

The Point Solar Farm – Proposed Conditions

Dated 15 January 2026

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Definitions and Abbreviations within the Conditions Schedule

Abbreviation / Term / Acronym	Term / Definition
Above-ground solar infrastructure	means all solar panels, inverters, transformers, cabling or structures associated with the Solar Farm operations.
AMP	Avifauna Monitoring Plan
BCMP	Bird Collision Management Plan
CFRMP	Construction Fire Risk Management Plan
CLMG	Contaminated Land Management Guidelines No.1: Reporting on Contaminated Land in New Zealand
CMP	Construction Management Plan
CMP	Construction Management Plan
CNMP	Construction Noise Management Plan
Commencement of physical works	<p>means activities undertaken to construct the solar farm including bulk earthworks (cut and fill activities), installation of solar panels and ancillary infrastructure (such as inverters, cabling and transformers), but excludes the following activities:</p> <ul style="list-style-type: none"> • Pre-construction site investigations including access for such activities; • The establishment of erosion and sediment control measures; • Site establishment activities for the purposes of providing any temporary site construction office compound; • Ecological survey(s); and • Any vegetation removal associated with the activities listed above.
Consent Authorities	Means Canterbury Regional Council and Mackenzie District Council jointly.
Consent Holder	means Far North Solar Farm Ltd, its successor, or any person(s) acting under the written approval of Far North Solar Ltd or its successor.
DMP	Decommissioning Management Plan
DoC	Department of Conservation
DSI	Detailed Site Investigation
Earthworks	Alteration or disturbance of land, including by moving, removing, placing, blading, cutting, contouring, filling or excavation of earth (or any matter constituting the land including soil, clay, sand and rock); but excludes gardening, cultivation, and disturbance of land for the installation of fence posts.
EEP	Ecological Enhancement Plan
EMF	Electric and Magnetic Fields
ERP	Emergency Response Plan
ESCP	Erosion and Sediment Control Plan
GIP	Grid Injection Point

HAIL	Hazardous Activities Industries List
Landscaping	means the planting, establishment, and maintenance of vegetation for visual and amenity purposes, in accordance with the approved and certified Landscape Management Plan.
LMP	Landscape Management Plan
LzMP	Lizard Management Plan
NES-CS	National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health
OMP	Operational Management Plan
Operation of the Solar Farm	means the phase following commissioning during which the Solar Farm generates electricity to the National Grid and is routinely maintained and monitored.
PAWMP	Pest Animal and Weed Management Plan
PFAS	Per- and Polyfluoroalkyl Substances
PSI	Preliminary Site Investigation
RAP	Remediation Action Plan
RGMP	Robust Grasshopper Management Plan
RMA	Resource Management Act 1991
SEMP	State of the Environment Monitoring Plan
Site	All land to be used for the Solar Farm operations on Section 3 SO 384036.
SMMP	Soil Mitigation Management Plan
Solar Farm	means utility-scale renewable energy facility comprising ground-mounted photovoltaic (PV) panels and associated infrastructure (including inverters, transformers, cabling, access tracks, security fencing, stormwater management measures, and ancillary buildings) used to generate electricity from solar radiation for supply to the National Grid.
Solar Farm decommissioning	means the permanent removal of the Solar Farm and associated infrastructure following the end of its operational life.
SQEP	Suitably Qualified and Experienced Person(s) means a person with a tertiary qualification in the field to which a particular condition relates; or having sufficient technical expertise that is at least equivalent; and having at least five (5) years working experience and (where applicable) chartered professional membership to an accredited organisation, unless otherwise specified in the conditions Person(s)
SVP	Site Validation Plan
TCMP	Transpower Construction Management Plan
TMP	Traffic Management Plan

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PART A: PRE-REQUISITES

1. The Consent Holder shall prepare the following management plans in Table 1 for certification by the Canterbury Regional Council and Mackenzie District Council (**Consent Authorities**) or by their nominated appointee. The Consent Holder shall prepare the following management plans in accordance with the requirements of the relevant conditions and in general accordance with the application documents listed in **Annexure A**.

Table 1. Management Plans.

Management Plan	Certifier / Reviewer	Condition Reference	Documents to Council for Certification – Minimum Timeframe
Avifauna Monitoring Plan (AMP)	Consent Authorities certified; draft reviewed by DoC	XX	15 working days from when monitoring is undertaken.
Construction Fire Risk Management Plan (CFRMP)	Consent Authorities	XX	30 working days before commencement of physical works on Site.
Construction Management Plan (CMP)	Consent Authorities	X	30 working days before commencement of physical works on Site.
Construction Noise Management Plan (CNMP)	Mackenzie District Council	XX	30 working days before commencement of physical works on Site.
Decommissioning Management Plan (DMP)	Consent Authorities	XX	Three months before the commencement of Solar Farm decommissioning.
Ecological Enhancement Plan (EEP)	Consent Authorities; draft reviewed by DoC	XX	30 working days before commencement of physical works on Site.

Emergency Response Plan (ERP)	Consent Authorities	XX	<ul style="list-style-type: none"> - 30 working days before commencement of physical works on Site - 30 working days before the commencement of Solar Farm operations.
Erosion and Sediment Control Plan (ESCP)	Consent Authorities	XX	30 working days before commencement of physical works on Site.
Landscape Management Plan (LMP)	Mackenzie District Council	XX	30 working days before the commencement of landscaping.
Lizard Management Plan (LzMP)	Consent Authorities	XX	Three months before the commencement of physical works on Site.
Operational Management Plan (OMP)	Consent Authorities	XX	30 working days before the commencement of the Solar Farm operations.
Pest Animal Weed Management Plan (PAWMP)	Consent Authorities	XX	30 working days before the commencement of landscaping.
Robust Grasshopper Management Plan (RGMP)	Consent Authorities	XX	Three months before the commencement of physical works on Site.
State of the Environment Monitoring Plan (SEMP)	Consent Authorities	XX	30 working days before commencement of physical works on Site.
Substation Construction Management Plan (SCMP)	Canterbury Regional Council	XX	20 working days before the commencement of any physical works for the initial construction of the Transpower Grid Injection Point Substation.
Traffic Management Plan (TMP)	Mackenzie District Council	XX	30 working days before commencement of physical works on Site.
Transpower Construction Management Plan (TCMP)	Mackenzie District Council; draft reviewed by Transpower	XX	30 working days before commencement of physical works on Site.

Management Plans

2. The Consent Holder shall ensure that all management plans are prepared by a suitably qualified and experienced person (**SQEP**).

3. The Consent Holder shall comply with all certified management plans set out in Table 1.
4. The Consent Holder must ensure that all contractors engaged to undertake activities authorised by this resource consent are supplied with a copy of and made aware of the conditions and management plans that apply to this resource consent that are relevant to their work area and the measures required for compliance with the conditions.
5. The Consent Holder may make amendments to the management plans specified in Condition 1 that are consistent with the objectives and performance requirements of the management plan and relevant consent conditions. The amended management plan shall be submitted to the Council for certification in accordance with **Conditions X-X** (including but not limited to the Council Certification Response in **Condition X**), and all relevant works must not continue until the amended management plan is certified.
6. The Consent Holder shall submit the management plans in Table 1 to the Consent authorities for certification in accordance with the timeframe specified in each relevant condition below. Works must not commence until the relevant management plan(s) are certified.
7. The certification process shall be limited to confirming in writing that the management plan has been prepared in accordance with the relevant conditions(s) and will achieve the objectives of the management plan.
8. If the Council's response is that it is not able to certify the management plan, the Consent Holder shall address any reasons or recommendations provided by the certifier and re-submit an amended management plan for certification.

