get-involved/apply-for-permits/managing-your-concession/safety-plans/

A. Applicant details

		☐ Individua	I (Go to 1)					
Legal status of applicant		Registered company (Go to 2)			☐ Trust (Trust (Go to 2)		
(tick	9				Other (Go to 2)	Other e.g. Educational institutes Go to ②)		
0	Applicant name (ind	lividual)						
	Phone	M	obile pho	one				
	Email							
	Physical address					Post	code	
	Postal address (if di from above)	fferent				Poste	code	
2	Applicant name (full name of register trust, incorporated sother)		University of O	tago				
	Trading name (if different from app	licant name)						
	NZBN if applicable (thttps://www.nzbn.go			Compa incorp society registr numbe	/ ation			
	Registered office of incorporated society							
	Company phone		0800 80 80 98	Compa	ny website	https:	//www.otago.ac.nz	
	Contact person and i	ole	Kevin Wood, St	rategic R	esource Pla	nner		
	Phone		03 470 4607	Mobile phone				
	Email		Kevin.wood@otago.ac.nz					
	Postal address		PO Box 56, Dunedin		Post	code	9054	
	Street address (if different from postal address)		111 Albany Street, Dunedin		din Post	code	9016	

B. Pre-application meeting			
Have you had a pre-application meeting or spoken to	to someone in DOC?		
No			
Yes			
If yes record the:			
Date of DOC pre-application meeting Name of DOC staff member			
C. Activity applied for			

Tick the **activity application form** applicable to the activity you wish to undertake on public conservation land. Complete the applicant information form and the activity application form and email them with any attachments to permissions@doc.govt.nz

ACTIVITY APPLICATION FORM*	FORM NO.	TICK
Grazing	2a	
Land use: Tenanting and/or using existing DOC facility/structure	3a	
Land use: Use of public conservation land for private/commercial facility/structure	3b	X
Guiding/Tourism/Recreation: Watercraft activities	4b	
Filming	5a	
Sporting Events	6a	
Marine reserves application form: Structure in a marine reserve	11a	
Other activities (not covered in the above forms or in the new activity application forms that combine applicant and activity information)	7a	

Note: If the activity is not in this list check the activity on the DOC website to find the correct application form or book a pre-application meeting. Application forms that combine applicant and activity information on the DOC website include:

- Aircraft activities⁸
- Easements⁹
- Land based guiding¹⁰

⁸ https://www.doc.govt.nz/get-involved/apply-for-permits/business-or-activity/aircraft-activities/

https://www.doc.govt.nz/get-involved/apply-for-permits/business-or-activity/access-easements/

¹⁰ https://www.doc.govt.nz/get-involved/apply-for-permits/business-or-activity/land-based-guided-activities/

D.	Are you applying for	anything else?
Are	you submitting any other application	on forms in relation to this application?
No		
Ye	S.F. Mark Land Land Land	
•	If yes, state which application form	s:
Ε,	Background experien	ce of applicant
Provi previ	de relevant information relating to	o your ability to carry out the proposed activity (e.g. details of professional organisations, and relevant qualifications).
Th	e application is to allow the constru ovide electricity for a physic resear	uction of both a solar panel array and a backup diesel generator to ch station that was established in the 1960s.
Ge	source consent for construction of teneration District Plan. The Universervation for this process.	the solar panels is required under the Dunedin City Council second ersity also requests written permission from the Department of

F. Attachments

Attachments should only be used if there is:

- Not enough space on the form to finish your answer
- You have additional information that supports your answer
- You wish to make an additional request of DOC regarding the application.

Label each document clearly and complete the table below.

Section of the application form the attachment relates to	Document title	Document format (e.g. Word, PDF, Excel, jpg etc.)	Description of attachment
E	AEE	PDF	Application to Dunedin CC

G. Checklist

Application checklist	Tick
I have completed all sections of this applicant information form relevant to my application and understand that the form will be returned to me if it is incomplete.	
I certify that the information provided in this applicant information form, and any attached additional forms is, to the best of my knowledge, true and correct.	
I have completed the activity application form.	
I have appropriately labelled all attachments and completed section F Attachments.	
will email <u>permissions@doc.govt.nz</u> my:	

H. Terms and conditions for a credit account with the Department of Conservation

Have you held an ac Department of Cons		Tick			
No					
Yes					
If 'yes' under what nar	ne	Universit	y of Ota	go	
	st and placing your names and conditions for				
Terms and conditions					Tick
	ortment of Conservation calcking Agency to enable it				\boxtimes
I/We agree that any chan management or control o notified in writing to the D effective.	f the applicant's company	(as detailed in th	is applica	tion) will be	\boxtimes
I/We agree to notify the D of the date of the invoice.		on of any disputed	d charges	within 14 days	\boxtimes
I/We agree to fully pay the the due date.	e Department of Conserv	ation for any invo	ice receive	ed on or before	\boxtimes
I/We agree to pay all cost recover any money owing		rest, legal costs a	nd debt re	ecovery fees) to	\boxtimes
I/We agree that the credit withdrawn by the Departn credit account are not me	nent of Conservation, if ar				\boxtimes
I/We agree that the Depar Debt Collection Agency in				Department's	\boxtimes
Typed applicant name/s	Kevin Wood		Date	24 May 2021	
For Departmental use					
Credit check completed					
Comments:					
Signed			Name		
Approved (Tier 4 manage or above)			Name		



Concession Application Form 3b – Private/commercial facility/structures

The Department recommends that you contact the Department of Conservation Office closest to where the activity is proposed to discuss the application prior to completing the application forms. Please provide all information requested in as much detail as possible. Applicants will be advised if further information is required before this application can be processed by the Department.

This form is to be used when the proposed activity is the building or use of any private or commercial facility or structure on public conservation land managed by the Department of Conservation. Examples may include lease of land to erect an information centre; authorisation to erect a weather station; or construct or lease a private/commercial campground or lodge. This form is to be completed in conjunction with either Applicant Information Form 1a (longer term concession) or Applicant Information Form 1b (one-off concession) as appropriate.

Please complete this application form, attach Form 1a or Form 1b, and any other applicable forms and information and send to permissions@doc.govt.nz. The Department will process the application and issue a concession if it is satisfied that the application meets all the requirements for granting a concession under the Conservation Act 1987.

If you require extra space for answering please attach and label according to the relevant section.

A. Description of Activity

Please describe the proposed activity in detail – where the site is located, please use NZTM GPS coordinates where possible, what you intend to use the building for, whether you intend to make any changes to the infrastructure.

Please include the name and status of the public conservation land, the size of the area for which you are applying and why this area has been chosen.

If necessary, attach further information including a map, a detailed site plan and drawings of proposal and label Attachment 3b:A.

The University of Otago established a physics research station at Swampy Summit in the 1960s. It has been operating continuously since that time.

The research station's building is located at NZTM 1404003.85E 4926509.16N. The proposed concession would be approximately 3.2 hectares in size and be located in the Silverpeaks Scenic Reserve (appellation Section 1 SO 24331). The land was acquired for a Reserve - New Zealand Gazette 1996 p 3360 and vested in the Crown.

The University was informed by the Airways Corporation, who own the infrastructure that supplies power to the University Building, their infrastructure was at end of life. To continue operation the University is proposing a new off grid power supply, a combination of solar panels with battery storage and a small back up diesel generator, is constructed. The solar panels will be located north of the existing physics shed and the above ground diesel tanks to the south. For safety and operational reasons the research building and solar panel array parts of the concession will be exclusive possession.

Images, drawings, and photos are provided in Attachment 3b:A.

B. Alternative sites considered

If your application is to **build**, **extend or add** to any permanent or temporary structures or facilities on public conservation land, please provide the following details:

- Could this structure or facility be reasonably located outside public conservation land? Provide details of other sites/areas considered.
- Could any potential adverse effects be significantly less (and/or different) in another conservation area or another part of the conservation area to which the application relates? Give details/reasons

The site has been part of an international research project for many years and moving the site would result in a significant capital cost, but also a disruption to the collection of longitudinal data (refer to AARDDVARK homepage). The physics research undertaken at this site requires a quiet site. Here we mean quiet in terms of electromagnetic interference, vehicle movements, and people activity. The site is internationally recognised as a quiet site and the University has been approached in the past by international scientists wanting to establish new passive instrumentation or work alongside us in collaboration. At least 25 students have undertaken postgraduate research projects from the AARDDVARK data in the last 15 years.

The only addition is an off-line electrical generator system to supply electrical power. The solar panels will cover an area of approximately 100m² and the pad to mount the above ground fuel tank will be approximately 3m².

C. Larger area

Is the size of the area you are applying for larger than the structure/facility



If **yes**, please detail the size difference in the box below, and answer the following 3 questions, if **no** please go on to the next section:

The area of the proposed concession is an area of approximately 3.2 ha and encompasses access to the research building, the research building, the proposed solar array, the antennas, the wires connecting the antennas to the building. The research building has a gross floor area of approximately 40 m². The solar array will have a footprint of approximately 100m². The antennas each have a small footprint.

Is this necessary for safety or security purposes?

Is this necessary as an integral part of the activity?

Is this essential to carrying on the activity?

YES NO
YES / NO
YES / NO

If the answer to any of the above is yes, please provide details and attach supporting evidence if necessary and label Attachment 3b:C.

The antennas need to be spaced apart to minimise interference.

D. Exclusive possession

Do you believe you need **exclusive possession** of the public conservation land on which your structure/building is located, ie no one else can use the land during your use of it?

(Exclusive occupation requires a lease which requires public notification of the application)

If yes, please answer the following 3 questions, if no please go to the next section:

Is exclusive possession necessary to protect public safety?

YES/ NO

Is exclusive possession necessary to protect physical security of the activity?

Is exclusive possession necessary for the competent operation of the activity?

ES (NO

If the answer to any of the above is yes, please provide details and attach supporting evidence if necessary and label Attachment 3b:D.

Inside the research building there is an electrical hazard because of batteries and an inverter. The proposed solar array will generate electrical current so is a hazard and there is also the risk of vandalism (because of the isolated location).

E. Technical Specifications (for telecommunications sites only)

Frequencies on which the equipment is to operate

Power to be used (transmitter output)

Polarisation of the signal

Type of antennae

The likely portion of a 24 hour period that transmitting will occur

Heaviest period of use

F. Term

Please detail the length of the term sought (i.e. number of years or months) and why.

Note: An application for a concession for a period over 10 years must be publicly notified, an application for a concession up to 10 years will not be publicly notified unless the adverse effects of the activity are such that it is required, or if an exclusive interest in the land is required.

It is requested the concession is to be for 30 years.

