Te Kaunihera ō Taranaki ki Te Tonga
South Taranaki District Council

Rārangi take o te Komiti Taiao me ngā Whakawā Whanokē

Extraordinary Environment and Hearings Committee Agenda

Wednesday 17 January 2024, 1 pm

Council Chamber, Albion Street, Hāwera

Te Kaunihera ō Taranaki ki Te Tonga
South Taranaki District Council

Pūrongo Whaitikanga
Governance Information

Ngā Mema o te Komiti / Committee Members

Andy Beccard
Chairperson

Steffy Mackay
Deputy Chairperson

Leanne Horo
Councillor

Aarun Langton
Councillor

Diana Reid
Councillor

Robert Northcott
Deputy Mayor

Tane Houston
Iwi Representative

Apatono / Delegations

The primary role of the Environment and Hearings Committee is to oversee the Council's obligations under the Resource Management Act 1991. It also oversees a number of the Council's environment and regulatory activities. The committee comprises five Councillors.

The Committee is delegated the following decision making powers:

- To hear all resource consent applications with the power to make a final decision;
- To hear all Building Act dispensation applications with the power to make a final decision;
- To consider all matters of an environmental and regulatory nature relating to the Resource Management Act, Building Act, Health Act, Fencing of Swimming Pools Act, Dog Control Act and to make recommendations to the Council;
- To hear objections to all matters in accordance with the Dog Control Act 2006
- To receive reports on all matters approved under delegated authority by the Chairperson or Deputy Chairperson together with the Group Manager Environmental and those functions delegated to staff;
- Hear objections to menacing dog classifications and either uphold or rescind the classification (as per the Dog Control Act).
- To consider and make recommendations to the Council on environmental policy matters relating to the Resource Management Act and the District Plan;
- To hear all plan changes and make recommendations to the Council;
- Non-notified applications will be referred to the Environment and Hearings Committee for consideration in the following circumstances:
    - Where the Group Manager Environmental believes that there are potential community effects and/or policy implications in respect of the District Plan, and no other applications of this nature have been dealt with before by the Council to determine precedent;
    - Appeals relating to consent conditions approved under delegated authority; and
    - Applications for retrospective activities.

That aside, the Committee is only able to make recommendations to the full Council for it to consider and make a decision on.

Te Kaunihera ō Taranaki ki Te Tonga
South Taranaki District Council

Pūrongo Whaitikanga
Governance Information

Huinga Tāngata / Attendance Register

Date	07/12/22	01/02/23	22/03/23	26/04/23	15/05/23	07/06/23	19/07/23	25/10/23	08/11/23	22/11/23
Meeting	E	O	E	O	O	O	O	O	E	O
Andy Beccard	√	√	√	√	√	√	√	√	√	√
Leanne Horo	√	√	√	√	A	√	√	√	√	√
Aarun Langton	A	√	√	√	√	√	√	A	√	√
Steffy Mackay	√	√	√	√	√	√	√	√	√	A
Robert Northcott	Y	√	√	√	√	√	√	√	√	√
Diana Reid	√	√	√	√	√	A	√	√	√	√
Tane Houston - Iwi Representative	-	-	-	-	-	√	√	√	√	A

Key

√	Attended
AO	Attended Online
-	Was not required to attend
A	Apology
Y	Attended but didn't have to attend
X	Did not attend - no apology given

Types of Meetings

O	Ordinary Council Meeting
E	Extraordinary Council Meeting

He Karere Haumaru / Health and Safety Message

In the event of an emergency, please follow the instructions of Council staff.
If there is an earthquake – drop, cover and hold where possible. Please remain where you are until further instruction is given.

He Pānga Whakararu / Conflicts of Interest

Members are reminded of the need to be vigilant to stand aside from decision making when a conflict arises between their role as an elected member and any private or other external interest they might have.

Te Kaunihera ō Taranaki ki Te Tonga
South Taranaki District Council

Rārangi
Agenda

Extraordinary Environment and Hearings Committee

Wednesday 17 January 2024 at 1 pm

1. **Karakia**

2. **Matakore / Apologies**

3. **Tauākī Whakarika / Declarations of Interest**

4. **Whakatakoto Kaupapa Whānui, Whakaaturanga hoki / Open Forum and Presentations**

5. **Pūrongo / Report**

5.1 Submission on Ōpunakē Solar Farm Project ..... Page 9

6. **Karakia**

Te Kaunihera ō Taranaki ki Te Tonga
South Taranaki District Council

Karakia

1. Karakia

Ruruku Timata – Opening Prayer

(Kia uruuru mai ā-hauora,	*(Fill me with vitality)*
ā-haukaha, ā-hau māia)	*strength and bravery)*
Ki runga	*Above*
Ki raro	*Below*
Ki roto	*Inwards*
Ki waho	*Outwards*
Rire rire hau	*The winds blow & bind us*
Paimārire	*Peace be with us.*

Te Kaunihera ō Taranaki ki Te Tonga
South Taranaki District Council

Matakore
Apologies

2. Matakore / Apologies

Leave of Absence: *The Board may grant a member leave of absence following an application from that member. Leave of absences will be held in the Public Excluded section of the meeting.*

Te Kaunihera ō Taranaki ki Te Tonga
South Taranaki District Council

Ngā Whakaputanga
Declarations of Interest

3. Tauākī Whakarika / Declarations of Interest

Notification from elected members of:

a) Any interests that may create a conflict with their role as an elected member relating to the items of business for this meeting; and

b) Any interests in items in which they have a direct or indirect pecuniary interest as provided for in the Local Authorities (Members' Interests) Act 1968.