Notification of commencement of works

9. At least 20 working days before the commencement of physical works on Site, the Consent Holder must notify in writing the Consent Authorities and mana whenua the expected start date of work commencing.

Advice Note: *The Consent Holder is to contact the Consent Authorities through the following:*

- Mackenzie District Council (info@mackenzie.govt.nz)
- Canterbury Regional Council (ecinfo@ecan.govt.nz)

Soil contamination reporting

10. Before the commencement of any earthworks on Site, the Consent Holder must provide a Preliminary Site Investigation (**PSI**) to the Council for certification. The PSI must be prepared by a SQEP and in accordance with the Ministry for the Environment's *Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Land in New Zealand (CLMG1)*.
11. In the event that an activity on the Hazardous Activities and Industries List (**HAIL**) is identified to have occurred on the Site in the PSI required under **Condition X**, a Detailed Site Investigation (**DSI**) must be prepared by a SQEP and in accordance with the CLMG1 guidelines. The DSI must be provided to Council for certification no more than 20 working days from the date of the submission of the PSI required in Condition 12.
12. In the event that the DSI required by **Condition X** finds contamination to exceed the applicable standards of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (**NES-CS**), a Remedial Action Plan (**RAP**) must be prepared by a SQEP and in accordance with the current edition of the CLMG1 and the Ministry for the Environment's *Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils (Revised 2021) (CLMG5)*. The RAP must be provided to the Council for certification no more than 15 working days from the date of the submission of the DSI required in **Condition X**.

Advice Note:

For the avoidance of doubt, the RAP is to be prepared in accordance with the relevant guidelines and requirements as set out by the Ministry for the Environment.

State of Environment Monitoring Plan

13. A SEMP shall be prepared and provided to the Consent Authorities for certification at least 30 working days before the commencement of physical works on Site. The purpose of the SEMP is to establish a framework for monitoring, managing, and reporting on environmental effects associated with the Solar Farm, to inform the Consent Authorities of environmental performance and compliance during construction and operation, including:

- a. Providing a baseline against which subsequent monitoring results submitted by the Consent Holder to the Consent Authorities can be assessed; and
 - b. In the event subsequent monitoring results significantly exceed corresponding SEMP baseline data, the Consent Authorities shall initiate a review of conditions of this resource consent under **Condition X**.
14. The SEMP shall, at a minimum, detail monitoring locations, procedures to collect baseline (pre-works) as required by **Condition X(a)** and include ongoing monitoring data, ongoing monitoring requirements (frequency and contaminants), compliance with the maximum acceptable contaminant concentration thresholds and reporting frequencies for the following in relation to the Site:
- a. Health of freshwater on Site, including upstream and downstream of adjacent waterbodies to the Site;
 - b. Groundwater up and downgradient of the Site; and
 - c. Soil health and contamination.
15. Data obtained from the monitoring of the Site required by **Condition X** shall be provided to the Consent Authorities on the basis specified in **Condition X**. The Consent Holder must notify the Consent Authorities immediately if trigger levels specified in the SEMP in **Condition X** are exceeded.

Groundwater and soil monitoring

16. The Consent Holder shall undertake monitoring of groundwater and soil in accordance with the SEMP required by **Condition X** at the following consent milestones:
- a. Before the commencement of any earthworks on Site;
 - b. Before the commencement of Solar Farm operations;
 - c. Every fifth year after the commencement of operation of the Solar Farm; and
 - d. At decommissioning of the Solar Farm.
17. The monitoring undertaken in accordance with **Condition X** must include testing for soil health parameters including at least:
- a. Bulk density
 - b. Aggregate stability
 - c. pH
 - d. Electrical conductivity
18. The monitoring undertaken in accordance with **Condition X** must include testing for soil contaminants including at least:
- a. Silver – Ag
 - b. Cadmium – Cd
 - c. Copper – Cu

- d. Lead – Pb
 - e. Antimony – Sb
 - f. Zinc – Zn
 - g. Per and Polyfluoroalkyl Substances Compounds - (**PFAS**)
19. Following completion of monitoring at each of the milestones identified in **Condition X**, the Consent Holder shall prepare and submit a report on monitoring results to Consent Authorities within two months of monitoring being undertaken. The report must include the following:
- a. Soil Health:
 - i. An assessment of the results of soil health testing;
 - ii. If the soil health testing results indicate a decline in soil health compared to testing prior to the installation of the panels, the Consent Holder must provide details of mitigating actions to be undertaken to avoid a further decline in soil health.
 - b. Soil Contamination:
 - i. An assessment of the results of soil contamination testing, including if the results indicate any trend of increasing contamination compared to the testing prior to the installation of the panels or if any contaminant exceeds the WasteMINZ Class 4 Guidelines Table 3-C adopted values (or, where these Guidelines have been updated, the updated values); and
 - ii. If the assessment indicate that soil contaminants exceed the Guideline values, or are increasing at a rate such that the Guideline values are likely to be exceeded, details of mitigation actions to be undertaken to ensure that any exceedance will be remediated, or that Guideline values will not be exceeded must be provided to the Consent Authorities within 20 working days.
 - c. Implementation of mitigation measures:
 - i. Mitigation measures required by **Condition X(d)** must be implemented as soon as practicable; and
 - ii. Testing shall be undertaken on a monthly basis until the trend for soil health is no longer in decline and until soil contaminants are no longer increasing and are either below the WasteMINZ Class 4 Guideline Table 3-C values, or at/below the pre-development levels recorded in the testing required by Condition 13(a) if they were higher than the Guideline values.
 - d. Soil Mitigation Management Plan (**SMMP**):
 - i. In the event that either the soil health or soil contamination triggers under **Conditions X(a)(ii) or X(b)(ii)** are met, the Consent Holder must prepare a Soil Mitigation Management Plan (SMMP) for approval and certification by the Consent Authorities. The purpose of the SMMP is to detail measures for how soil health and / or soil contamination on Site will be mitigated; and

- ii.* The SMMP must detail the mitigation measures, monitoring regime, reporting requirements and timelines to ensure that soil health and / or soil contamination is managed in accordance with **Condition X(c)**.

PART B: GENERAL CONDITIONS

20. The Solar Farm shall be constructed, operated, maintained and decommissioned in accordance with the information and plans submitted by the Consent Holder in support of application number XXX and officially received by Council on XXX. Plans and information that comprise this application are in **Annexure A**.

Consent Lapse

21. Pursuant to section 125(1) of the Resource Management Act 1991 (**RMA**), this resource consent shall lapse 5 years from the date of its commencement unless it has been given effect to, surrendered or been cancelled at an earlier date.

Duration of Consent

22. This resource consent shall expire 35 years from the date of commencement.

Monitoring Fees

23. Pursuant to section 36 of the RMA the Consent Holder must pay the actual and reasonable costs incurred by the Consent Authorities when monitoring the conditions of this resource consent.