G. Bulk fuel storage

Under the Hazardous Substances and New Organisms Act 1996 (HSNO Act) 'Bulk fuel storage' is considered to be any single container, stationary or mobile, used or unused, that has a capacity in excess of 250 litres of Class 3 fuel types. This includes petrol, diesel, aviation gasoline, kerosene and Jet A1. For more information on Hazardous Substances, go to: http://www.business.govt.nz/worksafe/information-guidance/legal-framework/hsno-act-1996

Do you intend to store fuel in bulk on the land as part of the activity?



If you have answered yes, then please provide full details of how and where you intend to store the fuel, and label any attachments including plans, maps and/or photographs as Attachment 3b:G. If your concession application is approved you will be required to provide a copy of your HSNO compliance certification to the Department before you begin the activity.

The off-grid generator will utilise either wind or sunlight plus batteries as the primary source of energy, but a backup diesel generator will be required. Less than 2,000 litres of diesel fuel will be stored.

Н. **Environmental Impact Assessment**

This section is one of the most important factors that will determine the Department's decision on the application. Please answer in detail.

In column 1 please list all the locations of your proposal, please use NZTM GPS coordinates where possible. In column 2 list any special features of the environment or the recreation values of that area. Then in column 3 list any effects (positive or adverse) that your activity may have on the values or features in column 2. In column 4 list the ways you intend to mitigate, remedy or avoid any adverse effects noted in column 3. Please add extra information or supporting evidence as necessary and label Attachment 3b:H.

Refer to Steps 1 and 2 in your Guide to Environmental Impact Assessment to help you fill in this section.

Location on public conservation land	Special feature or value	Potential effects of your activity on the feature or value (positive or adverse)	Methods to remedy, mitigate or avoid any adverse effects identified
Building (1,404,003E 4,926,509N)	Swampy areas and peat bogs with associated moss field, sedgeland and shrub communities on the flat plateau of Swampy Summit in the Silver	Pruning of plants	Only allow hand pruning where necessary to gain access by foot.
Solar panel array (1,404,005E 4,926,518N)		Removal of plants	Agree with DOC offset (i.e. targeted weed species control to encourage natives, native planting in the vicinity of the research station)
ELF antenna (1,404,023E 4,926,575N)	Peaks area ¹ . Swampy Summit peat bogs and associated plant communities provide important	Pruning of plants	Only allow hand pruning where necessary to gain access by foot.
Otago VLF loop antenna (1,404,013E 4,926,591N)	habitat for South Island Fernbird/Matata (Bowdleria punctata punctata) and other species1. Presence of the carabid beetle (Oregus inaequalis), a Category B	Pruning of plants	Only allow hand pruning where necessary to gain access by foot.
Magnetometer (1,403,990E 4,926,524N)		Pruning of plants	Only allow hand pruning where necessary to gain access by foot.
Stanford VLF loop antenna (1,403,984E 4,926,485N)		Pruning of plants	Only allow hand pruning where necessary to gain access by foot.
Riometer (1,403,921E 4,926,479N)	species of New Zealand's threatened fauna ² .	Pruning of plants	Only allow hand pruning where necessary to gain access by foot.
Off-line generator (1,404,004 E 4,926,516 N) 1 - Otago Regional Council (2004) Reg		Removal of plants and installation of concrete base for structure	Agree with DOC the exact location of the off-grid generator. Agree location and importance of the species; clearly tape off areas with important species to avoid damage. Minimise vegetation clearance

^{2 -} Pawson, S.M. and Emberson, R.M. (2001) Oregus inaequalis Castelnau, its distribution, and abundance at Swampy Summit, Otago. DOC Science Internal Series 6.

I. Other

Is there any further information you wish to supply in support of your application? Please attach if necessary and label Attachment 3b:I.

Assessments of Environmental Effects – additional details on the proposed solar panels

Attachment 3b:A - Description of Activity

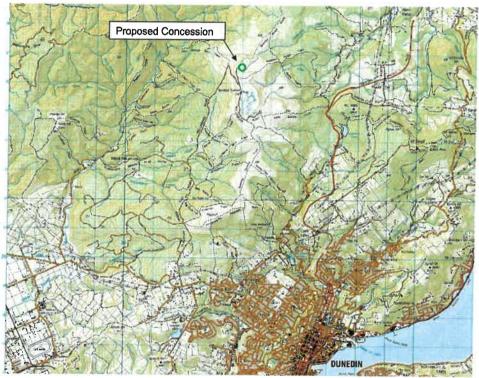


Figure 1: Location Map

Source - NZTopo50-CE17 ed 1.03

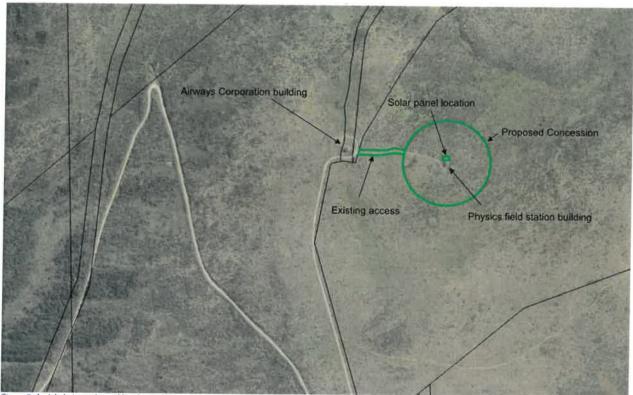


Figure 2: Aerial photography and legal parcels

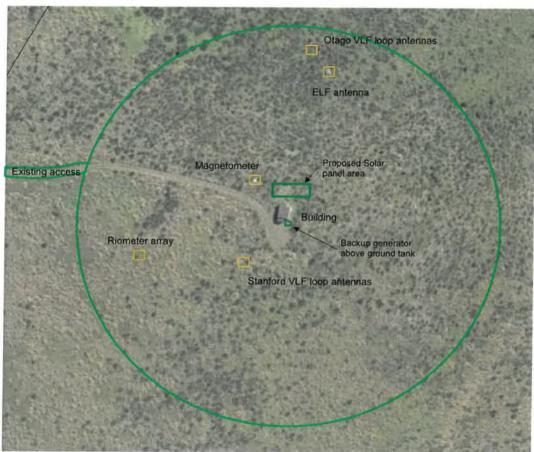


Figure 3: Shed and antennas

Attachment 3b:I – Assessment of Effects



AEE – Swampy Summit

May 2021

Document Version: Final 1

University Operations

Campus Development

Campus and Collegiate Life Services | Chief Operating Officer

Health and Safety Compliance | Information Technology Services | Project Management

Property Services | Risk Assurance and Compliance | Shared Services | Sustainability



University of Otago | PO Box 56 | Dunedin 9054 | New Zealand

Enable | Engage | Experience

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Appendix A – Research Station images

Appendix B – Legal Title

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Introduction

The University of Otago is seeking a Restricted Discretionary resource consent to allow the construction of an off-grid electrical power system (refer to Figure 1 and Figure 2) on land adjacent to the University's Physics Research Station.

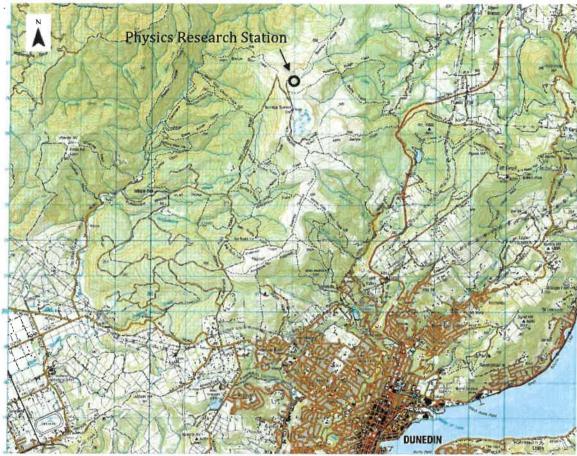


Figure 1: Location Map

Source - NZTopo50-CE17 ed 1.03

Background

The University of Otago established a physics research station at Swampy Summit in the 1960s. It has been operating continuously since that time. The site is internationally recognised as a 'quiet site' and the University has been approached in the past by international scientists wanting to establish new passive instrumentation or work alongside us in collaboration. Here we mean quiet in terms of electromagnetic interference, vehicle movements, and people activity. The instruments are very sensitive and easily affected by electrical sources or vehicle movements in the area.

At least 25 students have undertaken postgraduate research projects from the <u>AARDDVARK</u> data in the last 15 years. The data from these antennas are transmitted back to the University and used for real time public good science (i.e. the data from the magnetometer is used to produce Aurora Australis <u>nowcasts</u> for the public).

Recently the University was informed by the Airways Corporation, who own the cable that supplies power to the University Building, it was at its end of life. The existing circuit is being replaced with a low voltage supply. The supply will meet Airways

Corporation needs, but will no longer be capable of supplying power to the University Building. Effectively cutting power to our building from June 31st 2021.

The Site

The research station's building is located at New Zealand Map Grid (NZTM) 1,404,003.85E 4,926,509.16N in the Silverpeaks Scenic Reserve. The land was acquired for a Reserve - New Zealand Gazette 1996 p 3360 and vested in the Crown (refer to Figure 1 and Figure 2). The physics research requires a quiet site (refer to Figure 3).

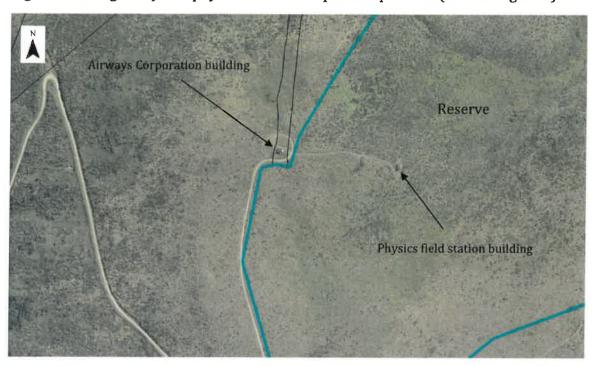


Figure 2: Physics Research Station

All instruments are blend into the natural environment to minimise attracting the attention of people in this isolated location (refer to **Appendix A** for images of the instruments discussed below). Both the Otago and Stanford Very Low Frequency (VLF) antennas are wooden poles, held up with guide wires, with a wire running to the top. The Stanford antenna was originally set up by Stanford University in a collaboration many decades ago, but this equipment is now operated by Otago University. The Extremely Low Frequency (ELF) antenna is housed in a small plywood pyramid. The magnetometer is positioned on a concrete pad. The Relative Ionospheric Opacity Meter (Riometer) looks like three rows of tall wooden fence posts.