Declarations of Interest: *Notification from elected members of: Any interests that may create a conflict with their role as an elected member relating to the items of business for this meeting; and Any interests in items in which they have a direct or indirect pecuniary interest as provided for in the Local Authorities (Members' Interests) Act 1968*

Te Kaunihera ō Taranaki ki Te Tonga
South Taranaki District Council

Whakatakoto Kaupapa Whānui, Whakaaturanga hoki

Open Forum and Presentations

4. Whakatakoto Kaupapa Whānui, Whakaaturanga hoki / Open Forum and Presentations

The Committee has set aside time for members of the public to speak in the public forum at the commencement of each Council, Committee and Community Board meeting (up to 5 minutes per person/organisation) when these meetings are open to the public. Permission of the Mayor or Chairperson is required for any person wishing to speak at the public forum.

Pūrongo
Report

5

To	Environment and Hearings Committee
From	Kaitātari Whakamahere Taiao / Planner, Caitlin Moseley
Date	17 January 2024
Subject	**Submission on Ōpunakē Solar Farm Project**

(This report shall not be construed as policy until adopted by full Council)

Whakarāpopoto Kāhui Kahika / Executive Summary

1. Energy Farms Limited (the "Applicant") has applied to the Environmental Protection Authority (EPA) for land use consent under Schedule 6 of the Covid-19 Recovery (Fast Track Consenting) Act 2020 ("the Act").

2. The Applicant seeks to construct and operate the Ōpunakē Solar Farm ("the Project") on a site located at 574 and 575 Upper Kina Road, Ōpunakē. The solar farm will have an approximate project area of 180ha with approximately 152,000 panels installed on the site.

3. As part of the consenting process the Council has been invited to provide feedback on the application. Although the Environment and Hearings Committee does not have a decision-making role under the Act, the purpose of this report is to provide the Committee with sufficient information on which it can provide effective input into the process, should it wish to exercise that option.

Taunakitanga / Recommendation(s)

THAT the Environment and Hearings Committee provides direction on the Ōpunakē Solar Farm Project and identifies key points to be included in the feedback to the Ministry for the Environment

Kupu Whakamārama / Background

The site and surrounding area

4. The applicant seeks land use consent under the Covid-19 Recovery (Fast Track Consenting) Act, 2020 to construct and operate the Ōpunakē Solar Farm on the subject site. The resource consent application from Energy Farms Limited is attached as Appendix 1.

5. The proposed site is located at 574 and 575 Upper Kina Road, Ōpunakē with a combined total area of 188.59ha, comprised of two separate titles. Both titles are held under separate ownership, however Energy Farms Limited have the sites under contract (Figure 1).

6. The site is currently used as part of a dairy farm unit, with existing dwellings, dairy shed and associated farm buildings. Both parcels of land are accessed via existing vehicle crossings from Ihaia Road, which will allow for an internal access road through the centre of the subject site.

7. The site slopes moderately from east to west and contains a number of ecological features including waterbodies, wetland areas, terrestrial vegetation and fauna. The Moutoti Stream and unnamed tributaries and the Oaoiti Stream and unnamed tributaries flow through the site located to the north of Kina Road, whilst the Manganui Stream and unnamed tributaries flow through the site to the south of Kina Road (Figure 1).

8. Seven wetlands have been identified throughout the site (Figure 2), with the ecological value of all seven being classified as 'Low' by the Beca Ecological Impact Assessment submitted with the application.

9. The site has a mixture of Land Use Capability 2 and 3, which is classified as Highly Productive under the National Policy Statement for Highly Productive Land (Figure 3).

10. The site is located approximately 8.1km northeast of Ōpunakē and 5.3km southeast of Rāhotu (Figure 4). The surrounding area and environment is generally rural in nature. There are a range of allotment sizes, with individual and clusters of rural-residential lots interspersed amongst larger agricultural blocks. Dwellings are, for the most part, located sporadically along road frontages.