Review

24. The Council may, under sections 128 and 129 of the RMA, initiate a review of any or all conditions of this resource consent on the first, second and third anniversary of the commencement of the consent and every three years after that, for the duration of the resource consent. Any such review of conditions shall be for the purposes of:

- a. Responding to any adverse effect on the environment which may arise from the exercise of the consent and which it is most appropriate to deal with at a later stage;
- b. Ecology including, but not limited to, any effects detected by the avifauna monitoring required under **Conditions XX**;
- c. Dealing with any unanticipated adverse effects on the environment which may arise from the exercise of the consent, which it is appropriate to deal with at a later stage; and
- d. Ensuring that the conditions are effective and appropriate in managing the effects of the activities authorised by this consent.

Complaints Register

25. The Consent Holder shall maintain a register of any complaints received regarding the activities authorised by this resource consent. As a minimum, the register shall include:
 - a. The name and contact details (if supplied) of the complainant;
 - b. The nature and details of the complaint;
 - c. The location, date and time of the complaint and the alleged event giving rise to the complaint;
 - d. Weather conditions at the time of the complaint, where relevant to the complaint;
 - e. Other activities in the area that may have contributed to the complaint;
 - f. The outcome of the Consent Holder's investigation into the complaint; and
 - g. A description of any measures taken by the Consent Holder to respond to the issue raised by the complainant.

26. The Consent Holder shall notify the Consent Authorities of any complaint received that relates to the activities authorised by this resource consent as soon as reasonably practicable and no later than two working days after receiving the complaint.

27. The Consent Holder shall respond to any complainant as soon as reasonably practicable and, within 5 working days, advise the Consent Authorities and the complainant of the outcome of the Consent Holder's investigation and any measures taken, or proposed to be taken, to respond to the complaint.

Landscaping

28. Implementation of the landscaping within the Landscape Mitigation Strip, as illustrated on the landscape plan prepared by Rough Milne Mitchell (titled: Proposed Solar Farm Plan), dated 4 April 2025, and provided with resource consent application titled Substantive Assessment of Effects Report, prepared by Williamson Water and Land Advisory Ltd, dated XXX (RMM Landscape Plan) prepared by Williamson Water & Land Advisory, is to be undertaken:
 - a. Within the first five planting seasons (approximately September - November) directly following commencement of any of the works relating to the solar farm (from detailed design stage onwards); and
 - b. Shall be maintained by the Consent Holder from that point onwards for the term of the resource consent to the satisfaction of the Consent Authorities or a duly delegated Council officer.

Advice Note:

*Condition 30 does not apply within 12 m either side of the centreline of Transpower transmission lines (refer to **Condition X**).*

29. The vegetation within the Landscape Mitigation Strip as illustrated on the landscape plan prepared by Rough Milne Mitchell (titled: Proposed Solar Farm Plan), dated 4 April 2025, is to achieve a height of 3 m tall and create a visually continuous band of planting.
30. At least 30 working days before the commencement on landscaping on Site, the Consent Holder shall submit to Mackenzie District Council for certification a LMP. The purpose of the LMP is to assist with achieving the best plant success rate possible and ensuring that the landscape mitigation vegetation, establishes, survives and thrives in this environment.
31. The LMP, at a minimum will include a planting methodology(s), maintenance methodology(s), and record the success and failure of the plant establishment. Therefore, the LMP will be a working document that can be altered if and when better planting and maintenance methodology(s) can be implemented. This may include substituting plant species if it is found that a more appropriate plant species is better suited to this environment, whilst achieving the desired screening.
32. The LMP will be prepared and updated by a suitably qualified landscape architect and / or ecologist. The LMP shall be informed by the PAWMP, AMP, LzMP and RGMP required by Conditions X-XX.
33. The vegetation identified within the RMM Landscape Plan shall not be cut down, damaged or destroyed (except for the purposes of replacing any vegetation that has died or represents an unacceptable risk to buildings or people as a result of a natural event) without the prior written consent of Mackenzie District Council. Such consent may be given in the form of resource consent.
34. The Consent Holder shall ensure that the ground underneath the solar panels is covered in established vegetation at all times to prevent sediments entering stormwater. Should the vegetation under the solar panels not thrive in the shade of the solar panels then the vegetation shall be immediately replaced with shade tolerant species.
35. At least 30 working days before the commencement of landscaping, the Consent Holder shall engage a SQEP ecologist to produce a PAWMP for the Solar Farm. The purpose of the PAWMP is to provide details on how pest animals and weeds will be managed on the site during the operation of the Solar Farm. The PAWMP shall be informed by the AMP, LzMP and RGMP required by Conditions XX-XX and as a minimum must:
 - a. Identify measures for how pest management and weed control will be undertaken on the Site;
 - b. Identify times of year to focus particular pest management and weed control strategies;

c. Establish mechanisms to report annually on the results of pest and weed management to Council.

36. The PAWMP shall be provided to the Consent Authorities' SQEP ecologist(s) at least 15 working days before the commencement of landscaping, for certification.

PART C: CONSTRUCTION AND OPERATIONAL CONDITIONS

Works in proximity to Transpower Transmission Lines:

37. The Consent Holder shall provide Transpower with 10 working days' notice in writing before the commencement of physical works on Site.

Advice Note:

Notification can be sent to: transmission.corridor@transpower.co.nz

38. No buildings or structures (except non-conductive fencing) shall be located within 12m of the centreline of Transpower's National Grid transmission lines.

39. No buildings or structures shall be located within 12m of any outer visible edge of the foundation of National Grid support structures; except for non-conductive fencing, which can be located 6m from any outer visible edge of the support structure foundation.

40. All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001) or any subsequent revision of the code.

41. All buildings, structures and vegetation must be located to ensure vehicle access is maintained to the MST-UHT A National Grid transmission lines, and support structures, for maintenance at all reasonable times, and emergency works at all times.

Advice Note:

Transpower has a right to access its existing assets under section 23 of the Electricity Act 1992. Any development on the site must not preclude or obstruct this right of access. It is an offence under section 163D of the Electricity Act 1992 to intentionally obstruct any person in the performance of any duty or in doing any work that the person has the lawful authority to do under section 23 of the Electricity Act 1992.

42. All machinery and mobile plant operated in association with the works shall maintain a minimum clearance distance of 4m from the live overhead

conductors (wires) of the National Grid transmission lines at all times to avoid the potential of machinery striking the lines.

43. To ensure safe separation distances to the conductors (wires) of the National Grid transmission lines are maintained, all machinery, mobile plant and vehicles operating within 12m of the transmission lines, and traversing beneath the lines, shall be limited to a maximum reach height of 2.1m. This includes any loads being lifted or transported underneath the line.
44. Any proposed new trees or shrubs within 12m either side of the centreline Transpower's National Grid transmission lines must not exceed 2m in height at full maturity and must comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.