Table 1: Site Information

Administrative Information		
Address	LOT 1 Silverstream Road Blueskin	
Legal Description	Section 1 SO 24331 (a copy is attached in Appendix B)	
Size of site	1,140,242 m ²	
Current use	Conservation	

Property owner	The reserve is administered by the Department of Conservation			
2GP planning	Hill Slopes Rural			
map and zoning	Wāhi Tupuna Mapped Area (ID 49)			
information	Landscape Overlay Zone (SNL)			
	 Area of Significant Biodiversity Value (ID C031) 			
Archaeological	The site is not listed as an archaeological site			
site				
Physical Features				
Topography	Access is on a ridgeline and the access track slopes towards the			
	east			
Water	No open water or streams located near the physics building			
Services	Only the existing underground power that is soon to be			
	disconnected			
Adjacent West of the reserve is DCC land for the purpose of Leith Valley,				
properties	Silverstream and Ross Creek Catchments - Water Catchment			
	Areas and Raw Water Reservoirs for Dunedin City Water			
	Supply.			

Proposal

The University is seeking consent to install an off-grid electrical power system to keep the physics research station operational. The off-grid electrical power system will be immediately north of the existing physics shed. It will located on DOC land in the position shown in Figure 3. The location of the proposed off-grid power system is approximate NZMG coordinates 1,404,004E 4,926,509N.

The configuration of the off-grid system will involve the installation of photovoltaic panels on the ground north of the physics shed, as well as, batteries and portable diesel generator stored inside the physics shed. The portable generator will use diesel fuel. The fuel tank will be an above ground double skinned tank with a capacity of less than 2,000 litres (refer to Figure 4).

The off grid power system needs to sized appropriately to support the current and future physics experiments. There is no long term metrological data set at the shed, so power yield assumption from the solar panels have been made. Ideally the solar cells will provide 100% of the site's power needs, but to provide redundancy the proposal includes a diesel generator. The area for solar panels, identified in this application (refer to Figure 4), is larger than the current design requires to allow some flexibility should more solar panels be required in the future (e.g. to allow the backup diesel generator to be used less often).

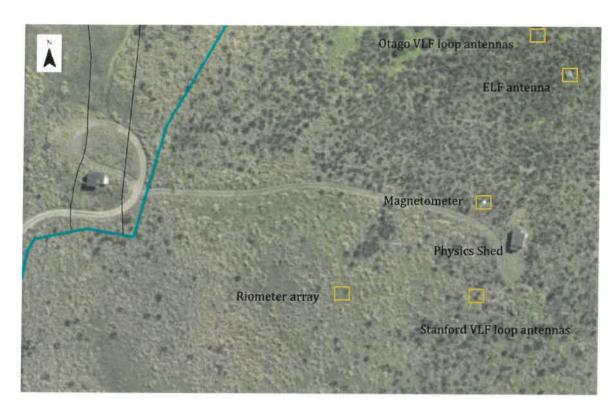


Figure 3: Site details



Figure 4: Proposed Solar Panel Area

Application

The DOC reserve (refer to Figure 5) is zoned Rural under the Operative (2006) Plan and Hill Slopes Rural under the Second Generation Plan (2GP). The site is not at the boundary of the zone. The activities undertaken in this proposal were assessed against the relevant performance standard, activity rules and activity statuses in the Dunedin Second Generation District Plan.

Activity Status

The overall status of this proposal is Restricted Discretionary.

Table 2: Analysis of activity status

Activity	Performance Standard and rules	Status
Temporary Ac	tivities	MITTERS STATES
4.3.2(2)	Construction	Permitted
Earthworks		
8A.3.2(2)	Earthworks - small scale	Permitted
8A.5		
Public Health a	and Safety	*P * 6 (1-2)***
9.3.4(d)	Storage and use of hazardous substances	Permitted
Natural Enviro	onment	
10.3.2.1(c)(v)	Vegetation Clearance	Permitted
10.3.2.2	Protected areas (vegetation clearance)	Permitted
10.3.3	Setback from Coast and Water Bodies	Permitted
10.3.6(3)	Reflectivity	Permitted
Manawhenua		
14.3.2.5	Vegetation clearance	Restricted
		Discretionary
Rural		
16.3.3.21	Land use	Permitted
16.3.4.4	Development	Permitted
16.3.4.26		
16.6.5(c)	Maximum height	Permitted
16.6.9	Reflectivity	Permitted
16.6.10.1(v)	Setbacks	Permitted

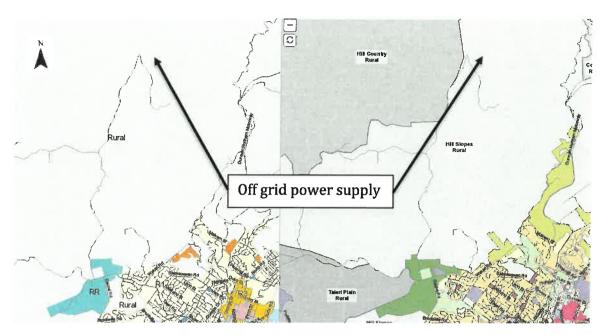


Figure 5: Zoning

Source: DCC 'side by side' planning map (accessed 1/4/2021)

Assessment of Environmental Effects

Application Form

A copy of the completed application form is presented in Appendix C.

Land Use

Physics research of the atmosphere is not anticipated by the current or second generation district plan. The land use activity is small scale in that no one lives or works on the land and access to the land for research happens infrequently. The land use was established over fifty years ago and does contravene a national standard, regional rule, or district rule.

There is a public DOC walking track near the research station.

Development

The off-grid electrical power system will be located on the ground north of the existing Physics research shed. The Physics research shed cover an area of approximately 40m^2 . The inverters and battery bank will be located inside the existing building with some panels on the roof and another bank ground mounted. The backup diesel generator will be placed outside of the north wall of the Physics research shed.

If sunlight is restricted to the solar panels then the backup generator will need to run for approximately four hours at a time to fully recharge the battery bank. It is anticipated that during the winter or early spring there could be times when the backup generator will be required. It is hoped the backup generator will be keep to a minimum, but it is anticipated that it may need to run for up to 80hrs annually to maintain supply of power all year round.

The solar panels need to face north. The ground mounted panels will be positioned at 60 degrees. The initial design is for 16 panels (approximately 1.05 wide by 1.8m high) on the ground mount system (refer to Figure 6). The 'Proposed Solar panel area' shown

in Figure 4 is 16m by 5m to allow flexibility in positioning the solar panels and also to allow for expansion. Solar panels with an area of less than 200m² is considered small scale in the DCC's 2GP.



Figure 6: Example of 16 panel, ground mounted system

There will be reflectivity associated with the solar panels. The panels will face towards the north and the large natural reserve. The location is very remote (refer to Figure 7) and the solar panels small, so is expected to have a less than minor effect on amenity.

Construction impacts

Less than 5m³ of soil will need to be excavated to allow construction of the concrete foundations for the solar panels. Similar to what is shown Figure 6, there will be narrow foundations laid (each approximately 0.5m wide by 2m long and 0.5m deep or a total of 1.5m³) onto which the frame holding the solar panels will be mounted. A concrete pad (approximately 1.2m by 2.4m by 0.1m) for the above ground fuel tank will be located north of the physics shed. A fence to enclose the ground mounted solar panels may be required to reduce the risk of damage in this isolated area.

The earthworks associated with the proposed off-grid electrical power system have been assessed to be large scale.

There is the potential for temporary effects arising from work on site, including dust, noise and vehicle movements. The District Plan exempts construction noise from performance standards, noise will still be managed to comply with 'NZS 6803:1999 Acoustics – Construction Noise'. In terms of dust, the dust will be managed so that adverse effects are avoided. There will be extra vehicle movements generated by construction, but any amenity effects will be negligible.

Heritage

The description of the area this consent relates to (Schedule A4.49) - Whanaupaki (Flagstaff) and Whawharaupo (Swampy Summit) as

These are significant peaks, referred to in oratory. Part of the range is within the Silverstream catchment (see below). The range as a whole is known as Whākari. Trails ran across these peaks linking Blueskin Bay with the Taieri Plain.

This site has linkages with Whakaehu.

The values to be protected are Mauka and Ara tawhito. The principal threats to these values: activities that affect the peaks, upper slopes and ridgelines, including buildings, structures, public amenities, network utilities, mining, forestry, earthworks, new roads or additions and alterations to existing roads; and wilding tree spread.

The University is undertaking consultation with Aukaha to understand the effects of the proposal on Manawhenua and their relationship with this wāhi tūpuna mapped area.



Figure 7: Swampy Summit looking north

Image from Google Map (accessed 16/4/2021)

Flora and fauna

Entry C031 (Schedule A1.2 of the 2GP) describes the area as

The Silverpeaks hills west of Dunedin. Contains silver beech forest, snow tussocklands, broadleaf forest, kanuka, cassinia/inaka shrubland and is the habitat for native falcon, fernbirds and a large number of invertebrates.

The area is also described as swampy areas and peat bogs with associated moss field, sedgeland and shrub communities on the flat plateau of Swampy Summit in the Silver

Peaks¹. It is notes the presence of the carabid beetle (Oregus inaequalis), a Category B species of New Zealand's threatened fauna².

The installation of the small concrete foundations to support the solar panels will result in the removal and shading of existing plants. Once the consent is granted the University will, in discussion with DOC and the DCC, agree the exact location of the off-grid power system. Identify the location and importance of the species and then clearly tape off areas with important species to avoid damage. Vegetation clearance will be kept to a minimum.

Indigenous vegetation clearance in wāhi tūpuna mapped area triggers the need for consent.

Benefits

The data from these antennas have been used for public good science for over 50 years. Data from the antennas continue to provide valuable information and experiments undertaken at Swampy Summit continue to provide research opportunities for post graduate students and international researchers.

Description of Alternatives

Options for the University to provide power to our research station are: 1) install a new underground power cable from the nearest Aurora transformer (approximately 3km away); or 2) install an off grid power system (i.e. solar panels and a small back up diesel generator). The cost and environmental effects of trenching to install a replacement cable would be significant. The off-grid electrical power system option results in the smaller environmental footprint to the Swampy Summit area.

The Fourth Schedule of the RMA requires an assessment of alternative locations and or methods where it is likely an activity will have significant effects on the environment. It is considered that the proposed development will not result in significant adverse effects, and it is accordingly not necessary to address alternative locations or methods. Notwithstanding this, alternatives were considered and evaluated.

