

Proposed Conditions – Clean Copy

General

- 1) The activity authorised by this consent must be carried out following these conditions and otherwise in a manner that follows the application received on 29 March 2024, completed by The Property Group Limited titled 'Application for Resource Consent 48 Ranfurly-Naseby Road, Naseby: Mānīatoto Plain Solar Farm' and the amended assessment of effects received on 16 June 2025, except where modified by these conditions, and:
 - a) The revised Site Layout Plan completed by Helios Energy Limited, titled 'Mānīatoto Plain – Preliminary Layout', Revision A dated 08 May 2025.
 - b) The Acoustic Assessment completed by Marshall Day Acoustics titled 'Helios Solar Farm - Maniototo Assessment of Noise Effects', dated 17 October 2023.
 - c) The Integrated Transport Assessment completed by Abley, titled 'Naseby Solar Farm Development Transport Assessment', dated 23 August 2023.
 - d) The Landscape Effects Assessment completed by Boffa Miskell Limited, titled 'Mānīatoto Solar Farm: Landscape Effects Assessment. Report prepared by Boffa Miskell Limited for Helios Energy Ltd', dated 28 February 2024.
 - e) The Graphic Supplement completed by Boffa Miskell Limited, titled 'Helios Maniototo Solar Farm – Graphic Supplement', dated 28 February 2024.
 - f) The amended "Mānīatoto Solar Farm Landscape Planting and Maintenance Plan" prepared by Boffa Miskell dated 28 May 2025
 - g) The Ecological Impact Assessment completed by Boffa Miskell Limited, titled 'Mānīatoto Solar Farm: Ecological Impact Assessment. Report prepared by Boffa Miskell Limited for Helios Energy Limited', dated 18 December 2023.
 - h) The Hazardous Substance Assessment completed by Beca Limited, titled 'Hazardous Substance Assessment Naseby Solar Farm', dated 20 December 2023.
- 2) The consent holder must construct, operate, and maintain the Solar Farm in general accordance with all management plans submitted to, and certified by, the Planning Manager, Central Otago District Council
- 3) The consent holder shall pay to the Council all required administration charges fixed by the Council pursuant to section 36 of the Act in relation to:
 - a) Administration, monitoring and inspection relating to this consent; and
 - b) Charges authorised by regulations.
- 4) The consent will commence in accordance with Section 116 of the Resource Management Act 1991 and provides for the operation of the solar farm for a period of 35 years from its commercial operating date (being the first date that the project is commercially exporting power to the National Grid, excluding operations under test conditions) after construction has concluded.

Certification of Management Plans

- 5) A minimum of 40 Working Days prior to the commencement of any works authorised under this consent (excluding any enabling works such as geotechnical investigations, piling tests and site surveys or testing), unless otherwise specified in the conditions of this consent, the management plan(s), listed in conditions 9, 10 and 18 must be submitted to Central Otago District Council in electronic form for certification that the management plan(s) meets the objective(s) specified and gives effect to the relevant conditions of this consent to which each plan relates.

- 6) At any time, the Consent Holder may provide the Central Otago District Council with an amended management plan(s) for certification. Any amended management plan(s) must be consistent with the objective of the relevant management plan and the requirements of the relevant conditions of this consent. Any changes do not take effect until certified by the Central Otago District Council.
- 7) The Consent Holder must ensure that copies of all certified management plan(s) are available on-site and will be provided to Central Otago District Council Officers upon request.
- 8) A Management Plan may be amended or updated without the need for certification where:
 - a) the amendment is to change any nominated personnel,
 - b) any other changes that are administrative in natureProvided the Planning Manager, Central Otago District Council is notified of the changes prior to them taking effect.