Transpower Construction Management Plan

45. A TCMP must be prepared at least 30 working days before the commencement of physical works on Site. The purpose of the TCMP is to manage the effects of construction on Transpower's assets. The TCMP must include the following (but is not limited to):
 - a. The name, experience and qualifications of the person/s nominated by the Consent Holder to supervise the implementation of, and adherence to, the CMP;
 - b. Construction drawings, plans, procedures, methods and measures to demonstrate that all construction activities undertaken on the site will meet the safe distances within the New Zealand Electrical Code of Practice for Electrical Safe Distances 2001 (NZECP 34: 2001) or any subsequent revision of the code; including (but not limited to) those relating to:
 - i. Excavation and Construction near Towers (Section 2);
 - ii. Building to conductor clearances (Section 3);
 - iii. Ground to conductor clearances (Section 4);
 - iv. Mobile Plant to conductor clearances (Section 5); and
 - v. People to conductor clearances (Section 9).
 - c. Details of any areas that are "out of bounds" during construction and/or areas within which additional management measures are required, such as fencing off, entry and exit hurdles, maximum height limits, or where a safety observer may be required (a safety observer will be at the Consent Holder's cost);
 - d. Demonstrate how the existing transmission lines and support structures will remain accessible during and after construction activities;

- e. Demonstrate how the effects of dust (including any other material potentially resulting from construction activities able to cause material damage beyond normal wear and tear) on the transmission lines will be managed;
 - f. Demonstrate how changes to the drainage patterns, runoff characteristics and stormwater will avoid adverse effects on the foundations of any support structure;
 - g. Demonstrate how construction activities that could result in ground vibrations and/or ground instability will be managed to avoid causing damage to the transmission lines, including support structures; and
 - h. Details of proposed contractor training for those working near the transmission lines.
46. The TCMP required in **Condition XX** must be submitted to:
- a. Transpower NZ Ltd to review that the TCMP protects and retains access to the MST-UHT-A National Grid transmission line and support structures. The Consent Holder must submit the TCMP to Transpower NZ Ltd for review at least 20 working days before it submits the TCMP to Council for certification; and
- Advice Note:** *The TCMP should be sent to Transpower NZ Ltd via PATAI Form 5: <https://transpower.patai.co.nz/new-enquiry>.*
- b. Mackenzie District Council to certify at least 30 working days before the commencement of physical works on Site.

Ecology

Lizards

47. At least three months before the commencement of physical works on Site, the Consent Holder shall provide for the certification of the Consent Authorities a LzMP for the purposes of minimising any potential effects on indigenous skinks / geckos within the vegetation. Copies of any Department of Conservation permits (if required) shall be attached to the plan. The LzMP shall be prepared by a suitably qualified and experienced herpetologist and shall be made in accordance with the Department of Conservation 'Guidelines and model for producing management plans for New Zealand lizards' and be informed by the LMP required by **Condition X**. The LzMP shall include (but not be limited to):

- a. Timing of the works;
- b. A description of the salvaging methodology;
- c. A description of relocation methodology, including transfer methods, relocation site(s) selection and habitat enhancement methods (such as deployment of logs and pest control).

Avifauna

48. Any physical works on Site occurring during the bird breeding season (1 September to 31 March) must be undertaken in accordance with the recommendations set out in Section 12 of Assessment of Ecological Effects for the Proposed Solar Farm Between the Lower Reaches of the Tekapo and Twizel Rivers, Mackenzie District (dated May 2023, ref. 6621c). At a minimum, this must include the following:
 - a. A Site inspection by a suitably qualified and experienced ecologist within 48 hours of works commencing to determine whether any indigenous birds are nesting on the Site on or in the vicinity of the construction area(s).
 - b. If nesting birds, eggs or chicks are found, then works must not commence until after an exclusion zone has been established around the nesting birds, eggs or chicks within which construction must not commence until after nesting activities have ceased. Exclusion zones must be 100m, or smaller if considered appropriate by the suitably qualified and experienced ecologist, but under all circumstances must not be less than 25.
 - c. If works are paused for eight successive days or more, then are resumed during the breeding season, a new survey will be required.

49. At least six months before the commencement of physical works on Site, the Consent Holder must engage a suitably qualified and experienced ornithologist / ecologist to prepare a Literature Review Report. This report must summarise the current state of knowledge on bird collision with ground-mounted, photovoltaic solar array. The purpose of the Literature Review Report is to:
 - a. Provide an up-to-date evaluation of bird collision risk with equivalent technology projects both internationally and within New Zealand.
 - b. Recommend appropriate timing, methods (including methods for carcass detection / persistence trials), frequency, and duration for bird collision monitoring that would enable effective detection and response to collision events in accordance with best practice.

The Literature Review Report must generally inform the development of, and must be appended to, the AMP required under Condition X.

Advice Note: *Carcass detection / persistence trials refer to methods developed to account for bird carcass detection and loss (via scavenging, decomposition) probability when estimating rates of bird mortality.*

50. At least three months before the commencement of physical works on Site, the Consent Holder shall provide for the certification of the Consent Authorities an AMP. The AMP shall be prepared by a suitably qualified and experienced ornithologist / ecologist with input from a biostatistician, in consultation with the DoC.
51. The objectives of the AMP are to:
- a. Enable detection of bird collision with the solar arrays and ancillary infrastructure within the Site;
 - b. Guide an appropriate management response in the event of collisions of indigenous bird species with the solar arrays and ancillary infrastructure within the Site, particularly those classified as nationally Threatened or At Risk to reduce the ongoing risk of exceeding the thresholds of unacceptable adverse effects in Table 2;
 - c. Ensure any effects on indigenous birds arising from the operation of the Solar Farm do not exceed the thresholds of unacceptable adverse effect in Table 1.
52. The draft AMP must be provided to DoC for comment at least 60 working days before the commencement of physical works on Site. Any review comments from DoC, including any responses to comments, must be appended to the AMP.
53. The AMP must incorporate best practice as determined through Condition X.
54. The AMP must include, but not be limited to, the following:
1. Monitoring Design:
 - i. Frequency, duration (including a minimum of 36 months from commencement of installation of solar panels and ancillary infrastructure within the Site), timing, and site coverage of bird collision monitoring surveys that is adequate to ensure carcasses are detected.
 2. Methodology:
 - i. Statistically robust methods for bird collision surveys.
 - ii. Methods for carcass detection and removal trials (to be informed by the Literature Review Report if addressed in the literature, otherwise that is of an adequate standard to ensure carcasses are detected).
 - iii. Methods for record keeping and data analysis, including statistical methods to derive annual mortality estimates.
 3. Mortality Thresholds and Management Responses:
 - i. Thresholds in Table 2 for indigenous bird species that trigger a management response in accordance with Condition X.

Table 2. Indigenous bird mortality thresholds.

National Threat Classification	Threshold to Trigger a Management Response
Threatened – Nationally Critical species	One carcass detected at any time during the monitoring period.

Threatened – Nationally Endangered species	
Threatened – Nationally Vulnerable species	Two carcasses detected within any one survey; or three carcasses detected cumulatively in any consecutive 12-month period.
Threatened – Nationally Increasing species	
At Risk species	Three carcasses detected within any one survey; or five carcasses detected cumulatively in a consecutive 12-month period.
Not Threatened indigenous species	Five carcasses detected within any one survey; or 15 carcasses detected cumulatively in any consecutive 12-month period.

55. Twenty working days after the first, second and third year anniversaries of the monitoring required by Conditions XX-XX, a suitably qualified and experienced ecologist / ornithologist is to submit a report to the Consent Authorities and DoC setting out the results of the monitoring.