Statutory Considerations

Resource Management Act 1991

Part 2 consideration

Part II of the RMA sets out the over-arching purpose and principles of the legislation. The purpose of the Act in section 5 of the RMA is to promote the sustainable management of natural and physical resources and avoid or mitigate any adverse effects of activities on the environment. Building an off-grid power system on a reserve to support on-going public good science is not inconsistent with the principles of sustainable management. Section 5 of the Act must be read in conjunction with Sections 6 to 8. In accordance to Section 6(c) the Dunedin City Council has identified the Swampy Summit area as areas of significant indigenous vegetation and significant habitats of

¹ Otago Regional Council (2004) Regional Plan: Water for Otago

² Pawson, S.M. and Emberson, R.M. (2001) Oregus inaequalis Castelnau, its distribution, and abundance at Swampy Summit, Otago. DOC Science Internal Series 6.

indigenous fauna. Section 7 of the Act, which requires particular regard to be had to a number of 'Other Matters', contains the following relevant sub-clauses:

- (b) The efficient use and development of natural and physical resources.
- (f) Maintenance and enhancement of the quality of the environment.

It is considered that installing an off-grid power system is an efficient use of land to support public good physics research. Section 8 of the RMA places an obligation on all persons exercising functions and powers under the Act to take into account the principles of the Treaty of Waitangi and the proposal will not impinge upon these principles.

Section 95D

With regard to sections 95A, 95B and 95C of the Act, it is considered that the subject application should be processed on a non-notified basis because:

- The activity will have or is likely to have adverse effects on the environment that are less than minor
- The applicant did not request public notification of the application
- There is no rule or National Environmental Standard that requires public or limited notification of the application
- The activity will NOT have adverse effects that are more than minor on any person(s) or order holders(s)
- No special circumstances exist in relation to the application.

Section 104 of the Resource Management Act

The proposal has a restricted discretionary status under the Dunedin City Council's partially operative second generation district plan. Consideration must be given to the provisions of section 104C of the Resource Management Act.

Dunedin City

2GP

The 2GP contains policies that are considered relevant to the proposal, specifically those contained in Section: 4 – Temporary Activities; Section 5 – Network utilities, 8A – Earthworks; 9 - Public Health and Safety; 10 – Natural Environment Section; 14 – Manawhenua; and 16 – Rural Zone.

Section 4 – Temporary Activities

Construction associated with the proposed off-grid electrical power system will be a temporary activity and is permitted.

Section 5 - Network Utilities

The proposed off-grid electrical power system meets the definition of 'solar panels - small scale' - maximum area of solar panels - small scale is $200m^2$. Small scale solar panels are provided for as a restricted discretionary activity within a SNL under Rule 5.3.2.9.d.

Section 8A - Earthworks

Earthworks is within an 'Area of Significant Biodiversity Values' (ASBV). The maximum change in finished ground level to be considered earthworks - small scale is 0.5m (Rule 8A.5.1.3vi). The maximum area of earthworks to be considered earthworks - small scale

is $25m^2$ (Rule 8A.5.1.4iv). The maximum volume of combined cut and fill to be considered earthworks - small scale is $1m^3$ (Rule 8A.5.1.5v). The volume of excavation will exceed $1m^3$, so earthworks is considered to be 'earthworks-large scale' which is provided for as a restricted discretionary activity (Rule 8A.7.3.3).

Section 9 - Public Health

The backup diesel generator requires fuel. It is proposed to place an above ground double skinned tank with a capacity of less than 2,000 litres in the container shed. Appendix A6.4.3(18) of the 2GP permits subclass 3.1D flammable liquids in certified double skin above-ground containers up to 2,000 litres.

Section 10 - Natural Environment

Objective 10.2.1 identifies that biodiversity values are maintained or enhanced, including by protecting areas of significant indigenous vegetation and the significant habitats of indigenous fauna. The proposal does not contravene Policy 10.2.1.3, 10.2.1.4, 10.2.1.6, or 10.2.1.8.

Objective 10.2.5 identifies that areas of Outstanding Natural Features (ONFs), Outstanding Natural Landscapes (ONLs) and Significant Natural Landscapes (SNLs) are protected from inappropriate development; and their values are maintained or enhanced. The proposal is consistent with the policies that support Objective 10.2.5.

The proposal involves indigenous vegetation clearance within an 'Area of Significant Biodiversity Values' (ASBV) and is not included in the list of activities under Rule 10.3.2.1.a. In accordance with Rule 10.3.2.1.b the proposal is therefore considered as 'indigenous vegetation clearance – large scale' which is provided for as a non-complying activity under Rule 10.3.2.1.e.i.

Section 14 - Manawhenua

Objective 14.2.1 identifies that the relationship between Manawhenua and the natural environment is maintained or enhanced, including the cultural values and traditions associated with wāhi tūpuna. Policy 14.2.1.4 says only allow activities that are identified as a threat to wāhi tūpuna in Appendix A4, where adverse effects on the relationship between Manawhenua and the wāhi tūpuna are avoided or, if avoidance is not practicable, are no more than minor.

The University will endeavour to reach a written agreement with Manawhenua that the effects of the proposed off-grid power system is no more than minor.

Section 16 - Rural Zone

Objective 16.2.3 is the rural character values and amenity of the rural zones are maintained or enhanced, elements of which include: a high ratio of open space, low levels of artificial light, and a low density of buildings and structures; buildings that are rural in nature, scale and design, such as barns and sheds; and extensive areas of indigenous vegetation and habitats for indigenous fauna. Policy 16.2.3.1require buildings and structures to be set back from site boundaries and of a height that maintains the rural character values and visual amenity of the rural zones.

The research station does not fall into any of the land use activity status in 16.3.3. The development activity is permitted in accordance with Rule 16.3.4.4. It has been assessed

the proposed off-grid power system will have a less than minor on the existing environment.

Rule 16.4.4 notes that indigenous vegetation clearance - large scale in a scheduled ASBV will consider the Department of Conservation (DOC) as an affected person (in accordance with Section 95B of the RMA). Rule 16.4.3 notes that manawhenua is considered an affected person for discretionary and non-complying activities in a Wahi Tupuna Mapped Area where the activity is identified as a threat in Appendix A4 where written approval is not provided.

Consultation

The University of Otago has discussed the proposal with Aukaha Limited and the Department of Conservation (refer to **Appendix D**).

It is not considered that the provisions of Sections 95A-95E warrant public notification, and any adverse effects on other persons would be less than minor, so the application is considered to meet the requirements for consideration on a non-notified basis.

Conditions

The University of Otago recommends the following conditions are included in this consent:

- 1. All excavation undertaken as part of this consent shall adhere to the Heritage New Zealand Pouhere Taonga Archaeological Discovery Protocol;
- 2. The University of Otago, to reduce reliance on the backup diesel fuel generator, will within 5 years of the obtaining this consent will investigate and implement alternative methods of power supply.

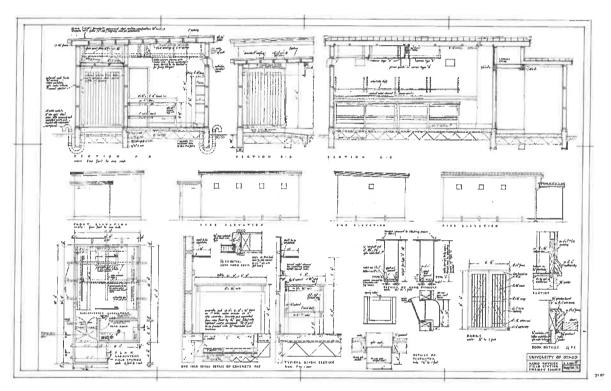
Conclusions

The proposed off-grid electrical power system, with appropriate controls, will have a less than minor effects on the existing environment.

In terms of section 104, it is considered that the proposal will be consistent with the relevant provisions of the District Plan and will have actual or potential effects on the environment which are acceptable and consistent with the environmental outcomes envisaged by the relevant statutory planning framework. There are no other matters which tell against the proposal.

Accordingly, it is concluded that consent should be granted to the activity on a non-notified basis in accordance with sections 104, 104C and Part 2 of the Act, subject to appropriate conditions in accordance with section 108.

Appendix A – Research Station images



1966 Physics field station building design



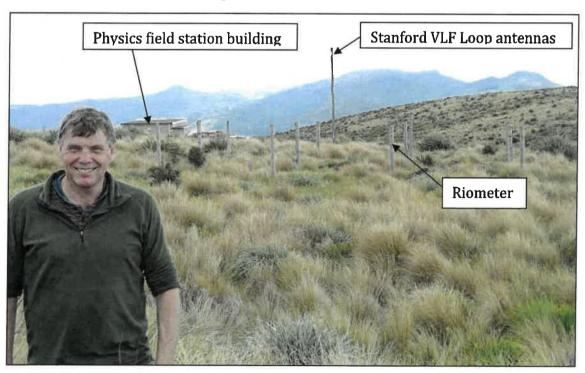
Physics field station shed



Magnetometer housing



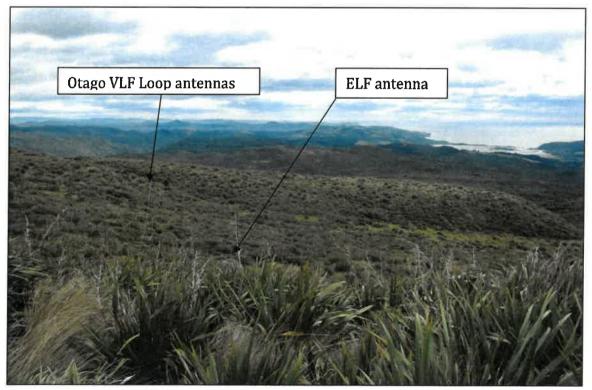
Stanford VLF loop antennas and pole



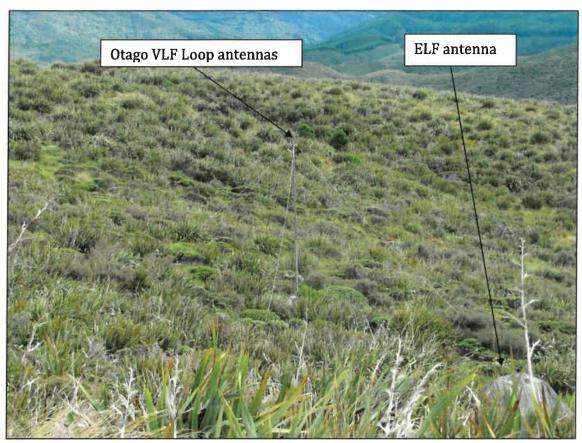
Riometer (posts in background)



Riometer (close up)



Otago VLF loop antennas and ELF antenna



Otago VLF loop antennas and ELF antenna (zoomed in)

Appendix B - Legal Title

Declaring Land Acquired and Land to be Set Apart for a Reserve in the City of Dunedin

Pursuant to the Public Works Act 1981, and to a delegation from the Minister of Lands, the Manager, Crown Property Services, Land Information New Zealand, Dunedin, hereby declares that:

(a) Pursuant to section 20, an agreement to that effect having been entered into, the land described in the First Schedule hereto, to be acquired for a reserve and shall vest in the Crown on the 3rd day of October 1996.