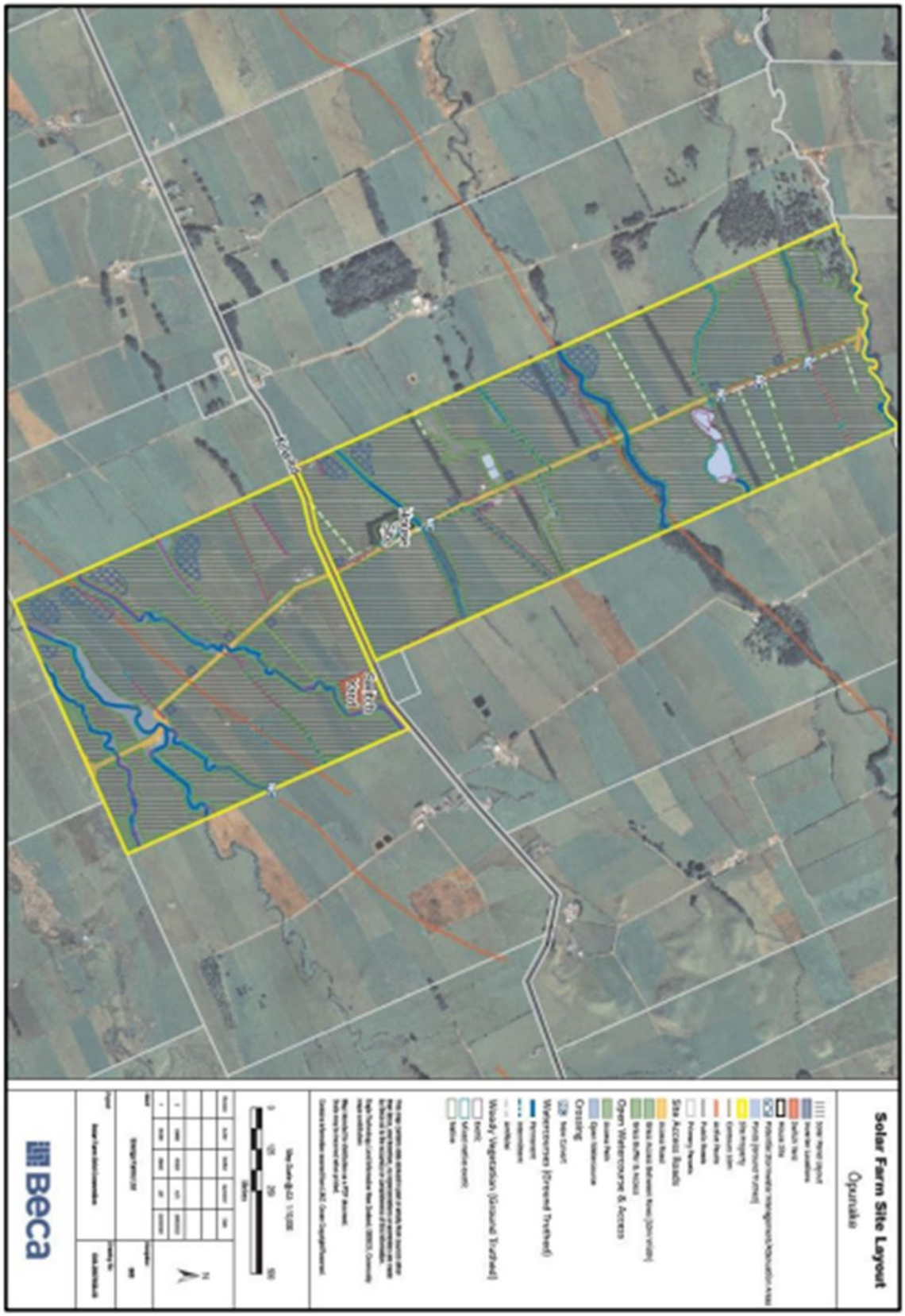


Figure 1: Solar farm site layout (Source: Beca)

Figure 2: Location of wetlands within subject site (Source: Beca EIA)

Figure 3: LUC soil classification (Source: Manaaki Landcare Research).