Construction Management

- 9) A Construction Management Plan (CMP) with the objective of developing measures and processes to manage and minimise the effects of noise, traffic and dust caused by the construction of the Solar Farm must be developed. For that purpose, the CMP must include:
 - a) A final construction methodology.
 - b) The contact details of the construction site manager.
 - c) Methodology of dust and stockpile management.
 - d) A Construction Traffic Management Plan (CTMP) including, as a minimum the following detail:
 - i) Truck drivers are advised:
 - (1) To adhere to the speed limit and drive to the conditions during periods of adverse weather.
 - (2) Of the circulation arrangements onsite, including the requirement to access the site via Access 1 and exit the site via Access 2.
 - ii) An outline of how traffic will be directed onto the site and where parking and the layby area will be located. The layby area must be set back sufficiently away from the gate to avoid vehicles queuing over the sealed access area.
 - iii) Identifies that only Accesses 1 and 2 are to be used by heavy vehicles
 - iv) Prohibits any form of heavy vehicle access on Ranfurly Back Road.
 - v) Any temporary traffic management measures.
 - vi) Includes detail on how staff will be transported to and from site including consideration of measures to encourage higher vehicle occupancy among construction staff (including, but not limited to carpooling, shuttle services or other transport coordination strategies).
 - e) Details of how the noise limits for long term construction in NZS 6803:1999 will be complied with.
 - f) An assessment of the robustness of the existing waterway crossings, and upgrading where necessary, to ensure crossings are capable of carrying the heavy machinery and that such machinery remains clear of wetland vegetation and wet

areas.

- 10) An Erosion Sediment Control Plan (ESCP) authored by a suitably qualified person must be developed. The ESCP shall identify the measures required to manage erosion and sediment arising from works on the site, and shall provide as per the following:
 - a) All earthworks must be managed to minimise any discharge of debris, soil, silt, sediment or sediment-laden water beyond the subject site to either land, stormwater drainage systems, watercourses or receiving waters.
 - b) All machinery associated with the earthworks and construction activity must be operated in a way which ensures that spillages of hazardous substances such as fuel, oil, grout, concrete products and any other contaminants are prevented.
 - 11) Noise from construction activities must not exceed the limits recommended in, and shall be measured and assessed in accordance with, New Zealand Standard NZS 6803: 1999 “Acoustics – Construction Noise” and German Standard DIN 4150-3:2016 Vibration in buildings – Part 3: Effects on structures [vibration].
 - 12) Prior to commencing construction (excluding any enabling works such as geotechnical investigations, piling tests and site surveys or testing), the consent holder must construct/upgrade Access 1, 2, 3 and 4 so they are in accordance with Part 29 of Council’s Roading Policies 2015, with the following amendments:
 - a) The geometry for Access 1 and 2 must also be in general accordance with the vehicle tracking shown in Appendix A of the Integrated Transport Assessment completed by Abley, titled ‘Naseby Solar Farm Development Transport Assessment’, dated 23 August 2023.
 - b) Accesses 1, 2 and 3 must be sealed from the edge of Ranfurly-Naseby Road to a distance of not less than 5m inside the property boundary
- Note: The consent holder is also required to obtain permission to construct a vehicle crossing, an approved Corridor Access Request and temporary traffic management plan from the Central Otago District Council Roading Manager prior to the commencement of any works within road reserve. The pavement design for the vehicle crossings should account for the fact that Accesses 3 and 4 will be low use crossings, and not to be used by heavy vehicles.*
- 13) The main internal accessways identified on the Mānīatoto Plain – Preliminary Layout’, Revision A dated 08 May 2025 in Condition 1 must be formed and constructed to a 4m width with an all-weather metalled surface. All other internal accessways can remain unformed provided they do not result in any airborne or deposited dust beyond the site’s property boundary, determined by the relevant regulatory authority to be noxious or dangerous, offensive or objectionable. If any airborne or deposited dust beyond the property boundary is noxious or dangerous, offensive or objectionable then the remaining internal accessways must be required to be formed to an all-weather metalled surface.
 - 14) If an unidentified archaeological site is located during works, the following applies:
 - a) Work must cease immediately at that place and within 20m around it
 - b) The consent holder or any contractor must shut down all machinery, secure the area and advise the site manager
 - c) The site manager must secure the site and notify the Heritage New Zealand Regional Archaeologist. Further assessment by an archaeologist may be required
 - d) If the site is of Māori origin, the Site Manager must notify the Heritage New Zealand Regional Archaeologist and the appropriate papatipu rūnaka of the discovery and ensure site access to enable appropriate cultural procedures and tikaka to be

undertaken, as long as all statutory requirements under legislation are met (Heritage New Zealand Pouhere Taonga Act, Protected Objects Act).