(b) Pursuant to sections 20 and 50, an agreement to that effect having been entered into, the land described in the Second Schedule hereto, is hereby acquired for a reserve and shall vest in the Crown on the 3rd day of October 1996,

First Schedule

Otago Land District—Dunedin City

ha
Being

146 35 0.5960 Part Section 30, Block III, North Harbour and
Blueskin Survey District; shown marked "L"
on plan.

146 35 1.2986 Part Section 30, Block III, North Harbour and
Blueskin Survey District; shown marked "M"
on plan.

146 35 2.3485 Part Section 30, Block III, North Harbour and

Blueskin Survey District; shown marked "N" on plan.

143 245 1.38 Part Section 24, Block III, North Harbour and

Blueskin Survey District; shown marked "O" on plan.

Part Section 24, Block III, North Harbour and Blueskin Survey District; shown marked "P" on plan.

136/420.7852 Part Section 15, Block III, North Harbour and Blueskin Survey District; shown marked "Q" on plan.

As shown marked as above mentioned on S.O. Plan 24331, lodged in the office of the Chief Surveyor at Dunedin.

Second Schedule

Агеа

Otago Land District—Dunedin City

ha Being
2.09 Part Section 38, Block III, North Harbour and Blueskin Survey District; shown marked "A" on S.O. Plan 24331.
150(1012 11.24 Part Section 38, Block III, North Harbour

and Blueskin Survey District; shown marked "B" on S.O. Plan 24331.

Part Sections 34, 35 and 36, Block III, North Harbour and Blueskin Survey District; shown marked "C" on S.O. Plan 24331.

shown marked "C" on S.O. Plan 24331.

shown marked "C" on S.O. Plan 24331.

North Harbour and Blueskin Survey District; shown marked "E" on S.O. Plan 24331.

24331.
Part Sections 33, 39 and 1522R, Block III,
North Harbour and Blueskin Survey
District; shown marked "F" on S.O. Plan
24331.

GN 918928.1 Gazette No Cpy - 07/01, Pgs - 034,22/09/06,11:37

ha Being
20,8700 Part Section 42, Block III, North Harbour
and Blueskin Survey District; shown
marked "G" on S.O. Plan 24331.

20,1212 1.9893 Part Section 42, Block III, North Harbour

Area

Part Section 42, Block III, North Harbour and Blueskin Survey District; shown marked "H" on S.O. Plan 24331.

and Blueskin Survey District; shown marked "I" on S.O. Plan 24331.

and Blueskin Survey District; shown marked "J" on S.O. Plan 24331.

Part Section 2, Block X and Sections 10 and 1521R, Block XI, Waikouaiti Survey District; shown marked "A" on S.O. Plan 24333.

Part Section 2, Block X, Waikouaiti Survey District; shown marked "B" on S.O. Plan 24333.

Part Section 2, Block X, Waikouaiti Survey District; shown marked "C" on S.O. Plan 24333.

0.5800 Part Section 2, Block X, Waikouaiti Survey District; shown marked "D" on S.O. Plan 24333.

O.5700 Part Section 2, Block X, Waikouaiti Survey District; shown marked "E" on S.O. Plan 24333.

0.2900 Part Section 2, Block X, Waikouaiti Survey District; shown marked "F" on S.O. Plan 24333.

n. 0.4300 Part Section 2, Block X, Waikouaiti Survey District; shown marked "G" on S.O. Plan 24333.

0.5700 Part Section 1, Block X, Waikouaiti Survey District; shown marked "H" on S.O. Plan 24333.

0.2900 Part Section 1, Block X, Waikouaiti Survey District; shown marked "I" on S.O. Plan 24333.

0.5800 Part Section 1, Block X, Waikouaiti Survey District; shown marked "J" on S.O. Plan 24333.

হেছ\ধ্য^ 129.0 Lot 2, D.P. 19518; shown marked "K" on S.O. Plan 24333.

147.0 Lot 1, D.P. 19518; shown marked "L" on S.O. Plan 24333.

5.0 Lot 3, D.P. 19518; shown marked "D" on S.O. Plan 24333.

Silverpeak Survey District; shown marked "A" on S.O. Plan 24334.

Scipt 1512299.3350 Part Sections 3 and 1520R, Block X, Silverpeak Survey District and part Sections 32, 39 and 1522R, Block III, North Harbour and Blueskin Survey District; shown marked "B" on S.O. Plan 24334.

As shown marked as above mentioned on the plans above mentioned, lodged in the office of the Chief Surveyor at Dunedin.

Dated at Dunedin this 30th day of September 1996.

Amending a Notice Declaring Land Acquired and Land Set Apart for a Reserve in the City of Dunedin

Pursuant to section 55 of the Public Works Act 1981, and to a delegation from the Minister of Lands, the Manager, Crown Property Services, Land Information New Zealand, Dunedin, hereby amends the notice dated the 30th day of September 1996 and published in the New Zealand Gazette, 3 October 1996, No. 139, page 3360, declaring land acquired and land to be set apart for a reserve in the City of Dunedin by omitting from the area twenty-thirdly described in the Second Schedule reference to the area "marked "D" on S.O. Plan 24333" and replacing it with the area "marked "M" on S.O. Plan 24333".

Dated at Dunedin this 21st day of October 1996.

M. R. MACKENZIE, Manager, Crown Property Services, Land Information New Zealand, Dunedin.

(LINZ Dn. D.O. 5350/DN/1580)

TCL

M. R. MACKENZIE, Manager (Crown Property Services), Land Information New Zealand, Dunedin.

(LINZ Dn. D.O. 5350/DN/1580)

1CL

927260 Grazette Honce hereby declaring the within reserve to be a scenic reserve for the purposes of section (9(1) (a) Reserves Act 1977 and shall be known as siturpeaks scenic reserve - 2.4.1997 at 11.380m

ALE.

Appartenant hereto is a right of way for public Food access created by Transter 6548155.1 - 26.8.2005 at 9.00 a.m.