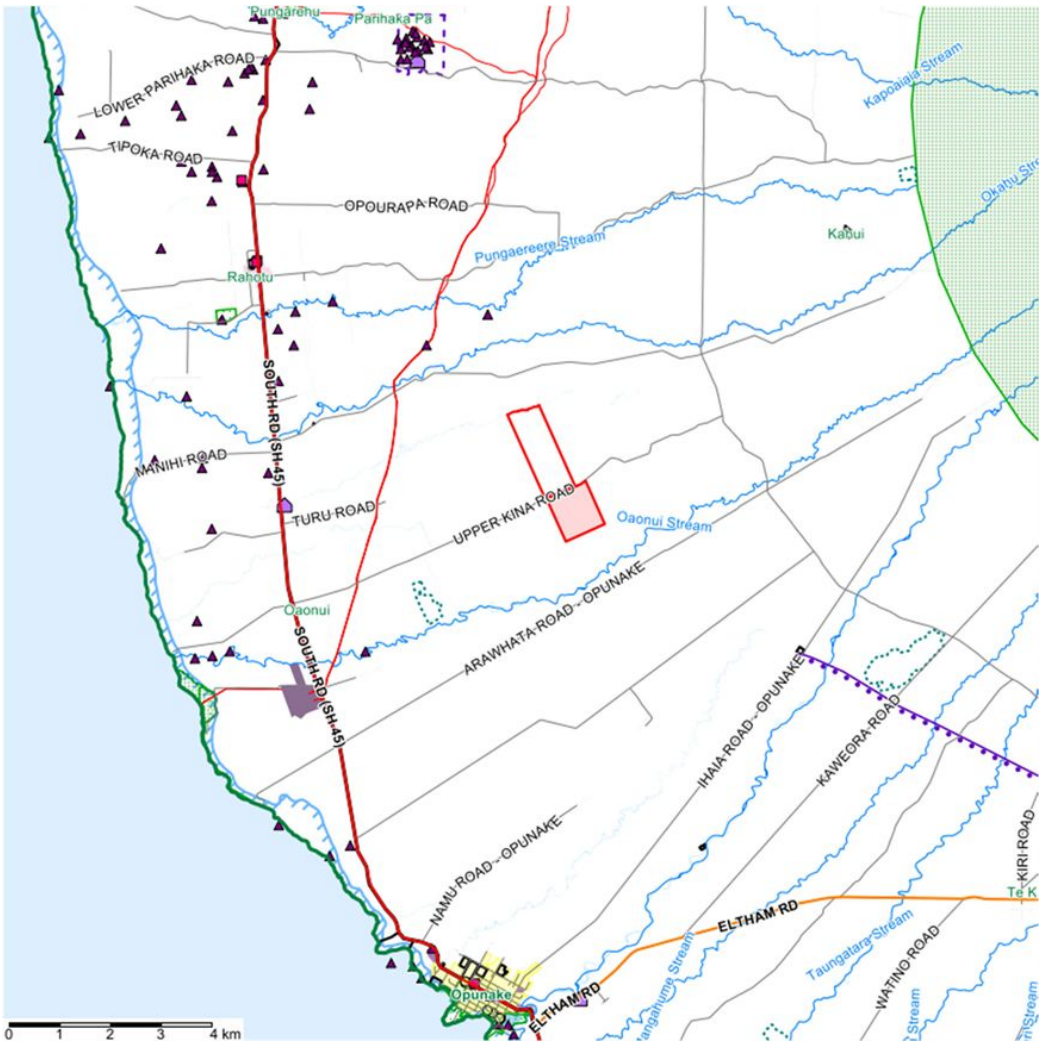


Figure 4: Subject site in relation to surrounding areas (Source: STDC IntraMaps)

Operational Details

11. The solar farm will have an approximate project area of 180ha and a peak output of 80 – 110 megawatts. It will involve the erection of approximately 152,000 photovoltaic panels on steel tracking systems. The tracking systems will allow the panels to rotate to maximise the solar resource and will be attached to the ground via piled pitches.

12. These will connect to 11 inverter stations, which will be connected to an on-site substation. The on-site substation will facilitate the interconnection of the solar farm into the national grid via Transpower's Ōpunakē substation located at 909 Ihaia Road, located approximately 4.5km southeast of the site.

13. Earthworks are required to establish internal access roads and pads for the inverters and substation. Significant trenching will also be undertaken to allow the laying of the cables that will connect the various aspects of the solar farm. Several culverts will be installed to facilitate access across the various watercourses that traverse the site. A range of mitigation landscaping is proposed, along with a range of ecological protection and enhancement measures.

Previous comment provided on application

14. The Council has previously been asked to provide comment on the project in April of 2023, to the Ministry for the Environment, via the Fast Track Consenting Team at the Ministry for the Environment. The comment was formulated between the Mayor, the Environment and Hearings Committee Chairman, the Group Manager Environmental Services, the Planning and Development Manager and the planner.

15. The comment provided by the Council identified benefits, constraints and other considerations that Council considered relevant to the project. The comment highlighted several issues and points of consideration that Council deemed relevant and of particular regard to the project. These included:

    - Loss of productive farmland
    - Reverse sensitivity and visual impact on surrounding properties and wider landscape
    - Impacts on the natural environment and ecological systems
    - Natural hazards

16. It was determined by the Council at this time that the project should be consented under the Covid-19 (Fast-track Consenting) Act 2020. The fast-tracking legislation provides a framework for the project to be considered, which by comparison, the District Plan does not provide a direct pathway for consenting of a project with this scale and complexity.

17. The full comment document can be found as Appendix 2.

18. Since this initial comment was provided, the EPA determined in October 2023 that the application complied with the requirements set out in clause 3, Schedule 6 of the Act and could be provided to the panel appointed to determine the application.

Whaiwhakaaro me ngā aromatawai / Considerations and Assessments

19. Included with the Application were several expert assessments and reports that support and provide guidance for the project and its overall design and operation. These expert reports are common with standard Resource Consents and offer assessments on opportunities and constraints that may be experienced within a project or development.