- e) If human remains (kōiwi) are uncovered the Site Manager must advise the Heritage New Zealand Regional Archaeologist, NZ Police and the appropriate papatipu rūnaka and the above process under 4 must apply. Papatipu rūnaka will lead the management of any kōiwi tangata (human remains of a Māori person) that have been uncovered, in line with the Te Rūnanga o Ngāi Tahu Kōiwi Tangata policy 2019. Remains are not to be moved until such time as papatipu rūnaka and Heritage New Zealand have responded
- f) Works affecting the archaeological site and any human remains (kōiwi) must not resume until Heritage New Zealand Pouhere Taonga gives written approval for work to continue. Works affecting a site of Māori origin or containing kōiwi tangata must not resume until papatipu rūnaka give written approval for work to continue. Further assessment by an archaeologist may be required.
- g) Where iwi so request, any information recorded as the result of the find such as a description of location and content, is to be provided for their records.
- h) Heritage New Zealand Pouhere Taonga will advise if an archaeological authority under the Heritage New Zealand Pouhere Taonga Act 2014 is required for works to continue.

Note: It is an offence under Section 87 of the Heritage New Zealand Pouhere Taonga Act 2014 to modify or destroy an archaeological site without an authority from Heritage New Zealand irrespective of whether the works are permitted or consent has been issued under the Resource Management Act. Please note that this Consent is not an Archaeological Authority.

Design Conditions

- 15) The substation transformers must be surrounded by spill containment measures with a capacity of 100% of the largest single volume of oil stored within the containment area.
- 16) Stormwater from within the substation where there is a risk that it will be contaminated with oil must be collected and treated to remove oil before being discharged within the site.
- 17) Solar panels and associated buildings or structures and all surface earthworks must be located in accordance with the recommendations of the Ecological Impact Assessment referenced within Condition 1.

Landscape and Visual Effects Management

- 18) A final Landscape Mitigation Plan must be prepared (being any updated details to the Landscape Mitigation Plan provided as Figure 5A attached to the Boffa Miskell memorandum RC 240065 - Helios Mānātoto Solar Farm LVA - Request for further information dated 30 April 2024 and

- a) A Landscape Management Plan which includes the following:

- i) Details that are in accordance with the recommendations identified in section 6 the Mānātoto Solar Farm Landscape Effects Assessment, dated 28 February 2024, and the recommendations identified in section 8.1.2 in the Mānātoto Solar Farm Ecological Impact Assessment, dated 18 December 2023, and in general accordance with the preliminary Landscape Planting and Maintenance Plan dated 28 May 2025.
- ii) Details of irrigation or water retention provision for two years after

implementation and availability if required through dry summer periods up to five years after implementation

- iii) Monitoring and maintenance requirements for weed removal, pest control and removal of dead branches and cuttings from the confines of the Site
- iv) The species mix shall satisfy the following proportions of plant flammability according to the Fire and Emergency New Zealand Plant Flammability Directory:
 - 1) “very low”, “low” or “low/moderate” for no less than 70% of plants;
 - 2) “moderate” or “moderate/high” for up to 20% of plants;
 - 3) “high” for up to 10% of plants; and

Plants classified with a flammability of “moderate” or greater shall be separated from other plants of “moderate” or greater flammability by their expected mature height.

- v) Detailed mitigation and enhancement planting areas required for the Project including layout, species, grades, numbers, spacing, eco-sourcing, and a programme and specification for implementation and maintenance.
- vi) Replacement planting with evergreen species where there are gaps or where there are trees that are failing and need to be removed.
- vii) The Landscape Management Plan will include >500 matagouri, >200 desert broom, >200 porcupine shrub, and >50 pohuehue shrubs.
- viii) Consideration of local seed sources for screening planting and their suitability where practicable, including indigenous species such as Mikimiki/yellow wood (*Coprosma linarifolia*), Kōtukutuku/tree fuschia (*Fuchsia excorticata*), Kāpuka/broadleaf (*Griselinia littoralis*), Horoeka/lancewood (*Pseudopanax crassifolius*), Kānuka (*Kunzea serotina*), Kōhūhū (*Pittosporum tenuifolium*), and Tōtara kiri kotukutuku/Hall’s tōtara (*Podocarpus laetus*).

Note: The purpose of indigenous mitigation/compensation planting, as required under the Landscape Mitigation and Management Plans and Wetland Enhancement Plan, shall be to:

i. support the central and southwest wetlands to become oases of indigenous wetland habitat; and ii. successfully establish indigenous plants for landscape mitigation and biodiversity enhancement purposes.