Fo. RGL

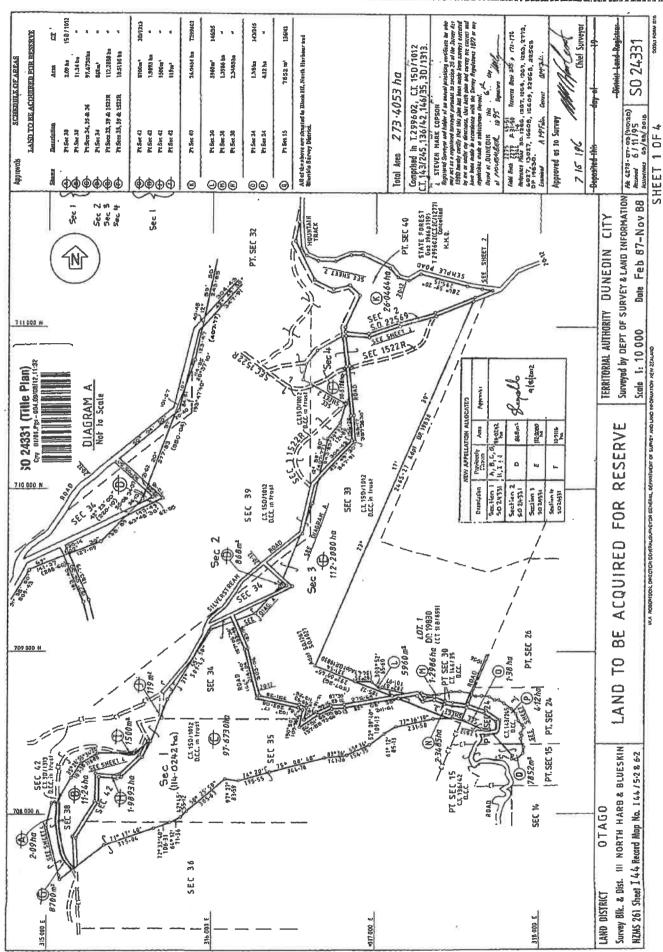
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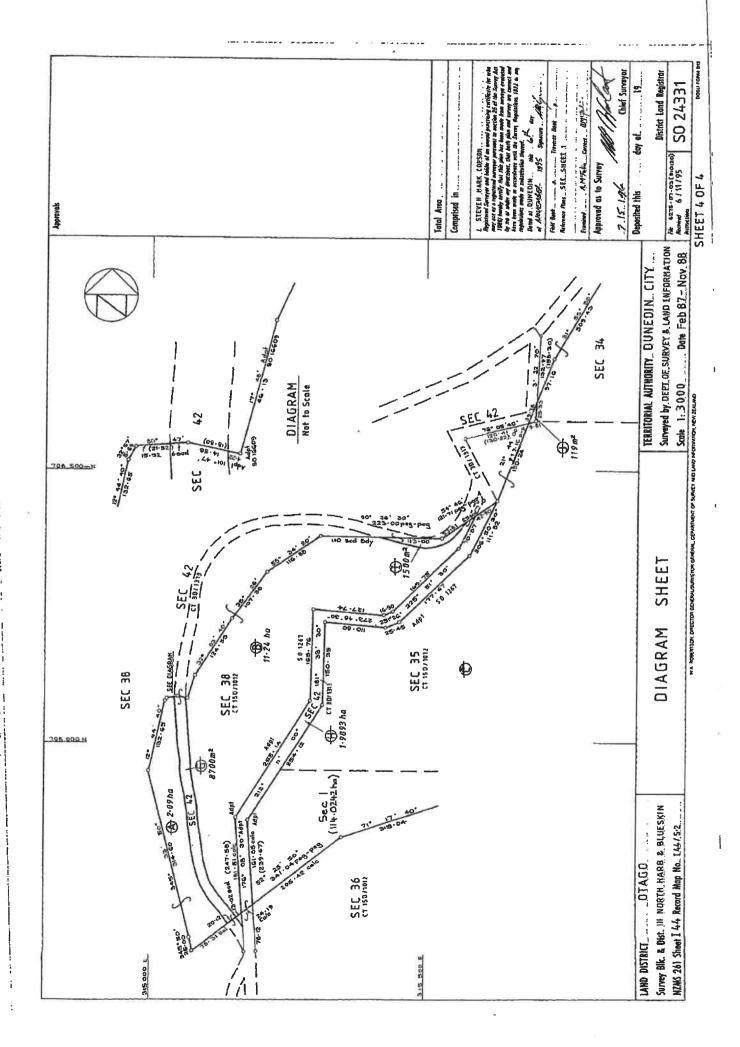
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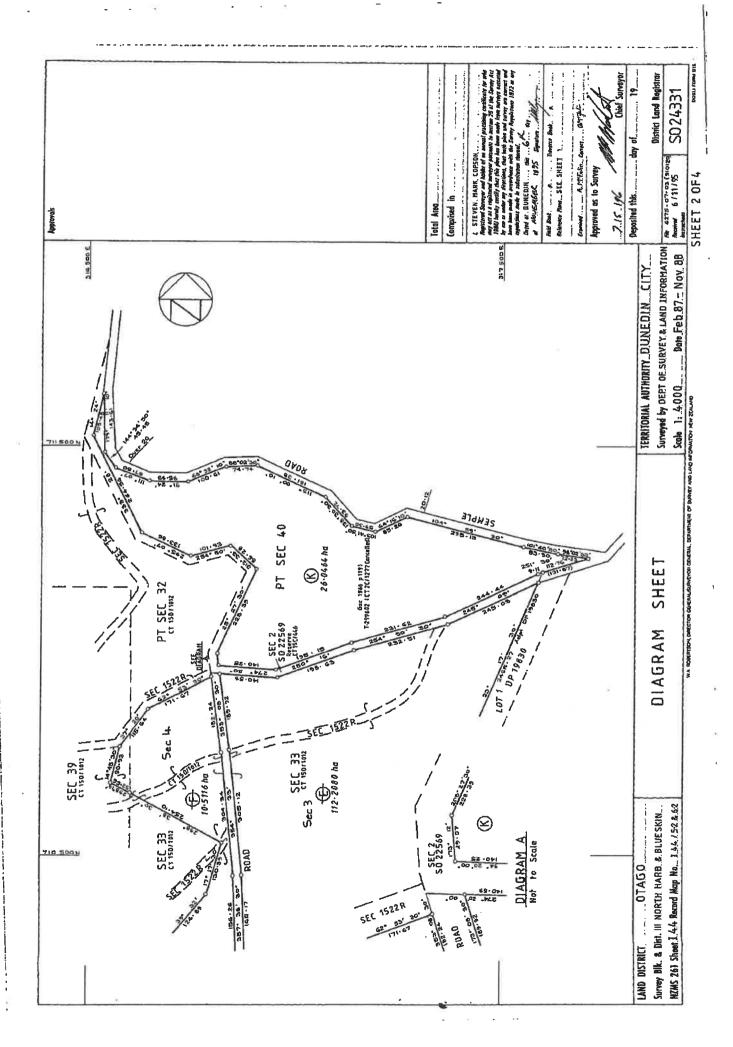
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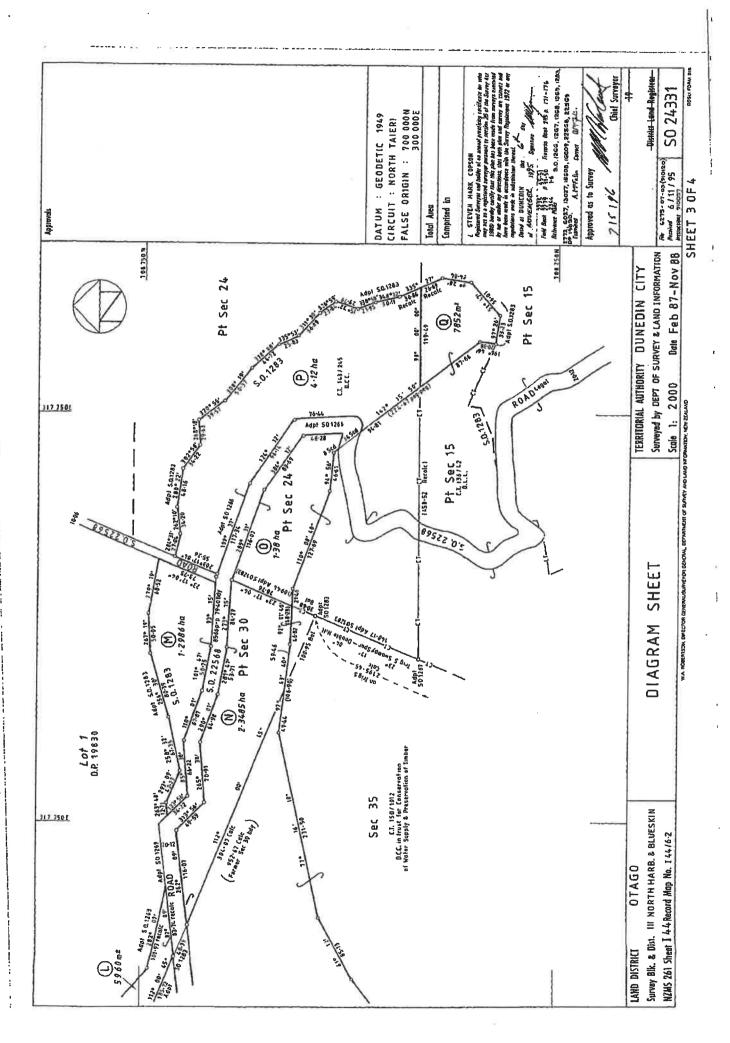
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Appendix C – Completed Application Form



APPLICATION FORM FOR A RESOURCE CONSENT

PLEASE FILL IN ALL THE FIELDS

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44 114 11	111.76	241311	110014	KIII S
App	ww	41411	44.01	THE STATE OF

I/We University of Otago

(must be the FULL name(s) of an individual or an entity registered with the New Zealand Companies Office. Family Trust names and unofficial trading names are not acceptable: in those situations, use the trustee(s) and director(s) names instead) hereby apply for:

✓ Land Use Consent

Subdivision Consent

I opt out of the fast-track consent process:

Yes ✓ No

(only applies to controlled activities under the district plan, where an electronic address for service is provided)

Brief description of the proposed activity:

The University of Otago is seeking a Restricted Discretionary resource consent to allow the construction of an off-grid electrical power system at the University's Physics Research Station at Swampy Summit.

Have you applied for a Building Consent?

Yes, Building Consent Number ABA

✓ No

Site location/description

I am/We are the: (

owner,

occupier,

lessee,

prospective purchaser etc) of the site (tick one)

Street address of site: LOT 1 Silverstream Road Blueskin

Legal description: Section 1 SO 24331

Certificate of Title:

Contact details

Name: Kevin Wood

(✓ applicant

agent (tick one))

Address: PO Box 56, Dunedin

Postcode: 9054

Phone (daytime): 03 470 4607

Email: kevin.wood@otago.ac.nz

Chosen contact method (this will be the first point of contact for all communications for this application)

I wish the following to be used as the address for service (tick one): 🗸 Email

Other:

Ownership of the site

Who is the current owner of the site? Department of Conservation

If the applicant is not the site owner, please provide the site owner's contact details:

Address: Level 1/265 Princes Street, Dunedin Central, Dunedin

Postcode: 9016

Phone (daytime): 03-477 0677

Email:



Planning Application Fees Payment Details (Who are we invoicing)

THIS FORM MUST BE COMPLETED FOR ALL PLANNING APPLICATIONS THAT ATTRACT A FEE. ALL FIELDS ARE MANDATORY.

This information is required to assist us to process resource consent invoices and refunds at lodgement and the end of the process. If you have any queries about completing this form, please email planning@dcc.govt.nz

Deposit Payment Payee Details:

Full Name of Deposit Payee (Person or Company): University of Otago

Mailing Address of Deposit Payee (please provide PO Box number where available): PO Box 65, Dunedin 9054

Email Address of Deposit Payee: kevin.wood@otago.ac.nz

Daytime contact phone number: 03 470 4607

Important Note: The Payee will automatically be invoiced for the deposit and/or any additional costs. Should a portion of the deposit be unspent, it will be refunded to the payee.

Fees

Council recovers all actual and reasonable costs of processing your application. Most applications require a deposit and costs above this deposit will be recovered. A current fees schedule is available on www.dunedin.govt.nz or from Planning staff. Planning staff also have information on the actual cost of applications that have been processed. This can also be viewed on the Council website.

Development contributions

Your application may also be required to pay development contributions under the Council's Development Contributions Policy. For more information please ring 477 4000 and ask to speak to the Development Contributions Officer, or email development.contributions@dcc.govt.nz.

Occupation of the site

Please list the full name and address of each occupier of the site:

University of Otago

Monitoring of your Resource Consent

To assist with setting a date for monitoring, please estimate the date of completion of the work for which Resource Consent is required. Your Resource Consent may be monitored for compliance with any conditions at the completion of the work. (If you do not specify an estimated time for completion, your Resource Consent, if granted, may be monitored three years from the decision date).

June 2021 (month and year)

Monitoring is an additional cost over and above consent processing. You may be charged at the time of the consent being issued or at the time monitoring occurs. Please refer to City Planning's Schedule of Fees for the current monitoring fee.

Detailed description of proposed activity

Please describe the proposed activity for the site, giving as much detail as possible. Where relevant, discuss the bulk and location of buildings, parking provision, traffic movements, manoeuvring, noise generation, signage, hours of operation, number of people on-site, number of visitors etc. Please provide proposed site plans and elevations.

Install solar panels. Please refer to AEE.

Description of site and existing activity

Please describe the existing site, its size, location, orientation and slope. Describe the current usage and type of activity being carried out on the site. Where relevant, discuss the bulk and location of buildings, parking provision, traffic movements, manoeuvring, noise generation, signage, hours of operation, number of people on-site, number of visitors etc. Please also provide plans of the existing site and buildings. Photographs may help.

Please refer to AEE.

District plan zoning

What is the District Plan zoning of the site? Hill Slopes Rural

Are there any overlaying District Plan requirements that apply to the site e.g. in a Landscape Management Area, in a Townscape or Heritage Precinct, Scheduled Buildings on-site etc? If unsure, please check with City Planning staff.

- Wāhi Tupuna Mapped Area (ID 49)
- Landscape Overlay Zone (SNL)
- Area of Significant Biodiversity Value (ID C031)

Breaches of district plan rules

Please detail the rules that will be breached by the proposed activity on the site (if any). Also detail the degree of those breaches. In most circumstances, the only rules you need to consider are the rules from the zone in which your proposal is located. However, you need to remember to consider not just the Zone rules but also the Special Provisions rules that apply to the activity. If unsure, please check with City Planning staff or the Council website.