Advice Note: *The meaning of ‘Threatened and At Risk’ and national threat classifications for indigenous bird species are based on the most recent available assessment under the New Zealand Threat Classification System administered by DoC (Rolfe et al. 2022; available at <https://nztcs.org.nz/>).*

56. Within 5 working days of exceeding a threshold in Table 2 (Condition X) at any time prior to the conclusion of the monitoring period, a suitably qualified and experienced ecologist / ornithologist is to advise the Consent Authorities setting out:

- a. The details of the mortality threshold breach;
- b. Notice of the preparation and recommendations on the content of an ongoing Bird Collision Management Plan (BCMP) to ensure mortality of avifauna does not continue to exceed the thresholds in Table 2, Condition X.

57. If a BCMP is required, as a result of a Table 2 threshold being breached, this must be provided to DoC for comment no later than 20 work days from the notification of a mortality exceeded outline within Condition X. Following 20 working days, or receipt of comment from DoC (whichever is sooner), the BCMP must be finalised and provided to the Consent Authorities for certification, no later than a further 20 working days following the conclusion of the comment period.

The BCMP must include:

- a. Details of ongoing monitoring to be undertaken; and
- b. Details of collision prevention / deterrent measures that are to be developed in consultation with DoC and must be implemented at the Site which may include (as relevant to the nature of the impacts

identified by the monitoring provided for under Conditions XX-XX) but are not limited to:

- i. Bird sensitive anti-reflective coatings and / or applications to the panels;
- ii. Use of deterrent devices or visual warning devices / markings (flags, streamers, or visually distinctive markings on panels) to deter attempted landing on panels;
- iii. Limitations on angle or orientation of solar panels over defined spatial, temporal scales, or environmental conditions if collisions were able to be attributed to certain spatial temporal or environmental patterns; and
- iv. Further monitoring at an appropriate time scale, to test the effectiveness of proposed mitigation responses.

58. The Consent Holder must comply with the certified Management Plan(s) or report(s) at all times including by undertaking bird collision monitoring, management and reporting in accordance with the methodologies within the certified AMP and BCMP (if development of such a plan is triggered).

Robust Grasshopper

59. At least three months before the commencement of physical works on Site, the Consent Holder shall provide for the certification of the Consent Authorities a RGMP. The purpose of the RGMP is to describe the specific procedures to address potential adverse effects associated with the construction and operation of the project on the Robust Grasshopper. The RGMP shall be prepared by a suitably qualified and experienced ecologist and be informed by the LMP required in Condition X. The RGMP shall include (but not be limited to):

- a. Timing of works; and
- b. Relocation methods, including transfer methods and selection of appropriate relocation site(s).

Ecological Enhancement Plan

60. At least three months before the commencement of physical works on Site, the Consent Holder shall provide for certification of the Consent Authorities an EEP. The purpose of the EEP is to describe how indigenous vegetation on the site will be managed during the term of the resource consent. The EEP shall be prepared by a suitably qualified and experienced ecologist and be informed by the LMP required by Condition XX. The EEP shall include (but not be limited to):

- a. Measures for how invasive species will be managed on-site;
- b. Measures outlining soil cultivation and weed control; and
- c. Monitoring to assess the ongoing success of the ecological enhancement initiatives.

61. The draft EEP must be provided to DoC for comment at least 60 working days before the commencement of physical works on Site. Any review comments from DoC, including any response to comments, must be appended to the EEP.

Panels

62. All panels installed and used on Site must be coated in anti-reflective coating, contain no PFAS and have gridlines.
63. The solar panels and array tables must be constructed to have a maximum tilted height of no more than 4.5m.

Construction works

64. All pre-construction activities are to be undertaken in accordance with the certified CMP, TMP, and CNMP.
65. The Consent Holder must ensure that any debris tracked onto adjacent roads from construction traffic is cleared from the carriageway immediately.
66. All loading and unloading of trucks with excavation or fill material must be carried out within the Site.
67. All disturbed ground surfaces must be adequately surfaced and stabilised as soon as possible to limit dust, contaminant or sediment mobilisation.

Archaeological sites or waahi tapu

68. In the event of any archaeological site or waahi tapu being discovered or disturbed while undertaking works to give effect to the conditions of this consent, the works in the area of the discovery shall cease immediately, and iwi and the Consent Authorities shall be notified within 48 hours. Works may recommence with the written approval of the Consent Authorities. Such approval shall be given after the Consent Authorities have considered:
 - a. Tāngata Whenua interests and values;
 - b. The Consent Holder's interests; and
 - c. Any archaeological or scientific evidence.

Erosion and Sediment Control Plan

69. At least 30 working days before the commencement of physical works on Site, the Consent Holder shall submit an ESCP for certification by the Consent Authorities. The ESCP must be prepared by a suitably qualified person who shall provide certification that the erosion and sediment controls in the ESCP have

been designed in accordance with the relevant best practice guidelines. As a minimum, the ESCP shall include the following:

- a. The expected duration (timing and staging) of earthworks;
- b. Details of all erosion and sediment controls;
- c. Diagrams and / or plans of a scale suitable for on-site reference, showing the locations of any cut and fill operations (including earthworks for internal accessways);
- d. The commencement and completion dates for the implementation of the proposed erosion and sediment controls;
- e. Measures to minimise sediment being deposited on public roads;
- f. Measures to ensure sediment or dust discharge from the earthwork's activity does not create a nuisance on neighbouring properties;
- g. Measures to prevent spillage of fuel, oil and similar contaminants;
- h. Means of ensuring contractor compliance with the ESCP; and
- i. The name and telephone number of the person responsible for monitoring and maintaining all erosion and sediment control measures.

Construction Management Plan

70. At least 30 working days before the commencement of physical works on Site, the Consent Holder shall prepare and submit to the Consent Authorities for certification a CMP. The purpose of the CMP is to avoid, remedy and / or mitigate adverse effects arising from construction. The CMP must include, but not be limited to:
 - a. Confirmation of the construction works program, including staging of work, construction methodology;
 - b. Identification of working hours;
 - c. Identification of ecological / restoration areas identified by the PAWMP, AMP, LzMp and RGMP;
 - d. Identification of key personnel and contact person(s);
 - e. Methods and systems to inform and train all persons working on the site of potential environmental issues and how to avoid, remedy or mitigate any potential effects;
 - f. Procedures for ensuring that surrounding property owners and occupiers are given prior notice of the commencement of construction works and are informed about the expected duration of the works;
 - g. The location of notice boards that clearly identify the name, telephone number and address for service of the site manager;
 - h. Procedures for communicating with surrounding property-owners and occupiers during construction works, including engaging with property owners and occupiers to minimise disruption to farming activities and work-from-home activities, consulting prior to any high noise generating activities, and implementing procedures to ensure action is taken into any complaints received; and
 - i. Procedures for ensuring that materials are disposed of in a way that maximises re-use and recycling. For any parts that cannot be reused or

recycled, ensuring that they are disposed of as e-waste in an environmentally responsible way in accordance with industry best practice.

Dust

71. Beyond the boundary of the Site there must be no dust caused by construction from the Site which, in the opinion of the Council, is noxious, dangerous, offensive or objectionable.