- 19) The certified final Landscape Mitigation Plan must be implemented before the solar farm is operational.
- 20) The landscape planting must be maintained in accordance with the certified Landscape Management Plan for the duration of the exercise of this consent. A minimal plant survival rate of 80% is to be achieved. Dead or dying plants are to be replaced in the next planting season (September to November and March to May) if loss rates are in excess of this.
- 21) All shelterbelts must be maintained to a minimum height of 3.0m.

Unless specified below, materials and colours of onsite buildings and structures ancillary to the solar arrays must have a Light Reflectivity Value (LRV) of less than 30%, and be in keeping with the materials and colouring of existing infrastructure, or of a colour that will blend with the landscape such as in a natural range of browns, greens and greys to complement the tones found in the rural surroundings. The following buildings and structures are exempt from this condition:

- a) The solar arrays and mounting structures
 - b) Inverter skids
 - c) 33/220kV Substation
- 22) The consent holder must ensure that all areas of soil disturbed by the project are rehabilitated progressively or immediately post-construction

Ecological Effects Management

- 23) Any construction works occurring during the bird breeding season (1 September to 31 March) shall be undertaken in accordance with the recommendations identified in section 8.1.1.2 of the Mānīatoto Solar Farm Ecological Impact Assessment, dated 18 December 2023. 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 be no less than 25m.
 - c) If works are paused for 8 successive days or more, then are resumed during the breeding season, a new survey will be required.

24) Literature Review

At least six months prior to commencement of construction of the solar farm (excluding any enabling works such as piling tests, site surveys or testing), the consent holder must engage a suitably qualified and experienced ornithologist / ecologist to prepare a Literature Review Report. This report shall summarise the current state of knowledge on bird collision with ground-mounted, photovoltaic solar arrays.

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 shall generally inform the development of, and shall be appended to, the Bird Monitoring Plan (BMP) required under Condition 25.

Note:

The Literature Review Report shall be prepared by a suitably qualified and experienced ornithologist / ecologist with input from a mātauraka Māori expert identified by Kā Rūnaka. Where available, the Report should incorporate monitoring data from other ground-mounted, solar photovoltaic farms that becomes publicly available between the granting and first exercise of this consent.

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.

25) Bird Monitoring Plan

A Bird Monitoring Plan (BMP) shall be prepared by a suitably qualified and experienced ornithologist / ecologist and with input from a biostatistician, in consultation with the Department of Conservation (DoC) and Kā Rūnaka.

A draft BMP must be provided to DoC and Kā Rūnaka for comment at least 60 working days prior to the commencement of construction of the solar farm. Following 20 working days, or receipt of comment from DoC (whichever is sooner), the BMP shall be finalised and provided to Central Otago District Council (CODC) for certification, no later than 20 working days prior to commencement of construction. The Consent Holder shall not commence construction prior to obtaining certification of the BMP.

Any review comments from DoC and Kā Rūnaka, including any response to comments, shall be appended to the BMP.

The objectives of the BMP 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 effect in table 1;
- 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).

The BMP must incorporate best practice as determined through Condition 24 above.

The BMP must include, but not be limited to, the following:

1. Monitoring Design:
 - a) 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:
 - a) Statistically robust methods for bird collision surveys.
 - b) 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).
 - c) Methods for record keeping and data analysis, including statistical methods to derive annual mortality estimates.
3. Mortality Thresholds and Management Response:

Thresholds in Table 1 for indigenous bird species that trigger a management response in accordance with Condition 26 below.

Table 1. Indigenous bird mortality thresholds that trigger a management response. The thresholds are for individual species (i.e. are not collective for each threat classification).

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 any 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.

4. Twenty working days after the 1, 2 and 3 year anniversary of the monitoring required by Condition 25, an independent suitably qualified and experienced ecologist/ornithologist is to submit a report to CODC and DOC setting out the results of the monitoring.

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://nztns.org.nz/>).

26) Bird Collision Management Plan

Within 5 working days of exceeding a threshold in Table 1 at any time prior to the conclusion of the monitoring period, an independent suitably qualified and experienced ecologist/ornithologist is to advise CODC setting out:

- a) The details of the mortality threshold breach
- b) Notice of the preparation and recommendations on the content of an on-going Bird Collision Management Plan (BCMP) to ensure mortality of avifauna does not continue to exceed the thresholds in Table 1, in Condition 25.