Rule 14.3.2.5 - vegetation clearance in a Wāhi Tupuna Mapped Area

Affected persons' approvals

I/We have obtained the written approval of the following people/organisations and they have signed the plans of the proposal:

Name: Address:

Name:

Address:

Please note: You must submit the completed written approval form(s), and any plans signed by affected persons, with this application, unless it is a fully notified application in which case affected persons' approvals need not be provided with the application. If a written approval is required, but not obtained from an affected person, it is likely that the application will be fully notified or limited notified.

Assessment of Effects on Environment (AEE)

In this section you need to consider what effects your proposal will have on the environment. You should discuss all actual and potential effects on the environment arising from this proposal. The amount of detail provided must reflect the nature and scale of the development and its likely effect. i.e. small effect equals small assessment.

You can refer to the Council's relevant checklist and brochure on preparing this assessment. If needed there is the Ministry for the Environment's publication "A Guide to Preparing a Basic Assessment of Environmental Effects" available on www.mfe.govt.nz. Schedule 4 of the Resource Management Act 1991(RMA) provides some guidance as to what to include.

Please refer to AEE

The following additional Resource Consents from the Otago Regional Council are required and have been applied for: Yes ✓ No

Water Permit Discharge Permit Coastal Permit Land Use Consent for certain uses of lake beds and rivers Not applicable

Assessment of Objectives and Policies

In this Section you need to consider and assess how your application proposal aligns with the relevant objectives and policies in the District Plan relating to your activity. If your proposal is a discretionary or non-complying activity under the District Plan more attention to the assessment will be necessary as the objectives and policies of the District Plan may not always be in support of the proposed activity.

Refer to AEE

Declaration

I certify that, to the best of my knowledge and belief, the information given in this application is true and correct.

I accept that I have a legal obligation to comply with any conditions imposed on the Resource Consent should this application be approved.

Subject to my/our rights under section 357B and 358 of the RMA to object to any costs, I agree to pay all the fees and charges levied by the Dunedin City Council for processing this application, including a further account if the cost of processing the application exceeds the deposit paid.

Signature of: ✓ Applicant Agent (tick one):

Kevin Wood

11 May 2021

Date:

Privacy - Local Government Official Information and Meetings Act 1987

You should be aware that this document becomes a public record once submitted. Under the above Act, anyone can request to see copies of applications lodged with the Council. The Council is obliged to make available the information requested unless there are grounds under the above Act that justify withholding it. While you may request that it be withheld, the Council will make a decision following consultation with you. If the Council decides to withhold an application, or part of it, that decision can be reviewed by the Office of the Ombudsmen.

Please advise if you consider it necessary to withhold your application, or parts of it, from any persons (including the media) to (tick those that apply):

Avoid unreasonably prejudicing your commercial position

Protect information you have supplied to Council in confidence

Avoid serious offence to tikanga Māori or disclosing location of waahi tapu

What happens when further information is required?

If an application is not in the required form, or does not include adequate information, the Council may reject the application, pursuant to section 88 of the RMA. In addition (section 92 RMA) the Council can request further information from an applicant at any stage through the process where it may help to a better understanding of the nature of the activity, the effects it may have on the environment, or the ways in which adverse effects may be mitigated. The more complete the information provided with the application, the less costly and more quickly a decision will be reached.

Further assistance

Please discuss your proposal with us if you require any further help with preparing your application. The Council does provide pre-application meetings without charge to assist in understanding the issues associated with your proposal and completing your application. This service is there to help you.

Please note that we are able to provide you with planning information but we cannot prepare the application for you. You may need to discuss your application with an independent planning consultant if you need further planning advice.

City Planning Staff can be contacted as follows:

IN WRITING: Dunedin City Council, PO Box 5045, Dunedin 9054

IN PERSON: Customer Services Centre, Ground Floor, Civic Centre, 50 The Octagon

BY PHONE: (03) 477 4000

BY EMAIL: planning@dcc.govt.nz

There is also information on our website at www.dunedin.govt.nz

Information requirements

- ✓ Completed and Signed Application Form
- ✓ Description of Activity and Assessment of Effects
- ✓ Site Plan, Floor Plan and Elevations (where relevant)

Written Approvals

✓ Payee details

Application fee (cash, eftpos, direct credit or credit card (surcharge may apply))

✓ Certificate of Title (less than 3 months old) including any relevant restrictions (such as consent notices, covenants, encumbrances, building line restrictions)

Forms and plans and any other relevant documentation signed and dated by Affected Persons

In addition, subdivision applications also need the following information:

Number of existing lots

Number of proposed lots

Total area of subdivision

The position of all new boundaries

In order to ensure your application is not rejected or delayed through requests for further information, please make sure you have included all of the necessary information. A full list of the information required for resource consent applications is in the Information Requirements Section of the District Plan.

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Has the application been completed appropriately (including necessary information)? Yes No

Application: F

Received Rejected

Received by:

Counter

Post

Courier

Other:

Comments:

(Include reasons for rejection and/or notes to handling officer)

Planning Officer:

Date:

Appendix D - Consultation



21 May 2021

University of Otago P O Box 56 **DUNEDIN 9054**

Attention:

Kevin Wood

Resource Consent – University of Otago

Application

Te Rūnanga o Ōtākou understand that the University of Otago are applying for resource consent associated with the installation and operation of solar panels – Swampy Summit/Whawha-raupō, Dunedin (as specified in the information provided).

The Affected Party

Aukaha writes this letter on behalf of Te Rūnanga o Ōtākou, the kaitiaki Rūnaka whose takiwā (area) includes the site the application relates to.

The representatives have received the full application provided.

This reply is specific to the above proposal and any changes to the application will require further consultation with Rūnaka.

I have the authority to sign on behalf of the Rūnaka and I have read the full application provided.

Te Rūnanga o Ōtākou represent the rakatira and are kaitiaki of all natural resources within the area to which the application relates.

Decision

Te Rūnanga o Ōtākou understand that the University of Otago have agreed to investigate and implement alternative methods of power supply to reduce its reliance on a diesel fuel generator within 5 years of the granting of this consent, and:-

 That the Heritage New Zealand Pouhere Taonga Archaeological Discovery Protocol (attached) should be adhered to.

Te Rūnanga o Ōtākou provide their written approval. In signing this written approval, Te Rūnanga o Ōtākou understand that the consent authority must decide that Te Rūnanga o Ōtākou are no longer an affected person, and the consent authority must not have regard to any adverse effects on Te Rūnanga o Ōtākou.

Please see Kāi Tahu ki Otago Natural Resource Management Plan 2005 appendices seen as relevant to this application.

Te Rünanga o Ōtākou understand that they may withdraw written approval by giving written notice to the consent authority if there is a hearing, or if not, then before the application is determined.

Nāku noa, nā

Tania Richardson

Consents Officer – Mana Taiao

c Te Rûnanga o Ōtākou



Appendices

The following Issues/Objectives/Policies of the Kāi Tahu ki Otago Natural Resource Management Plan 2005 are seen as relevant to the above proposal. This relates to the holistic management of natural resources from the perspective of local iwi.

Kāi Tahu ki Otago Natural Resource Management Plan 2005

Otago Region / Te Rohe o Otago

Wai Māori

Land Management and Use including:

- Sedimentation from land use and development
- o Accidental discovery of cultural materials or sites from changed land use.

Wāhi Tapu

Wāhi Tapu General Issues

The resurfacing of koiwi takata through natural and human-induced processes.

Wāhi Tahu Objectives

- All w\(\text{ahi}\) tapu are protected from inappropriate activities
- Kāi Tahu ki Otago have access to wāhi tapu.
- o Wāhi tapu throughout the Otago region are protected in a culturally appropriate manner.

Wāhi Tapu General Policies

o To require consultation with KTKO for activities that has the potential to affect wahi tapu.

Cultural Landscapes General Policies

Air and Atmosphere

Air and Atmosphere Issues

General

- The cultural impacts of air pollution and discharges to air are poorly understood and seldom recognized.
- Discharges to air can adversely affect health and can be culturally offensive

Mahika Kai and Biodiversity

Clean air is important to the health of mahika kai.

Objectives

o The life supporting capacity and mauri of air is maintained for future generations.



Kevin Wood

From:

Benjamin Davies <bedavies@doc.govt.nz>

Sent:

13 April 2021 12:19 p.m.

To:

Kevin Wood

Subject:

RE: Swampy Summit consent?

Good Afternoon Kevin,

I've reviewed the draft documentation you've sent through and believe they will be sufficient. Please send through the completed forms to permissions@doc.govt.nz and they will be assigned to a Permissions Advisor to review in due course.

Please note the permissions team has a large backlog of work at present (approximately <u>four months</u>) and given the station has been operating for some time I don't have reason to believe this permit would be fast-tracked.

Once the application has been assigned we will be in touch to advise regarding any progress.

Please feel free to contact me via email or on my cell 027 266 3992 if you have any further queries.

Kā mihi,

Ben Davies

Ranger, Community | Kaitiaki Ão Hāpori

Department of Conservation | Te Papa Atawhai Dunedin Office | Ōtepoti Phone: +64 27 266 3992

www.doc.govt.nz



From: Kevin Wood <kevin.wood@otago.ac.nz>

Sent: Monday, 12 April 2021 3:48 pm

To: Benjamin Davies <bedavies@doc.govt.nz>

Subject: RE: Swampy Summit consent?

Ben.

Just wondering ... have you had an opportunity to look at the Swampy Summit draft concession application?

Regards Kevin From: Benjamin Davies < bedavies@doc.govt.nz>

Sent: 01 April 2021 3:55 p.m.

To: Kevin Wood < kevin.wood@otago.ac.nz > Subject: RE: Swampy Summit consent?

Kia ora Kevin,

Thank you for your email and my apologies for the late reply I've been away on a training course for 10 days and am slowly catching up on my emails!

I'm back in the office Tuesday 6th of April and I'll have a good look through the application before giving you some feedback.

Have a good long weekend.

Kā mihi nui,

Ben Davies

Ranger, Community | Kaitiaki Āo Hāpori

Department of Conservation | Te Papa Atawhai

Dunedin Office | Ōtepoti

Phone: +64 27 266 3992

www.doc.govt.nz



From: Kevin Wood < kevin.wood@otago.ac.nz > Sent: Wednesday, 31 March 2021 10:13 am
To: Benjamin Davies < bedavies@doc.govt.nz > Cc: Daniel Jephson < djephson@doc.govt.nz > Subject: FW: Swampy Summit consent?

Kia ora Ben,

You have helped Hayley with the Swampy Summit Concession and I am wondering if you can help me? I've attached a draft version of the Swampy Summit Concession application and I am wondering if there would be benefit in having a pre-application meeting?