20. The reports and assessments that were provided as part of the application include:

    - Ecological Impact Assessment – Solar Farm at Upper Kina Road Report. Prepared for Energy Farms Ltd, Prepared by Beca Limited. 8 June 2022.
    - Archaeological Assessment of Effects: Solar Farms Limited. Prepared for Reyburn and Bryant, Prepared by Geometria. 31 December 2021.
    - Traffic Impact Assessment – Proposed Solar Plant, Kina Road, Ōpunakē-Lots 3 & 15 DP 682. Prepared by Hawthorn Geddes, engineers &architects ltd. 11 Ma 2022.
    - Landscape Assessment – Energy Farms Ltd. Proposed Solar Farm Upper Kina Road, Ōpunakē. Prepared by Simon Cocker Landscape Architect. 20 September 2023.

- Solar Farm Site Assessment – Ōpunakē. Civil Report – Proposed Solar Farm at 574 and 575 Upper Kina Road, Ōpunakē. Prepared for Energy Farms Limited, Prepared by Beca Limited. 28 February 2022.
- Solar Farm, Ōpunakē. Assessment of Noise Effects. Prepared for Energy Farms Ltd, Prepared by Marshall Day Acoustics, 25 March 2022.
- Preliminary Site Investigation – Solar Farm Grid Connection-Ōpunakē. Prepared for Energy Farms Ltd, Prepared by Beca Limited. 5 May 2022.

Consistency with South Taranaki District Council Operative District Plan

21. The Solar Farm, if consented under the Operative South Taranaki District Plan would be classified as a Discretionary Activity, following Rule 3.1.4(n) and Rule 13.1.4(a)(iii):

> *3.1.4 DISCRETIONARY ACTIVITIES*
> *(n) Any activity that is not listed as a permitted, controlled, restricted discretionary, non-complying or prohibited activity.*
>
> *13.1.4 DISCRETIONARY ACTIVITIES*
> *(a) In the Rural Zone, the following activities*
> *(iii) Large-scale renewable electricity generation activities that is not located in an area of Outstanding Natural Character listed in Schedule 8B or Outstanding Natural Features and Landscapes listed in Schedule 8A.*
>
> *Following the Performance Standards of Section 13, large scale solar farms are considered those that are freestanding and have a footprint (gross floor area) of over 50m2 per site.*

22. The objectives and policies of the District Plan recognise that the Rural Zone is predominantly a productive environment but allows for a mix of different design, scale and intensity. The District Plan is clear that any land use or development not typically considered a rural based activity must not inhibit the main uses of the zone.

23. Further, the objectives and policies of the energy section also provide for renewable energy in the District, with emphasis on these uses that minimise effects on adjoining land based uses of which it does. They direct energy efficiency, and the use and development of renewable energy as matters that the Council must have particular regard to under Section 7 of the Resource Management Act. There is also national policy direction (National Policy Statement for Renewable Electricity Generation 2011 (NPSREG)) which requires that all district plans provide for, and recognise the benefits of, renewable electricity generation.

24. The following objective and policies would be considered relevant to the Solar Farm, had it been consented under the District Plan:

> *<u>Rural Zone:</u>*
> *Objectives*
> - *2.1.3 To ensure that subdivision, land use and development in the rural environment is of a nature, scale, intensity and location that maintains and, where appropriate, enhances rural character and amenity values.*
>
> - *2.1.4 To enable the efficient and effective functioning of farming and rural based activities and ensure that activities are not inhibited by adverse effects of new incompatible land uses.*

Policies

- *2.1.5 Provide for rural subdivision at a scale, design and intensity where it is compatible with the character and qualities of the surrounding environment, and limit more intensive or poorly designed subdivision where the character and qualities would be degraded or compromised.*

- *2.1.8 Manage the adverse effects of noise, vibration, odour, dust, traffic, glare and other nuisances from land use activities and development through relevant performance standards and appropriate spatial buffers and setback requirements for specific activities.*

- *2.1.9 Ensure that new land use activities are of a nature, scale, intensity and location consistent with maintaining the character and amenity of the rural environment and avoids or mitigates potential reverse sensitivity effects.*

- *2.1.11 Provide for the establishment and operation of new non-farming activities and the ongoing operation of existing lawfully established activities which are compatible and / or associated with farming activities in the rural environment, provided they avoid, remedy or mitigate adverse effects.*

- *2.1.12 Minimise, and where possible, avoid subdivision, land use and development that has the potential to inhibit the efficient use and development of versatile land for farming purposes or other lawfully established rural activities or rural industrial activities in an adjoining Rural Industrial Zone.*

- *2.1.15 Manage potential reverse sensitivity conflict between farming, other rural activities and sensitive activities through appropriate separation distances or other measures, while giving priority to existing lawfully established activities*

<u>Energy:</u>

Objective:

- *2.10.6 To recognise the significant local, regional and national benefits from the use and development of renewable energy resources by providing for the investigation, development, operation, maintenance and upgrading of renewable energy activities, including electricity generation.*

Policies:

- *2.10.9 Provide for the identification, investigation, prospecting and exploration of new potential sites and energy sources for energy resource activities.*

- *2.10.10 Ensure that the investigation, prospecting, exploration, development, use, production, and generation of energy resource activities, is managed in a way that recognises the national, regional and local benefits of the use and development of energy, while avoiding, remedying and mitigating adverse effects on the environment, including cumulative effects.*