- 27) If a BCMP is required, as a result of a Table 1 threshold being breached, this must be provided to DoC and Kā Rūnaka for comment no later than 20 working days from the notification of a mortality exceedance outlined within condition 26. Following 20 working days, or receipt of comment from DoC (whichever is sooner), the BCMP shall be finalised and provided to Central Otago District Council (CODC) for certification, no later than a further 20 working days following the conclusion of the comment period

The BCMP shall 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 the Department of Conservation 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 Condition 25) 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; and
 - 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
 - iv. Further monitoring, at an appropriate time scale, to test the effectiveness of proposed mitigation responses.

28) Compliance with Bird Management Plans

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 BMP and BCMP (if development of such a plan is triggered).

29) Review Condition

CODC may, under sections 128 and 129 of the Resource Management Act 1991, initiate a review of any or all conditions of this resource consent on the first, second, third and fifth anniversary of the commencement of the consent and every five years after that, for the duration of the resource consent, provided that any such review of conditions shall be for the purposes of 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. These effects include, but are not limited to, those that may arise in relation to:

- a) ecology including, but not limited to, any effects detected by the avifauna monitoring required Conditions 25 and 26.
- b) 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
- c) ensuring that the conditions are effective and appropriate in managing the effects of the activities authorised by this consent

30) Wetland Enhancement Plan

A draft Wetland Enhancement Plan (WEP) must be provided to DoC for comment at least 60 working days prior to the commencement of the construction of the solar farm. A minimum of four (4) weeks before the commencement of the activity authorised by this consent (excluding any enabling works such as geotechnical investigations, piling tests and site surveys or testing), the consent holder shall provide a copy of the Wetland Enhancement Plan to the Manager Resource Consents, Central Otago District Council for their certification. Any review comments from DoC, including any response to comments, shall be appended to the Wetland Management Plan. If the Wetland Enhancement Plan is also a conditioned requirement of any regional council approval, then certification of this document by the Regional Council shall be accepted in lieu of CODC certification. The objective of the WEP is to improve the ecological outcome for wetlands identified within the Site. The WEP shall be prepared by a suitably qualified ecologist, and shall address, but not be limited to:

- a) The removal of crack willow and common alder species and replacement with native or non-spreading exotic species from the southwest wetland and other wetlands where appropriate.
- b) Details of fencing the southwest and central wetlands and undertaking supplementary planting within these wetlands.
- c) Details of species to be planted to achieve ecological benefits
- d) Details of planting indigenous species within the 10m wetland setback areas
- e) Details of ongoing weed management, survival monitoring and replacement of plants that do not establish or survive
- f) Details of ongoing removal of woody weeds such as willow and alder; and
- g) Details of ongoing predator control within the southwest and central wetlands (targeting mustelids and cats) with the aim of increasing survival of bird species in these areas.

Operational Conditions

31) Glint and Glare Adaptive Management Plan

The Consent Holder must prepare and implement a Glint and Glare Adaptive Management Plan (GGAMP) to address any substantiated adverse glint and glare impacts on complainants and/or the surrounding road network. The GGAMP must include the following:

- a) Details of mitigation to be established as follows:
 - i) Prior to the commencement of operation of the solar farm, the planting as shown in Figure 2 of the Minimum Screening Analysis for Maniatoto Solar Farm dated 30 April 2025 are implemented at a height of at least 3m, and
 - ii) A solar panel rest angle of 10 degrees, as required to avoid yellow glare effects on the public road.
- b) Contact Information: The GGAMP must provide contact details for the Consent Holder and their agent responsible for addressing glint and glare complaints ensuring that affected parties have a direct line of communication for reporting issues.
- c) Reporting Procedures: The plan must include procedures for reporting glint and glare issues by affected parties, including Road Controlling Authorities for any road network affected by “Yellow glare” or “Green glare”. This includes:
 - i) The process for lodging a complaint.
 - ii) The timeline within which the Consent Holder must acknowledge receipt of the complaint.
 - iii) A detailed timeline for the investigation and response process, ensuring that any substantiated glare issues reported are addressed promptly and effectively within a specified timeframe.
 - iv) Adaptive Management Strategies: The GGAMP should detail a range of possible mitigation solutions to address reported glint and glare issues. These solutions may include but are not limited to, installation of screening or landscaping to block or diffuse glare, and adjustments to the operational procedures of the solar farm (such as tracking management).
- d) Monitoring and Evaluation: The Consent Holder must implement a monitoring regime to assess the effectiveness of the mitigation measures implemented under the GGAMP, including any road affected by “Yellow glare” or “Green glare”. This includes feedback from affected parties on the resolution of reported glare issues.
- e) Duration of the Plan: Unless otherwise authorised by the Consent Authority, the GGAMP must be implemented for whichever is the greater duration of the following:
 - i) A period of three years following the mitigation planting obtaining the minimum height required by (a) above; or
 - ii) For a year following any remedial action undertaken.