Traffic Management Plan

72. No less than 30 working days before the commencement of physical works on Site, the Consent Holder shall prepare and submit to the Mackenzie District Council for certification a TMP. The purpose of the TMP is to provide measures to avoid, remedy or mitigate any potential or actual traffic effects associated with the construction or commissioning of the Solar Farm, including the following:
 - a. No more than 6 heavy vehicle trips (one-way) per day;
 - b. All deliveries (pick up and drop off) are to occur wholly within the site;
 - c. Methods to ensure that the appropriate erosion and sediment control measures are in place to avoid, remedy, or mitigate the potential effects of sediment runoff associated with the construction or commissioning of the works; and
 - d. Adjacent landowner and occupier liaison during the construction stage.

Construction Noise

73. Noise from construction work shall not exceed the typical duration limits recommended in, and shall be measured and assessed in accordance with, New Zealand Standard NZS 6803: 1999 "Acoustics – Construction Noise" as set out in Table 2.

Advice Note:

For reference, the noise limits that apply at rural dwellings that are occupied when construction work is underway are provided in Table 2. The construction noise limits do not apply at any building that is unoccupied during construction work. NZS6803:1999 requires construction noise to be measured outside buildings at a point 1m from the wall most exposed to the sound under investigation and at a height 1.2 to 1.5m above the relevant floor height (no adjustment for façade effect reflections is to be made to

the measured sound level). NZS6803:1999 states that noise shall not be measured for more than one-hour at any location, and that 15-minutes will often be adequate.

Table 2. Construction noise limits.

<i>Time of week</i>	<i>Time period</i>	<i>Noise Limit</i>	
		<i>LAeq</i>	<i>LAFmax</i>
Weekdays	0630-0730	60	75
	0730-1800	75	90
	1800-2000	70	85
	2000-0630	45	75
Saturdays	0630-0730	45	75
	0730-1800	75	90
	1800-2000	45	75
	2000-0630	45	75
Sundays & Public Holidays	0630-0730	45	75
	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75

Construction Noise Management Plan

74. A CNMP shall be prepared by a suitably qualified and experienced acoustic expert and submitted to Mackenzie District Council for certification at least 30 working days before the commencement of physical works on Site. The purpose of the CNMP is to manage construction noise generally on the Site. The CNMP shall be prepared with reference to Annexure E, New Zealand Standard NZS6803:1999 Acoustics – Construction Noise. The CNMP should include (but not be limited to), identification of the following matters:

- a. Any required limits on hours of construction, in addition to the construction noise limits as set out in Condition 72.
- b. Construction machinery and equipment that will be used (and their operating noise levels);
- c. The timing and duration of specific construction activities over the total construction period;
- d. Any areas of piling on maps that are likely to breach the consented construction noise limits without further attenuation;
- e. Suitable methods of noise attenuation that should be used by the Consent Holder to comply with the noise limits set out in Condition 83 when piling within these zones;
- f. Any procedures that must be implemented before the commencement of physical works in these areas to ensure compliance with Condition 83;
- g. Methods and measures to mitigate noise effects including, but not limited to, structural mitigation such as barriers, shrouds or enclosures, the

scheduling of high noise construction, selection of low noise machinery, or temporary offers from the contractor to the adjacent dwelling occupants to reduce noise effects during periods of high noise;

- h. The roles and responsibilities of the personnel in the contractor team for managing and monitoring noise levels and effects;
- i. Induction and training procedures for construction personnel;
- j. The location and proximity of adjacent neighbouring dwellings;
- k. Process of community liaison and communication with the owners and occupants of adjacent neighbouring dwellings; and
- l. Systems or procedures for receiving and resolving any community / neighbour complaints about actual or potential noise emissions, including noise monitoring, where appropriate.

Fire Risk Mitigation

75. Before the commencement of physical works on Site, the Consent Holder shall submit to the Consent Authorities, detailed design drawings showing the following:
- a. Final location of all internal roads in general accordance with approved plans under **Condition X**;
 - b. Size and location of all fire water tanks including hard stands capable of accommodating a fire appliance;
 - c. Details of fire water tanks including appropriate couplings in accordance with the New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008; and
 - d. Detailed design of all site access tracks demonstrating compliance with FENZ “Emergency Vehicle Access” (F5-02-GD, 10 December 2021), applicable for an Aerial Appliance. The access tracks shall be gravel and of minimum 4m width and able to withstand a laden weight of up to 25 tonnes, with multiple axles spaced at no less than 2.5m centres and each carrying 8.2 tonnes.

Advice Note:

*In relation to Condition **X(c)**, New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008 applies only to the type of coupling at each water tank. In relation to **Condition X(d)**, the purpose is to provide Water Tanker (not Aerial Appliance) access and manoeuvring and therefore, in accordance with FENZ advice, an Aerial Appliance has been referenced to ensure suitable access and turning radius is provided for Water Tankers. **Condition X(d)** does not apply to manoeuvring around water tanks and their associated hardstand areas.*

Construction Fire Risk Management Plan

76. At least 30 working days before the commencement of physical works on Site, the Consent Holder shall submit to the Consent Authorities, a CFRMP that has been developed in consultation with FENZ. The following matters shall be addressed in the CFRMP:
- a. Describe all proposed construction works on-Site;
 - b. Identify any foreseeable on-site and off-site fire events and other emergency risks that could occur at the facility during construction (e.g. fires involving solar panels, bushfires in the immediate vicinity or potential hazardous materials incidents);
 - c. Identify appropriate fire risk control measures to safely mitigate the identified risks; and
 - d. Prioritise what fire risk mitigations shall be sequenced early into the construction works, including consideration of site access for emergency vehicles, internal access tracks and fire water tanks.

Emergency Response Plan – Construction Stage

77. At least 30 working days before the commencement of physical works on Site, the Consent Holder shall submit to the Consent Authorities, an ERP for the construction stage of the Solar Farm that has been developed in consultation with FENZ. The following matters shall be addressed in the ERP:
- a. Identify any foreseeable on-site and off-site fire events and other emergency risks that could occur at the facility (e.g. fires involving solar panels, bushfires in the immediate vicinity or potential hazardous materials incidents);
 - b. Provide details of appropriate risk control measures to be implemented to safely mitigate potential risks to the health and safety of firefighters and other first responders (including electrical hazards) from the events identified in **Condition X(a)**. Such measures shall include (but not be limited to):
 - i. The level of personal protective clothing required to be worn;
 - ii. The minimum level of respiratory protection required and decontamination procedures;
 - iii. Minimum evacuation zone distances taking into consideration a range of potential fire events and weather conditions; and
 - iv. A safe method of shutting down and isolating the photovoltaic system (either in its entirety or partially, as determined by the risk assessment).
 - c. Other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site; and
 - d. Include a procedure for a site representative to be available to attend whenever FENZ are alerted to a fire at the site.

