



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](mailto: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.

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## 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.

### Unison's Remote Supply System - Description

Maintaining electricity supply to the remote **Taupiri Lookout site**, located on DoC land in the **Kaingaroa Forest** is often challenging. This site houses communications equipment owned by Timberlands and NZ Police and a more reliable power supply is needed. Power lines to sites such as the Taupiri lookout are vulnerable to damage from storms, landslips and trees – causing power cuts from time to time.

Unison has identified an alternative method of providing this supply which is expected to improve reliability. This would involve replacing the existing lines supply with a standalone on-site electricity system, a 'Remote Supply System'.

This Remote Supply System is predominantly powered by renewable solar energy, using PV panels, with batteries for energy storage, and includes a back-up diesel generator. It is purpose built and each system is optimised to suit the site's electricity requirements. Customers using systems such as this typically report that they have received improved service.

For the first year the existing electricity lines to the site will remain in place. During that year Unison will monitor the performance of the Remote Supply System and, in the event of any issues, we will be able to quickly switch back to the lines supply. Following the completion of the year, a decision will be made as to whether the Remote Supply System will become the permanent supply source. If so, the power lines would be removed.

The footprint of the Remote Supply System is approximately 55m<sup>2</sup>. A detailed layout of the site and the overview of the Remote Supply System are attached as **Appendix 3b:A** and **Appendix 3b:B**.

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## 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

There are no alternative location options to locate the Remote Supply System and still be able to service the communications hut.

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**C. Larger area**

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

**NO**

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:

Is this necessary for safety or security purposes?

**YES / NO**

Is this necessary as an integral part of the activity?

**YES / NO**

Is this essential to carrying on the activity?

**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.

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**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?

**YES**

*(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**

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

**YES**

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

**YES**

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

**Unison's Remote Supply System requires exclusive possession of the DoC land on which it is located for three reasons:**

- (a) **Public Safety.** The equipment generates and supplies electricity to the communications equipment located in the hut at Taupiri Lookout. Although the live connections are protected and enclosed in the unit away from direct access by the public, we require exclusive possession to ensure the public's safety. Signage will be provided on the equipment.
- (b) **Physical Security.** The equipment will be secured and locked; however, exclusive possession helps to ensure the physical security of the Remote Supply System. This in turn also helps to ensure public safety.
- (c) **Competent Operation:** Due to the rationale outlined in (a) and (b) above, exclusive possession also allows Unison assurance that the Remote Supply System will operate as it should, without interference from the public.

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**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**

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**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.*

10 years

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**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?

**NO. A maximum of 120 litres diesel will be held in the generator's fuel tank.**

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.

## H. 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  |
|--|--|---|--|
| <i>EG: Tararua Forest Park</i>               | <i>Northern rata - threatened species</i>  | <i>Damage to the plants by construction</i>   | <i>Brief construction and maintenance staff of the location and importance of the species; clearly tape off areas with the species to avoid damage</i>   |
| Taupiri Lookout Site in the Kaingaroa Forest | Taupiri Lookout – site of historic value as one of the last fire lookouts from the Forest Service era, actively managed by The Department Of Conservation and Ngati Whare. | <p>Small amount of earthworks and removal of trees to locate the Remote Supply System as close as practical to the lattice tower.</p> <p>Diesel generator as one of the components of the Remote Supply System.</p> | <p>All earthworks will be carried out after consultation with DOC, Ngati Whare and other interest groups and in accordance with conservation plans, the Electricity (Hazards from Trees) Regulations 2003, Unison Public Safety Management System and Vegetation Management Programme to minimise environmental impact. Working area will be clearly marked and secured to protect public safety.</p> <p>The Remote Supply System will be powered by renewable 'green' resources and use sunlight most of the time to generate electricity, storing it in batteries, ready to power the Site. A back-up, purpose-built diesel generator is included for times of low light or high load.</p> <p>The amount of diesel required (max 120l fuel tank) has been minimised by sizing the solar panels and the</p> |

|  |  |  |   |
|--|--|--|---|
|  |  |  | <p>battery capacity. Double wall generator's tank is designed to prevent any fuel spills or leaks.</p>  |
|  |  | <p>Vegetation Clearance prior to removal of overhead power lines.</p> <p>Note: Decision about the removal to be made after the completion of the year trial and discussion with DOC and other interest groups, whether the Remote Supply System will become the permanent supply source.</p> | <p>The overhead power line to Taupiri Site is 6km long crossing approximately 50% flat pasture land and 50% forestry, hence some vegetation works will be related to the power line removal.</p> <p>It should help to improve of electricity supply reliability for the Site as power lines to sites such as the Taupiri lookout are often vulnerable to damage from trees causing power cuts and risk for public safety.</p> <p>Prior to that Unison will engage with DOC and all involved partners to prepare and carry out these works as soon as possible, to a high standard and with the minimal disruption for the site.</p> |

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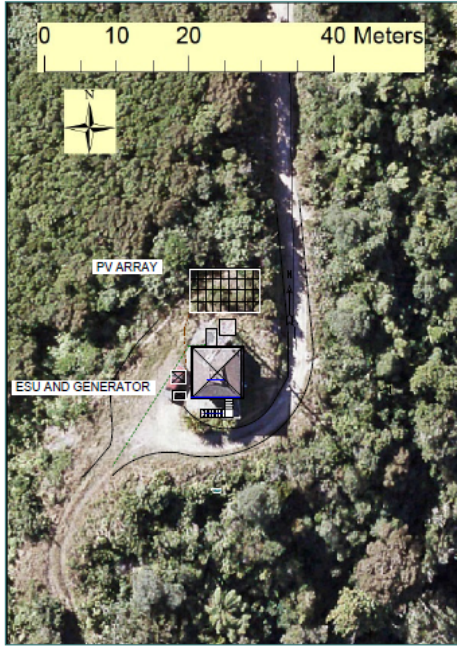
**I. Other**

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

Blank area for providing further information, consisting of six horizontal lines.