During this period, the Consent Holder is obligated to respond to and manage glint and glare complaints as per the procedures outlined in the GGAMP.

- f) Review and Reporting: If complaints are received, the Consent Holder must submit an Annual Report to the Consent Authority, summarising the glint and glare complaints received, actions taken, and the effectiveness of the mitigation measures implemented. The Annual Report may also recommend whether ongoing management of glint and glare issues is required along with any relevant supporting information.

Note:

An adaptive management plan offers a flexible and responsive approach to managing glint and

glare that may arise from the approved solar farm, recognising the inherent challenges and uncertainties in accurately predicting glare impacts ahead of time. This approach allows for real-time monitoring and addressing of actual impacts as they occur, rather than relying solely on predictive models that may not fully capture the dynamic and variable nature of sunlight and its interactions with the environment. By focusing on adaptive measures, the plan can more efficiently respond to affected parties' concerns, ensuring that mitigation strategies are directly tailored to the specific conditions and experiences of those impacted. For the avoidance of doubt, the consent holder may adapt the mitigation measures, such as the solar panel rest angle, provided that no yellow glare occurs within the public road network.

Fire Risk Management

32) A minimum of eight (8) weeks before the activity commences (excluding any enabling works such as geotechnical investigations, piling tests and site surveys), the consent holder must submit to the Planning Manager, Central Otago District Council, for their approval, the following plans ("Fire Risk Management Plans"):

- a) Construction Fire Risk Management Plan;
- b) Operational Fire Risk Management Plan; and
- c) Fire Emergency Response Plan.

These plans shall first be provided to FENZ, for review and comment, and any comment(s) received shall be addressed prior to submitting to Central Otago District Council for certification.

33) Construction Fire Risk Management Plan

During construction of the solar farm, activities on-site shall comply with the provisions of the Construction Fire Risk Management Plan and the relevant provisions of the Fire Emergency Response Plan;

The Construction Fire Risk Management Plan shall be prepared by a suitably qualified and experienced person, which:

- a) Identifies reasonably foreseeable on-site fire risks that could occur at the Site during construction;
- b) Identifies appropriate fire risk control measures to safely mitigate the identified risks;
- c) Prioritises the sequence of fire risk mitigations early into the construction works, including consideration of Site access for emergency vehicles, access tracks construction and filling of the firefighting water storage tanks;
- d) Confirms the selected electrical components meet the following requirements. PV modules are of the bi-facial toughened glass type and conform to a IEC 61730 Class C fire classification or AS/NZS 5033 or an equivalent international standard. Inverters shall comply with IEC 62109 or an equivalent international standard.
- e) Sets out the required quality controls on the procurement and installation of all key equipment, including PV modules and inverters, considering manufacturers' and contractors' history of fire safety, long-term operational reliability and compliance with relevant industry standards on comparable utility-scale solar projects.
- f) Documents the final layout of the 4 m wide internal and perimeter gravel access tracks shown on Mānīatoto Plain Preliminary Layout dated 08/05/2025 and demonstrates the geometry of non-straight sections of these access tracks comply with the wider turning requirements for aerial appliances in Fire and Emergency New Zealand "Emergency Vehicle Access" (F5-02-GD, 10 December 2021). The access tracks shall be able to withstand a laden weight of up to 25 tonnes with multiple axels spaced at no less than 2.5 m centres and each carrying 8.2 tonnes. The perimeter access track shall have at least 2m grassed buffer on either side to allow for additional setback between the perimeter screen planting and the Project infrastructure.

Note:

It is not intended that an aerial appliance be involved in firefighting. Rather, following FENZ advice, the geometrical requirements for an aerial appliance have been referenced to provide allowance for water tankers. This access condition does not apply to manoeuvring around water tanks and their associated hardstand areas.

- g) Details the size, location and details of fire water tanks and hardstands capable of accommodating a fire appliance and are located off access tracks and at an appropriate proximity to coupling(s);
- h) Includes requirements for signage at the entry to the site which clearly displays the name, telephone number and address for service of the construction manager.
- i) Includes provisions requiring construction vehicles, excluding motorbikes, quadbikes and visiting vehicles, on the site to be equipped with fire extinguishers, of size and type in accordance with NZS4503 or as recommended by FENZ.