Emergency Response Plan – Operational Stage

78. At least 30 working days before the commencement of Solar Farm operations, the Consent Holder shall submit to the Consent Authorities a separate ERP for the operation stages of the Solar Farm that have been developed in consultation with FENZ. The following matters shall be addressed in the ERP:
- a. Identify any foreseeable on-site and off-site fire events and other emergency risks that could occur at the facility (e.g. fires involving solar panel arrays, bushfires in the immediate vicinity or potential hazardous materials incidents);
 - b. Provide details of appropriate risk control measures to be implemented to safely mitigate potential risks to the health and safety of firefighters and other first responders (including electrical hazards) from the events identified in **Condition X(a)**. Such measures shall include (but not be limited to):
 - i. The level of personal protective clothing required to be worn;
 - ii. The minimum level of respiratory protection required and decontamination procedures;
 - iii. Minimum evacuation zone distances taking into consideration a range of potential fire events and weather conditions; and
 - iv. A safe method of shutting down and isolating the photovoltaic system (either in its entirety or partially, as determined by the risk assessment).
 - c. Other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site; and
 - d. Include a procedure for a site representative to be available to attend whenever FENZ are alerted to a fire at the site.

Operational fire risk mitigation measures

79. At least 15 working days before commencement of Solar Farm operations, the Consent Holder shall undertake an on-site meeting with FENZ to familiarise emergency crews with the Site and the ERP.
80. Once the Solar Farm is operational, the Consent Holder must ensure that all grass on the site and in the road reserve adjacent to the site is maintained for the purposes of managing fire risk to a maximum average height of:
- a. 300 mm for the months April to November (inclusive); and
 - b. 200 mm for the months of December to March (inclusive).
81. During the operation of the Solar Farm, the following equipment must be monitored at all times by a remote central control room for the purposes of monitoring equipment faults and potential fires:
- a. Electrical equipment;
 - b. Fault monitoring detection system(s); and
 - c. CCTV system(s) that monitors the components of the Solar Farm within the screen planting.

82. During the operation of the Solar Farm, the Control SCADA Control Building must be monitored at all times by an automatic fire detection and alarm system incorporating automatic notification to FENZ.
83. Two copies of the applicable ERPs under **Condition X** and **Condition X** shall be stored on-site in a prominent 'Emergency Information Cabinet' located directly adjacent to the site's main entry point(s).
84. The Consent Holder shall ensure that each fire water storage tank installed on the Site is exclusive for firefighting purposes and is filled following its installation and then refilled after each subsequent take of water has ceased.
85. Each fire water storage tank must be fitted with a highly visible float indicator so each tank's water level is easily observed.
86. The substation on-Site will be designed and operated to meet Transpower's "Substation Fire Mitigation Design Standard" (Transpower Reference TP.DS 61.06).
87. Construction and operational vehicles entering the Site in relation to activities authorised by this resource consent must be equipped with fire extinguishers, of size and type in accordance with NZS4503 or as recommended by FENZ.

Advice Note: *It is expected that vehicles which are able to carry a fire extinguisher will do so, including cars, utes, vans, trucks and tractors which have an enclosed cab. It is not practical, and therefore not required by **Condition X**, to carry fire extinguishers on smaller vehicles such as motorbikes, quadbikes or side-by-sides. Where fire extinguishers are carried, these are expected to be hand-held and generally expected to be the dry-powder type (Class ABE) which are versatile in responding to most types of fires.*

88. All inverters used during the operation of the Solar Farm must comply with the requirements set out in the Radiocommunications (EMC Standards) Notice 2019. Evidence of compliance with this standard, in the form of inverter manufacturer specifications sheets verified by a suitably qualified and experienced radio frequency engineer, is to be provided to the Consent Authorities, at least 15 working days before the commencement of Solar Farm operations.

Operational Management Plan

89. At least 30 working days before the commencement of the Solar Farm operations, the Consent Holder must submit to the Consent Authorities an OMP for certification. The purpose of the OMP is to provide details on how the solar farm will be managed and operated. The OMP shall include (but not be limited to), the following matters:

- a. Contact details of the Site Manager on a 24 hour, 7 days a week basis;
 - b. Procedures for receiving and resolving any complaints about operational noise;
 - c. Staff and visitor inductions and safety;
 - d. Signage;
 - e. Fire water storage tank checks;
 - f. Seasonal grass height grazing requirements in accordance with **Condition X**;
 - g. Access track maintenance;
 - h. Boundary treatment maintenance;
 - i. Site security;
 - j. Panel and infrastructure maintenance and cleaning, including monitoring for panel damage and integrity;
 - k. Risk mitigation measures including appropriate disposal and recycling of any damaged panels as e-waste;
 - l. High wind events;
 - m. Emergency events and site remediation in the event of contaminant discharge (e.g. fire or oil spill);
 - n. Natural disasters; and
 - o. A reinstatement procedure after any electrical equipment is damaged by an emergency event or natural disaster.
90. The Consent Holder must keep a hard copy of the certified OMP on Site at all times.
91. The OMP, when certified under **Condition X**, must be adhered to at all times during the operation of the Solar Farm.
92. The OMP shall be subject to review annually from the date the Solar Farm becomes operational (unless the requirement for review is waived by the Consent Authorities). A review is to include assessment of the performance of the practices and procedures specified in the OMP. Any amendment required by the Council arising out of this review shall be incorporated into the OMP without delay.

Operational Noise

93. The noise level from the Solar Farm operations shall comply with the following noise limit when measured and assessed at any notional boundary on any other site:

All times: 45 dB L_{A10}

Noise levels shall be measured and assessed in accordance with NZS 6801:1999 Acoustics – Measurement of Environmental Sound and NZS 6802:1991 Acoustics – Environmental Noise.

Advice Note:

The notional boundary is a line 20m from the façade of a dwelling, or the legal boundary where this is closer to the dwelling. NZS6801 and NZS6802 are detailed standards that any person measuring noise must be familiar with (however for general guidance note that noise must be measured with suitable specialised equipment, for appropriate durations, in suitable meteorological conditions, at distances more than 3.5m from any reflecting surface, at 1.2 to 1.5m above local ground level, and must be analysed using specific provisions for duration and special audible characteristics).

Advice Note:

Condition X applies to the noise limit associated with the operation of the Solar Farm only and is separate to the noise limit which applies operation of the Transpower Grid Injection Point Substation, which is managed by **Condition X**.

94. The Consent Holder shall undertake all practicable measures to ensure wind generated noise from the Solar Farm is minimised or eliminated.

Advice Note:

Wind noise could include: rattling of solar panels or structures, aeolian tones or vortex shedding, organ pipe noise, or other sources of audible noise that are primarily generated by winds.

95. The Consent Holder shall provide Mackenzie District Council with an acoustic assessment report from a suitably qualified and experienced acoustic expert that demonstrates the proposed permanently installed solar panels / arrays and layout will achieve compliance with the operational noise limits in **Condition XX**. The acoustic assessment report shall be provided to Mackenzie District Council for certification at least 30 working days before the commencement of Solar Farm operations.

Night-time resting position

96. Once the Solar Farm is operational, the solar panels standard resting position at night-time must be vertical (be no less than 90 tilt from horizontal).

Operational Stormwater

97. At least 20 working days before the installation of the stormwater system on Site, the Consent Holder shall submit to the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring:
- a. Final detailed design plans for the stormwater system;
 - b. A certificate signed by a Chartered Professional Engineer (CPEng) with stormwater system design and construction experience confirming that the stormwater system has been designed in accordance with the conditions of this resource consent; and
 - c. A statement signed by the CPEng confirming that they are competent to certify the engineering work.