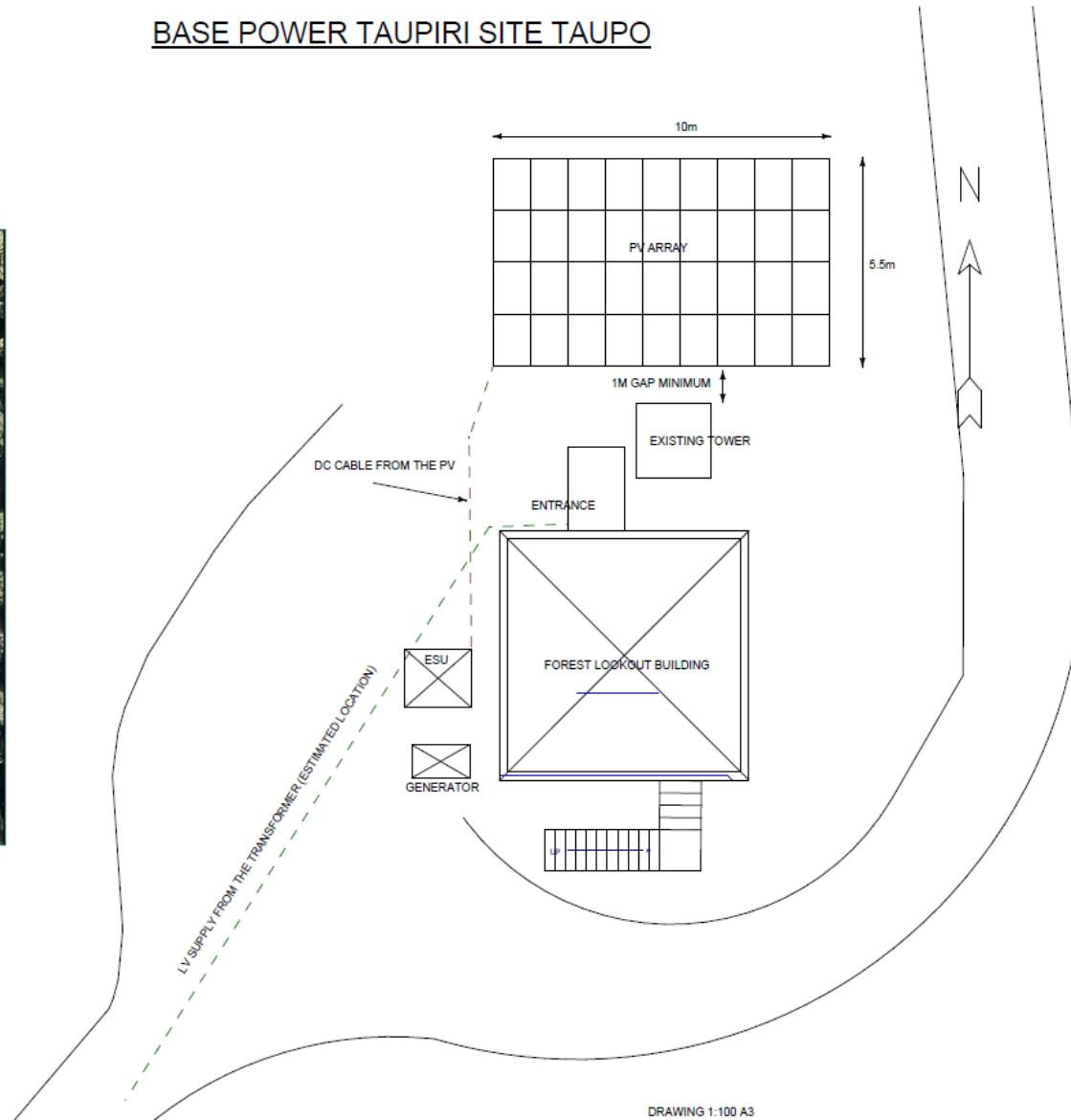
## Appendix 3b:A: The Site

1. MINIMISE VEGETATION CLEARANCE
2. PLACE PV ARRAY AS CLOSE AS PRACTICABLE TO THE LATTICE TOWER
3. KEEP CABLE RUNS AS SHORT AS POSSIBLE
4. PLACE GENERATOR AND ESU ONTO CONCRETE SLABS
5. FLEXIBILITY FOR THE ESU TO BE REMOVED IN FUTURE
6. UNISON TO PROVIDE A PILLAR BOX FOR ESU AC CABLE TERMINATION
7. USE THE EXISTING ESU 3G EQUIPMENT TO CONNECT TO THE LOCAL CELL NETWORK. HIGH GAIN ANTENNA MOUNTED ON THE ROOF OF THE ESU. (VODAFONE OR SPARK - TBC)



AERIAL IMAGE 1:500A3

## BASE POWER TAUPIRI SITE TAUPO



DRAWING 1:100 A3



## Appendix 3b:B: The Remote Supply System – Overview



### Key Specifications:

- Solution tailored to meet customer's site-specific supply requirements.
- Performance data and remote access via dedicated communications service.
- High quality components (Schneider, Simplphi)
- Component/modular design.
- Self-contained 10KVA Diesel generator
- Ground mounted PV panels installed in 2mx10m arrays