Note:

It is expected that operational 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, 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.

- j) Include a procedure for a site representative, capable of managing electrical hazards, be available to attend whenever FENZ are alerted to an emergency at the site.
- k) Two-copies of the construction phase Fire Emergency Response Plan shall be stored on site in a prominent 'Emergency Information Cabinet' located adjacent to the Site's main entry point.

34) Operational Fire Risk Management Plan

During operation of the solar farm, activities on site shall comply with the provisions of the Operational Fire Risk Management Plan and the relevant provisions of the Fire Emergency Response Plan.

The Operational Fire Risk Management Plan shall be prepared by a suitably qualified and experienced person, which addresses/provides:

- a) Contact details of the local Site Representative who is available to attend site in an emergency on a 24 hour, 7 days a week basis;
- b) Fire water storage tank checks;
- c) Signage at entries to the Site which clearly display the name, telephone number and address to contact in the event of an emergency.
- d) Grass height requirements and management. The grass height should be based on the lowest reasonably practicable height achievable by grazing;

Note:

Grazing is used to set the reasonably practicable grass height. This grass height limit can be maintained by grazing, mechanical, other means or a combination.

- e) Access track maintenance;

- f) Weed maintenance;
- g) Screen planting and site vegetation maintenance, including maintenance of retained existing trees to their current height and width;
- h) Solar PV panel and infrastructure maintenance, including monitoring for panel damage and integrity;
- i) Details of monitoring for faults and potential fires at all times, by a remote control room, including:
 - 1. Key electrical system infrastructure
 - 2. Fault monitoring detection system(s);
 - 3. CCTV system(s) that covers the components of the Solar Farm within the screen planting;
- j) Requirements for the Site Administration Building, substation switch-room building and any other buildings containing equipment or parts to be monitored at all times by an automatic fire detection and alarm system which incorporate automatic notification to FENZ;
- k) Details of the fire extinguishers, of size and type in accordance with NZS4503, in the Site Administration Building and substation switch-room;
- l) Requirements that vehicles, excluding motorbikes, quadbikes and visiting vehicles, on the site to be equipped with fire extinguishers, of size and type in accordance with NZS4503 or as recommended by FENZ;

Note:

It is expected that operational 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, 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.

- m) Site remediation in the event of contamination as a result of a fire;
- n) A reinstatement procedure after any electrical equipment is damaged;

The Operational Fire Risk Management Plan shall be reviewed annually from the date the Solar Farm becomes operational. Any amendment arising from this review shall be incorporated in the plan and provided to Central Otago District Council.

35) Fire Emergency Response Plan

A Fire Emergency Response Plan ("ERP") shall be prepared by a suitably qualified and experienced person, following the Fire and Emergency New Zealand "Emergency Response Plan Preparation" guide (RD2-1, 20 June 2018), for reasonably foreseeable fire emergencies during the construction and operation of the facility. It shall include a procedure for a site representative, capable of managing electrical hazards to be available to attend whenever Fire and Emergency New Zealand are alerted to a fire at the site.

Note:

The intent of a Fire Emergency Response Plan is to capture the benefits of planning for likely responses to fire emergencies on the Site which contains electrical hazards not frequently encountered by firefighters.

Two-copies of both the construction and operational phase Fire Emergency Response Plan shall be stored on site in a prominent 'Emergency Information Cabinet' located adjacent to the site's main entry point.

Prior to the Project becoming operational, the operator must offer to undertake an onsite meeting with FENZ and if agreed, undertake the site visit to familiarise emergency crews with the site and the ERP. Once the Project is operational, the operator shall offer this onsite FENZ familiarisation meeting every two years.

36) Firefighting Provisions

Twelve 25,000 litre water tanks shall be provided exclusively for firefighting purposes. The tanks shall be filled following installation and refilled after each subsequent take of water has ceased. Each fire water storage tank shall be fitted with a highly visible float indicator so that each tank's water level can be easily observed. Adjacent tanks shall be connected so that water is withdrawn from adjacent tanks. Tanks shall be fitted with fire service coupling(s) following the coupling requirements of SNZ PAS 4509 (only the coupling requirements shall apply). The tank location(s), couplings arrangement and hardstand locations shall be agreed in consultation with the regional risk officer, Fire and Emergency New Zealand.