- *2.10.13 Where the adverse effects of oil and gas energy activities and renewable electricity generation activities cannot be avoided, remedied or mitigated, have regard to any offset measures and/or environmental compensation that is of benefit to the environment and, where appropriate, the affected community proposed or agreed to by the applicant.*

- *2.10.14 In determining an application for resource consent for the use and development of renewable energy resources where any potential adverse effects are not fully understood or are uncertain and associated risks are considered to be acceptable, have regard to the merits of adopting adaptive management measures to avoid, remedy or mitigate any adverse effects on the environment.*

- *2.10.19 Recognise the locational, operational and technical constraints associated with developing, operating and maintaining large-scale renewable electricity generation activities and their requirements to connect to distribution networks and the National Grid.*

Key Matters for Consideration

25. The Expert Consenting Panel invites specified identified parties, including the relevant local authority to provide comment on the application. As such, South Taranaki District Council has been identified as a relevant local authority from whom the Panel must seek comment.

26. From the original comment that was provided by the Council in April 2023, and further review of information provided with the application there are four key matters of consideration that are applicable to the project:

1. The National Policy Statement for Highly Productive Land (NPS-HPL)

27. As identified earlier in the report, the site is comprised of Land Use Capability 2 and 3, which is considered Highly Productive under the NPS-HPL therefore, the provisions of the NPS-HPL must be considered.

28. The proposed solar farm meets Section 1.3(1) of the definition of specified infrastructure as defined in the NPS-HPL. Specified infrastructure is defined as below:

> *Specified Infrastructure means any of the following:*
>
> *(a) infrastructure that delivers a service operated by a lifeline utility:*
> *(b) infrastructure that is recognised as regionally or nationally significant in a National Policy Statement, New Zealand Coastal Policy Statement, regional policy statement or regional plan:*
> *(c) any public flood control, flood protection, or drainage works carried out:*
> *(i) by or on behalf of a local authority, including works carried out for the purposes set out in section 133 of the Soil Conservation and Rivers Control Act 1941; or*
> *(ii) for the purpose of drainage, by drainage districts under the Land Drainage Act 1908*

29. Section 3.9 determines that the Council must avoid inappropriate use or development of highly productive land unless exemptions in 3.9(2) apply:

> *Section 3.9(2)(j)(i) states:*
> *[the development is inappropriate except where] it is associated with one of the following, and there is a functional or operational need for the use or development to be on the highly productive land:*
> *(i) the maintenance, operation, upgrade, or expansion of specified infrastructure:*

30. Therefore, the project can be considered exempt from the NPS-HPL. However, consideration should still be given for the potential loss of productive farmland if a dual occupancy arrangement of the site is not undertaken.

31. Section 4.3 of the Consent Application identifies that the solar farm will also be used as an active sheep farm and research facility for alternative agrisolar methods to ensure that productive agricultural use of the land continues in conjunction with the solar farm.

2. Affected Parties

32. The application has identified those parcels of land that are adjacent to the subject site, as required under the Fast Track Consenting Act. However, aside for the landscape mitigation plan that was formulated as part of the Landscape Assessment, there is little to no mention of other parties that may be considered affected to this proposal.

33. Visual effects on surrounding properties have been considered as part of the landscape report, noting that views into the site from some surrounding properties and roads exist, however vegetation may be used to mitigate visual effects.

34. Correspondence between the agent acting on behalf of Energy Farms Ltd and Taranaki Iwi has been included as part of the application. Rather than undertaking a full Cultural Impact Assessment, Taranaki Iwi have provided consent conditions to avoid, remedy, mitigate or offset adverse effects that may arise from the project.

35. Consideration therefore may be given to surrounding properties and the wider community for any affects that may arise as a result of the project.

3. Lack of Data

36. There is little to no data in regard to industry best practice for the end of life process for solar farms. This process includes the decommissioning of the project, site rehabilitation and solar panel disposal.

37. Section 5.5 of the application does identify that the land can be easily re-purposed for productive purposes should the solar farm be decommissioned.

38. The consent conditions that were provided by Taranaki Iwi also consider the end of life for the project, whether it includes decommissioning or re-powering of the site.

39. However, the application seems to lack any clear direction for the end of life process for the project.

4. Cumulative Effects

40. South Taranaki has seen a recent increase for large-scale solar farms, with at least three consents being granted in 2023.

41. Additionally, the Council has also been invited to comment on a second solar farm project that has been applied for by Harmony Energy NZ #4 Limited under the Covid-19 Recovery (Fast Track Consenting) Act, 2020. The solar farm is similar in size to this project and proposed to be on Ōpua and Arawhata Roads.

42. As with this application, the comment was officially provided to the Ministry of the Environment in early 2023 and formulated between the Mayor, the Environment and Hearings Committee Chairman, the Group Manager Environmental Services, the Planning and Development Manager and the planner.