98. Any detailed design plans certified under **Condition X**, may be amended and recertified under the process outlined in **Condition X**.
99. The stormwater system may be installed either:
- a. Following certification being received from the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring, that it meets the requirements under this resource consent, or
 - b. After 10 working days from submitting the design to Canterbury Regional Council for certification, and certification has not been received.
100. Within 20 working days of the installation of the stormwater system, the consent holder shall submit to the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring:
- a. All as built design plans of the stormwater system installed;
 - b. A certificate signed by a CPEng with stormwater system design and construction experience confirming that the installed stormwater system complies with the conditions of this resource consent; and
 - c. A statement signed by the CPEng confirming that they are competent to certify the engineering work.
101. The stormwater system shall be maintained by:
- a. Inspecting the stormwater system at least once every two months;
 - b. Removing any visible hydrocarbons, debris or litter within five working days of the inspection;
 - c. Removing any accumulated sediment in the soakpit within five working days of the inspection;
 - d. Removing any accumulated sediment in the soakpit when the sediment occupies more than one quarter of the depth below the invert of the outlet pipe; and
 - e. Repairing any scour or erosion within five working days of the inspection.
102. Any material removed from the devices in accordance with **Condition X** shall be disposed of at an appropriate location.
103. All practicable measures shall be taken to avoid spills of fuel or any other hazardous substances within the site. In the event of a spill of fuel or any other hazardous substance:
- a. The spill shall be cleaned up as soon as practicable, the stormwater system shall be inspected and cleaned and measures shall be taken to prevent a recurrence;
 - b. The Canterbury Regional Council, Regional Leader – Monitoring and Compliance shall be informed within 24 hours of a spill event exceeding five litres and the following information provided:
 - i. The date, time, location and estimated volume of the spill;
 - ii. The cause of the spill;

- iii. The type of hazardous substance(s) spilled;
- iv. Clean up procedures undertaken;
- v. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;
- vi. An assessment of any potential effects of the spill; and
- vii. Measures to be undertaken to prevent a recurrence.

104. All best practicable options must be used to contain spills or leaks of any hazardous substance from being discharged via the stormwater system. These shall include, but not be limited to the following:
- a. Using a tank filling procedure to minimise spills during any fuel delivery;
 - b. Making spill kits available to contain or absorb any hazardous substances used or stored on the site;
 - c. Maintaining signs to identify the location of the spill kits; and
 - d. Maintaining written procedures in clearly visible locations that are to be undertaken to contain, remove and dispose of any spilled hazardous substance.

PART D: Transpower Grid Injection Point Substation Conditions

Construction Management Plan - Substation

105. A Substation CMP, or a series of CMPs, shall be prepared and provided to Canterbury Regional Council for certification at least 20 working days before the commencement of any physical works for the initial construction of the Transpower Grid Injection Point (**GIP**) Substation, and shall address the management of all construction works, including details of how the adverse effects of construction will be managed.

Operation

Electric and Magnetic Fields (EMF)

106. The substation works shall be designed and constructed to limit the EMF exposure at or beyond the boundary of the Transpower GIP Substation site to the International Commission on Non-Ionising Radiation Protection, *Guidelines for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (1 Hz to 100 kHz)* (Health Physics, Vol 99, No. 6, Pg 818-836, Dec 2010). That is the public reference levels of 5 kV/m for electric fields and 200µT for magnetic flux density at one metre above ground level under maximum normal operating conditions (i.e. when there are no faults in the transmission system).

Radio Frequency Interference

107. Any Transpower GIP Substation works or equipment shall be designed to comply with NZS 6869:2004 Limits and Measurement Methods of Electromagnetic Noise from High-Voltage AC Power Systems, 0.15 to 1000 MHz.

Operational Noise (GIP Substation)

108. The noise (rating) level from all plant associated with the operation of the Transpower Grid Injection Point Substation and line connections shall comply with the following noise levels in Table 3 when measured and assessed at any notional boundary on another site. Noise shall be measured in accordance with New Zealand Standard NZS 6801:2008 Acoustics - Measurement of Environmental Sound and assessed in accordance with the requirements of New Zealand Standard NZS 6802:2008 Acoustics - Environmental noise:

Table 3. Operational noise limits – GIP Substation.

Timeframe	Noise limit
7:00am to 7:00pm	50 dB LAeq

7:00pm to 10:00pm	45 dB LAeq
10:00pm to 7:00am	40 dB LAeq and 65 dB LAmax

PART E: Subdivision Conditions

General

109. The subdivision shall be carried out in general accordance with the plans and information submitted with the application and stamped “Approved” by the Mackenzie District Council in **Annexure A**, except where modified by these conditions.

Survey Plan Approval

110. A survey plan shall be submitted to Mackenzie District Council for approval under section 223 of the RMA. The plan shall be generally consistent with the approved subdivision layout and conditions of this consent.

Completion of Subdivision

111. The subdivision shall be completed, and section 224(c) RMA certification obtained, within five (5) years of the date of commencement of this consent.

Purpose of Solar Lot

112. The lots identified on the approved plan shall be created solely for the purpose of accommodating a solar electricity generation activity, associated infrastructure, and ancillary activities.

PART F: Decommissioning

113. The Consent Holder shall provide written notice to the Consent Authorities of the intended commencement of decommissioning of the Solar Farm at least six months before the commencement of Solar Farm decommissioning.
114. At least three months before the commencement of Solar Farm decommissioning, the Consent Holder must submit a DMP to the Consent Authorities for certification that fulfils the requirements of **Conditions X and X**.
115. The DMP must be prepared by a SQEP and meet the following objectives:
 - a. Decommissioning of the solar panels and all associated infrastructure in a manner that complies with all legislative requirements;
 - b. Clearing the site of all panels, buildings/structures and cabling;
 - c. Reinstatement of the site to a state than enables it to continue to be used for land-based primary production; and
 - d. Ensuring that the components and infrastructure are disposed of in a way that maximises re-use and recycling. For any parts that cannot be reused or recycled, ensuring that they are disposed of as e-waste in an environmentally responsible way in accordance with industry best practice.
116. The DMP must include but not be limited to:
 - a. Details on all infrastructure to be decommissioned, including details, method and location of reuse, recycling or disposal and the reasons why the options have been chosen;
 - b. Details of specific infrastructure to remain on-site post-closure and reasons why it will remain on the Solar Farm site;
 - c. Scheduling and timing for decommissioning; and
 - d. Details for finished ground cover at completion of decommissioning and future intended land use.
117. The Consent Holder must notify the Consent Authorities at least 10 working days before the completion of Solar Farm decommissioning to allow Council staff to carry out site inspections to determine compliance with the certified DMP.

Soil – Contamination Remediation

118. No more than 15 working days following completion of decommissioning works on the site, the Consent Holder must provide a DSI to the Council for certification. The DSI must be prepared in accordance with the current edition of the CLMG1 guidelines.
119. In the event that the DSI required in **Condition X** finds that contamination exceeds the applicable standards of the (NES-CS, a RAP and Site Validation Plan (**SVP**) must be prepared in accordance with the current edition of the CLMG1 and CLMG5 guidelines. The RAP and SVP must be provided to the

Council within 15 working days of the submission of the DSI required under Condition X, for certification.

Advice Note:

For the avoidance of doubt, the RAP is to be prepared in accordance with the relevant guidelines and requirements as set out by the Ministry for the Environment.

Annexure A: Application Documents and Approved Plans