Nāku, nā Kevin

From: Hayley Suter < hayley.suter@otago.ac.nz >

Sent: 23 March 2021 2:31 p.m.

To: Kevin Wood < kevin.wood@otago.ac.nz > Subject: FW: Swampy Summit consent?

Hi Kevin – this is the link to the appropriate form:

https://www.doc.govt.nz/globalassets/documents/about-doc/concessions-and-permits/concessions/concession-application-3b-private-structures.pdf

From: Benjamin Davies <bedavies@doc.govt.nz>

Sent: 23 March 2021 11:24 a.m.

To: Hayley Suter < hayley.suter@otago.ac.nz > Cc: Daniel Jephson < diephson@doc.govt.nz > Subject: RE: Swampy Summit consent?

Kia ora Hayley,

Thank you for getting in touch, Daniel has passed your email on to me.

I have confirmed the Research Shed is currently on Public Conservation Land (DOC Land). This will mean that the structure will require a permit (concession).

I have included a link below to our concession application forms page. The most appropriate form would be private/commercial facility/structures under longer-term activities. Once you have completed the required forms please email them through to permissions@doc.govt.nz

We will be able to advise you further when we have received your application.

Kā mihi nui,

Ben Davies

Ranger, Community | Kaitiaki Āo Hāpori

Department of Conservation | *Te Papa Atawhai* Dunedin Office | Ōtepoti Phone: +64 27 266 3992

www.doc.govt.nz



From: Hayley Suter < hayley.suter@otago.ac.nz >

Sent: Monday, 15 March 2021 2:33 pm
To: Daniel Jephson < djephson@doc.govt.nz >
Cc: Kevin Wood < kevin.wood@otago.ac.nz >

Subject: Swampy Summit consent?

Kia ora Daniel

Murray Brass and Craig Wilson have given me your contact details for this issue - hope you can help!

The University's Physics Department has a research shed and some aerials up on Swampy Summit – been there since the 1960s at least. We had thought this was on DCC land, like the nearby Airways Corporation set up, but turns out we are down a track on DoC land.

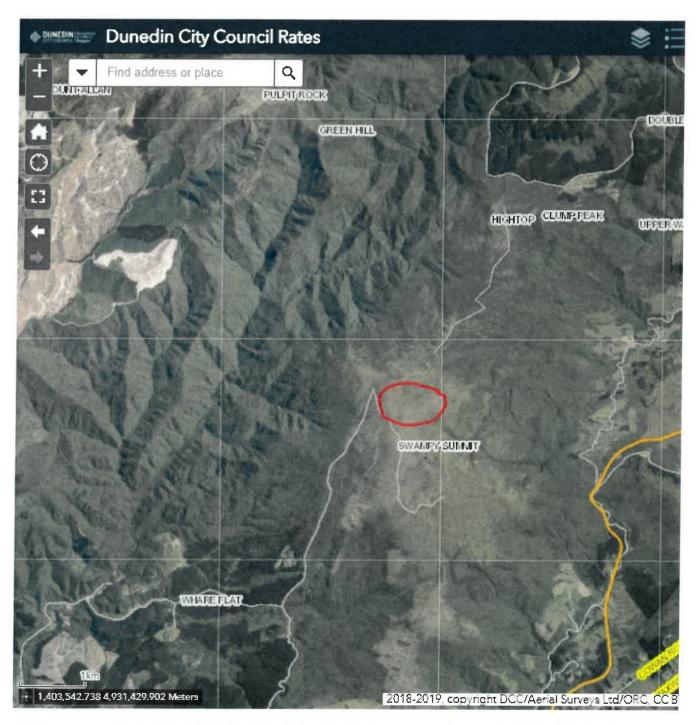
Our Resource Planner has been unable to track down any record of an easement/consent. Are you able to determine whether you have any record of an arrangement at your end?

The power supply needs replacing (we currently get it from Airways via a cable, which either needs to be replaced or an alternative source like solar panels installed), which is likely to require landowner consent, so we would like to get something official in place as soon as possible.

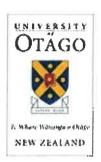
I've attached some maps below from the <u>DCC Rates Map</u> site. To the left of the second snip is the Airways premises - 520 Flagstaff-Whare Flat Road, with DCC 3 Waters listed as the ratepayer. Our property (circled) is on LOT 1 Silverstream Road Blueskin (CT 15D/1012, 15D/1012, 15D/1012, 12B/679, 12B/679, 12B/679).

Thanks for your assistance

Hayley







Hayley Suter
Property Manager

Property Services Division

Operations Group University of Otago | *Te Whare Wānanga o Otāgo* PO Box 56, Dunedin 9054 New Zealand | *Aotearoa*

Tel: +64 3 479 8051

Email: hayley.suter@otago.ac.nz

Website: <u>www.otago.ac.nz/propertyservices</u> Work hours: Mon, Tues, Thurs, Fri 8.30-5pm

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Kevin Wood

From:

permissions <permissions@doc.govt.nz>

Sent:

14 April 2021 10:12 a.m.

To:

Kevin Wood

Subject:

Your structures application has been received (93399-OTH)

Kia ora Kevin Wood,

Thank you for your structures application to continue operating at a physics research station at Swampy Summit and installing an off-grid power supply. The Permission Number your application has been assigned is: 93399-OTH.

DOC's priority is to support New Zealand in stopping the spread of COVID-19 and saving lives. During the current COVID-19 Alert Level we ask for your patience while we continue to process applications, as our standard processing times will be affected.

The advisor who will be managing your application will contact you when they have an estimated timeframe for processing your application.

If you have any questions about the status your application, please contact us at permissions@doc.govt.nz.

Ngā mihi nui,

Melissa Smith (any pronouns)

Statutory Processes Team

Planning, Permissions and Land Unit

Department of Conservation—*Te Papa Atawhai*Conservation leadership for our nature *Tākina te hī, tiakina te hā, o te ao tūroa*www.doc.govt.nz

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Kelvin Brown

From:

Kevin Wood <kevin.wood@otago.ac.nz> Monday, 20 September 2021 1:50 pm

Sent: To:

Emma Salmon

Cc:

Kelvin Brown; Murray McDonald

Subject:

RE: 93399-OTH: Swampy Summit FOX---P-15-FOX-20-07-2021.pdf

Attachments:

Emma,

I understand that currently University of Otago staff and students go up to swampy summit about twelve times a year for a few hours during each trip. Trips are made for repair and maintain of existing equipment, install new monitoring equipment, or field research trips for students.

In the future, when the station is not connected to the national grid, there will be the need for more travel up to Swampy Summit. There will be a lot more travel up to Swampy Summit during construction and commissioning. But once the proposed work is completed, I would estimate the number of trips to double over current levels. This extra travels will be needed to service the generator and for fuel runs.

I've attached a copy of the type of generator I understand the University is looking at. The size of the fuel tank is 600 litres.

Regards Kevin

From: Emma Salmon <esalmon@doc.govt.nz>

Sent: 20 September 2021 12:07 p.m.

To: Kevin Wood <kevin.wood@otago.ac.nz>
Cc: Kelvin Brown <kibrown@doc.govt.nz>
Subject: RE: 93399-OTH: Swampy Summit

Kia ora Kevin,

I hope you had a good weekend.

Thank you for your patience as we process your concession for Swampy Summit. I have a few more questions to ask so that we can make the best decision for the land.

How often do staff and students visit the physics shed annually? (please include the average trip length) How much fuel will actually be stored on site?

Kā mihi nui

Emma Salmon (She/Her)

Ranger, Community | Kaitiaki, Āo Hāpori

Department of Conservation | *Te Papa Atawhai* Ötepoti Dunedin Office Phone: +64 27 213 6584

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TECHNICAL DATASHEET



FOX - P 15 FOX





FOX "FOX"



No. of the last of		
ENGINE		
Engine brand	PERKINS	
Engine model	403A-15G2	
Cylinders	3	
Speed	1500	r.p.m.
Cubic capacity	1.50	I
Air intake	Aspirated	
Standard voltage	12	Vdc
Optional voltage		Vdc
Sae	4-7«	
ВМЕР	746	kPa
Cooling	Water	
Flywheel P.R.P. Power	13.8	kW
Flywheel Stand-by Power	15.2	kW
Fuel Cons. at 100% (L.T.P.)	5.0	I/h
Fuel Cons. at 100% (P.R.P)	4.3	I/h
Fuel Cons. at 75% (P.R.P.)	3.1	l/h
Fuel Cons. at 50% (P.R.P.)	2.2	l/h
Fuel Cons. at 25% (P.R.P.)	1.5	l/h
Electronic regulator	On request	
Precision class	G2	
Oil quantity	6.0	I
Engine Antifreeze capacity	2.6	I
Radiator type	Tropical	
Heat from radiator	14.6	kW
Heat from exhaust	11.6	kW
Heat from radiation	4.0	kW
Exhaust temperature	580	°C
Cooling air flow	0.00	m³/min
Combustion air flow	1.00	m³/min
Exhaust gas flow	2.20	m³/min
TA Luft	Not available	
TA Luft/2	Not available	
EPA	Not available	
Stage	Not available	

MAIN DATA	
Continuous power (PRP)	15.0 (kVA)
Continuous power (PRP)	12.0 (kW)
Stand-by power (LTP)	16.5 (kVA)
Stand-by power (LTP)	13.2 (kW)
Voltage • Frequency • Power Factor	400V •50Hz • 0.8 cosφ

DIMENSIONS AND WEIGHT	7. 1	# : T
Width	770	mm
Length	1660	mm
Height	1330	mm
Weight	610	kg

ALTERNATOR		
Alternator brand	STAMFORD	
Alternator model	SOL1-P	
P.R.P. Power	15.0	kVA
L.T.P. Power	16.5	kVA
Connection	Series star	
Phases	3PH+N	
Winding	12 terminals Winding 311	
Terminal Number	12	nr.
IP Protection	23	
Electronic regulator	AS540	
Precision	1.0	± %

BASEFRAME	
Model	FOX
Standard tank	50 [
Optional tank	600 I
Oversized tank*	0 1

CANOPY & SILENCER	Harris	100
Canopy model	FOX	
Silencer model	F50/02	
Silencer outlet diameter	50.0	mm

Standard reference conditions temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0,850kg/l. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.

dimensions, performance.

P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.

L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1. The number of hours per year is stated by the Manufacturer. Overload is not permitted.

The data contained in this document is nominal and refers to the standard equipped model and is not binding. Visa S.p.A. reserves the right to revise the information without notice per our policy of continuous product development and improvement.