43. Section 5.2.4 of the application considers the cumulative effects citing that the landscape assessment *"has considered the potential cumulative effects of the Project in relation to the definition provided under Te Tangi a Te Manu (New Zealand Landscape Guidelines). Simon Cocker Landscape Architecture is not aware of any other solar farms within the immediate visual catchment or proximate to the immediate visual catchment of the subject site that have been granted consent and has therefore concluded that the Project will not generate a cumulative effect."*

44. It is noted that the landscape assessment was published in September of 2023, which may allow for some inconsistencies with the above statement.

45. Having noted the several large-scale solar farms that have been consented in 2023, the cumulative effects of solar farms and projects on the wider South Taranaki landscape should be considered.

Whakakapia / Conclusion

46. The Ministry for the Environment have identified South Taranaki District Council as being an affected party to the project – for Energy Farms Limited to construct a solar farm at 574 and 575 Upper Kina Road, Ōpunakē.

47. Subsequently, Ministry for the Environment have requested South Taranaki District Council provide feedback on the project. Feedback has to be received by MfE no later than 30 January 2024.

Caitlin Moseley
Kaitātari Whakamahere Taiao / Planner

[Seen by]
Liam Dagg
Kaiarataki Taiao / Group Manager Environmental Services

Attachments:

- Appendix 1: Application Forms and Assessment of Environmental Effects
- Appendix 2: Initial South Taranaki District Council Written Comment on Application

Environmental Protection Authority
Te Mana Rauhī Taiao

Application form: For resource consent

Form FTC01

Use this form to apply for a resource consent under clause 2(1) of Schedule 6 of the COVID-19 Recovery (Fast-track Consenting) Act 2020 (the Act).

- You will need to complete form FTC02 as well if you are also applying for a notice of requirement.
- Please use form FTC03 if you are applying for a certificate of compliance.

Please read our *Guidance for completing forms* before completing this form, as it contains important information including about use and disclosure of personal information.

We recommend you discuss your application with us at the Environmental Protection Authority (EPA) before lodging your application. You can contact us by:

- phone: 0800 CALLEPA (0800 225537)
- email: fasttrack@epa.govt.nz

Part 1: Applicant details

Project name and identifier (as named in Schedule 2 or referral order): Ōpunake Solar Farm – Schedule 101	
Person or entity authorised to undertake project (as named in Schedule 2 or referral order): Energy Farms Limited	
Key contact name: Steve Hawkins	
Phone: 021 945 332	Email: Steve@energyfarms.co.nz
Email address for service: Steve@energyfarms.co.nz	
Postal address (if preferred method of service): N/A	

Consultant details

Company: Reyburn and Bryant	
Full name of consultant: Thomas Keogh	
Phone: 021 026 33990	Email: thomas@reyburnandbryant.co.nz
Email address for service: thomas@reyburnandbryant.co.nz	
Postal address (if preferred method of service): N/A	

If you are making this application on behalf of the applicant, please attach evidence that you are authorised to make this application.

Please direct all correspondence from the EPA to:

☐ Applicant
☒ Consultant

Part 2: Type of application for resource consent

This application is for the following type(s) of resource consent (please tick all that apply):

- ☒ land-use consent
- ☐ subdivision consent
- ☐ water permit
- ☐ discharge permit
- ☐ coastal permit:
  - ☐ for reclamation
  - ☐ aquaculture activities
  - ☐ other

Part 3: Brief description of the application

Please provide a brief description of the application and the consents sought:

Attach additional pages if required

The application seeks land use consent to construct and operate the Ōpunake Solar Farm on the subject site.

The solar farm will have an approximate project area of 180ha and a peak output of 80 – 110 megawatts. It will involve the erection of approximately 152,000 photovoltaic panels on steel tracking systems. These will connect to 11 inverter stations, which will be connected to an on-site substation. The on-site substation will facilitate the interconnection of the solar farm into the national grid via Transpower's Ōpunake substation located at 909 Ihaia Road.

Earthworks are required to establish internal access roads and pads for the inverters and substation. Significant trenching will also be undertaken to allow the laying of the cables that will connect the various aspects of the solar farm.

Several culverts will be installed to facilitate access across the various watercourses that traverse the site.

A range of mitigation landscaping is proposed, along with a range of ecological protection and enhancement measures.

The solar farm requires consent as a discretionary activity under the South Taranaki District Plan, the National Environmental Standard for Assessment and Managing Contaminants in Soil to Protect Human Health 2011, and The National Environmental Standards for Freshwater 2020; and as a controlled activity under the Regional Fresh Water Plan for Taranaki.

Further details of the solar farm and associated consenting requirements are provided in the Assessment of Environmental Effects.