37) Components and Construction

The substation shall be designed and operated to comply with the Transpower "Substation Fire Mitigation Design Standard" (Transpower Reference TP.DS 61.06).

At least 10 working days prior to commissioning of the Solar Farm, the Consent Holder must provide Council with written verification from a suitably qualified and experienced engineer confirming that the installed electrical infrastructure has been installed in accordance with good engineering practice and in accordance with the design

38) The noise level from all solar farm operations must meet the following noise limits at the notional boundary of all existing or consented dwellings on any other site at the time of issue of consent:

- a) 55 dB L_{Aeq} from 7:00 am to 10:00 pm
- b) 40 dB L_{Aeq} and 70 dB L_{AFmax} from 10:00 pm to 7:00 am the following day

Note:

Noise levels shall be measured and assessed following NZS 6801:2008 Acoustics – Measurement of Environmental Sound and NZS 6802:2008 Acoustics – Environmental Noise (or any subsequent replacement standard).

39) After a hailstorm or similar weather event, the following must be undertaken:

- a) The facility must be physically inspected to identify any damaged solar panels or supporting infrastructure that may discharge contaminants into the environment due to that damage within 24 hours of the cessation of the weather event.
- b) Any solar panel or supporting infrastructure found to be damaged and at risk of discharging contaminants must either be removed from the site, be replaced, or be repaired in such a way that it is no longer at risk of discharging contaminants either permanently or until a more permanent repair can be undertaken within seven calendar days of the cessation of the weather event. This seven day period can be extended with the prior approval of the Planning Manager, Central Otago District Council, if they are satisfied that site conditions, including extent of damage to the facility, mean it is not practicable to undertake the necessary works within the seven day period.

40) Fixed exterior lighting must comply with the following:

- a) Lighting must be oriented so that it is angled away from the closest adjoining road or other property
- b) Security lighting must be fitted and controlled with a motion sensor
- c) All outdoor lighting with a light output of 500 lamp lumens or greater must be shielded or tilted so as to not emit any light at or above a horizontal plane measured at the light source

41) Any security cameras must be oriented so that their field of view does not include visibility over any neighbouring private land.

Site Decommissioning

42) A minimum of eight (8) weeks before the solar farm ceases operation or before the cessation of the activity authorised by this consent, whichever is earlier, a Site Decommissioning Plan must be submitted to the Planning Manager, Central Otago District Council for certification. The Site Decommissioning Plan must, at a minimum, address the following matters:

- a) Methods for reusing or recycling solar panels and supporting infrastructure and cables, or for their safe disposal if the consent holder can demonstrate that reuse or recycling of any parts of the facility is not practicable.
- b) Methods for identifying and remediating any soils that have been contaminated as a result of the operation of the facility in order to avoid ongoing risks to human or environmental health based on the anticipated future use of the land.
- c) Methods for reinstating and rehabilitating the site, including revegetation (Excluding areas of native planting), to enable it to be used for land based primary production or another activity permitted as of right by the relevant planning framework and approved by Central Otago District Council

43) The site decommissioning works must not commence until after the Site Decommissioning Plan has been certified by Central Otago District Council under Condition 42

44) The site decommissioning works must be completed in accordance with the certified Site Decommissioning Plan

45) The consent holder must notify the Planning Manager, Central Otago District Council, at least ten (10) working days before completion of the decommissioning to allow Council staff to carry out site inspections to determine compliance with the certified Site Decommissioning Plan.

Advice Notes:

1. *In addition to the conditions of a resource consent, the Resource Management Act 1991 establishes through sections 16 and 17 a duty for all persons to avoid unreasonable noise, and to avoid, remedy or mitigate any adverse effect created from an activity they undertake.*
2. *Resource consents are not personal property. The ability to exercise this consent is not restricted to the party who applied and/or paid for the consent application.*
3. *It is the responsibility of any party exercising this consent to comply with any conditions imposed on the resource consent prior to and during (as applicable) exercising the resource consent. Failure to comply with the conditions may result in prosecution, the penalties for which are outlined in section 339 of the Resource Management Act 1991.*

4. *The lapse period specified above may be extended on application to the Council pursuant to section 125 of the Resource Management Act 1991.*
5. *This is a resource consent. Please contact the Council's Building Services Department, about any building consent requirements for the work.*