Part 4: Schedule of application documents

List all documents submitted with the application

Attach additional pages if required

Attachment number	Document name and date	Author	Document versions
01	Clause 9 of Schedule 6 checklist – same date as application	Reyburn and Bryant	Only one version
02	Solar Farm Site Layout Plan – 28/02/2022	Beca	Revision 2
03	Records of Title (TNC3/1386 and TNE4/973) – obtained 21/09/2023	Land Information New Zealand	N/A
04	Rule assessment – same date as application	Reyburn and Bryant	Only one version
05	Ecological Impact Assessment – 08/06/2022	Beca	Revision 3
06	Archaeological Assessment of Effects: Solar Farms Limited – 31/12/2021	Geometria	Final revision
07	Landscape Assessment – 20/09/2023	Simon Cocker Landscape Architecture	Version 1
08	Draft conditions – same date as application	Reyburn and Bryant	Only one version
09	Solar Farm Site Assessment – Ōpunake: Civil Report – Proposed Solar Farm at 574 and 575 Upper Kina Road, Ōpunake – 25/02/2022	Beca	Revision 1
10	Traffic Impact Assessment – Proposed Solar Plant: Kina Road Ōpunake – Lot 3 and 15 DP 682 – 11/05/2022	Hawthorn Geddes	Only one version – ref 12761
11	Solar Farm, Opunake: Assessment of Noise Effects – 25/03/2022	Marshall Day	Rev – ref 002 20211179

12	Email titles 'Hapū process moving forward for Energy Farms Solar' – 11/08/2023	Carl Owen – Taranaki Iwi	N/A
13	Preliminary Site Investigation – Solar Farm Grid Connection Ōpunake – 05/05/2022	Beca	Revision 1
14	Economic Assessment of: Proposed Solar Farm at 574 – 575/539 Upper Kina Road, Opunake – 24/02/2023	Urban Economics	Only one version – ref 51878.5.01
15	Relevant Taranaki Regional Policy Statement and Regional Fresh Water Plan for Taranaki objectives and policies – same date as application	Reyburn and Bryant	Only one version

Part 5: Description of inquiries made to identify occupiers

Please explain what reasonable inquiries were made to identify the occupiers of the land on which the project is to be undertaken and the land adjacent to that land.

Review of Records of Title, Council systems, and Quickmap. Energy Farms Limited also liaised with the real estate agent for the properties (they currently have the sites under contract), who completed further investigations and provided information on owners and occupiers.

Part 6: Personal information

☒ I have checked all the application documents for personal information such as personal contact details for you (the applicant) and any other individual, including persons identified as owners or occupiers of land or affected persons

☒ I have provided a redacted version of the application (clearly labelled) that does not disclose personal information.

Part 7: Is this application part of a project planned to proceed in stages?

☐ Yes (see below)

☒ No

If the project is planned to proceed in stages, please provide clear details of the nature and timing of any staging including indicative lodgement and construction dates for each stage. Note that if stages of the project are intended to be decided at different times, a new application will be required for each separate stage.

Attach additional pages if required

Part 8: Signature

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

☒ I understand that the EPA can recover actual and reasonable costs incurred in relation to this application.

- Thomas Keogh 13/10/2023

Signature of applicant (or person authorised to make application) Date

Note: The information checklist on the following page must be completed prior to lodging this application. The checklist is designed to assist you in providing all the relevant information. If an application does not comply with all requirements then the EPA must return it to the person who lodged it.

Resource consent application checklist

In accordance with clauses 9-12 of Schedule 6 of the COVID-19 Recovery (Fast-track Consenting) Act 2020 the following information must be provided for resource consents for listed or referred projects: (all clauses in this checklist are from Schedule 6 of the Act)	Application Reference (Section and page)	✓
A description of the proposed activity **(clause 9(1)(a))**	Section 4 of the AEE – pages 22 – 33.	✓
A description and map of the site at which the activity is to occur **(clause 9(1)(b))**	Site description in section 2 of the AEE – pages 9 – 18. Mapp included in section 2 of the AEE – page 9. Records of Title included at Appendix 3.	✓
Confirmation that the consent application complies with clause 3(1) **(clause 9(1)(c))**	Checklist provided in Appendix 1.	✓
The full name and address of each owner of the site and of land adjacent to the site, and each occupier of the site and of land adjacent to the site who, after reasonable inquiry, is able to be identified **(clause 9(1)(d))**	The details of the owners of the site are detailed in section 1.3 of the AEE – Table 1 – page 3 and 4. The details of the owners and occupiers of land adjacent to the site are detailed in section 3.2 of the AEE – Table 3 – page 20 and 21.	✓

In accordance with clauses 9-12 of Schedule 6 of the COVID-19 Recovery (Fast-track Consenting) Act 2020 the following information must be provided for resource consents for listed or referred projects: **(all clauses in this checklist are from Schedule 6 of the Act)**	**Application Reference (Section and page)**	✓
A description of any other activities that are part of the proposal to which the application relates **(clause 9(1)(e))**	All activities that form part of the application are detailed in section 4 of the AEE – pages 22 – 33.	✓
A description of any other resource consents, notices of requirement for designations, or alterations to designations required for the proposal to which the application relates **(clause 9(1)(f))**	All resource consent requirements are identified in section 1.4 of the AEE – pages 4 – 6. No notices of requirement for designations or alterations to designations are required.	✓
An assessment of the activity against (i) Part 2 of the Resource Management Act 1991; and (ii) the purpose of the Act; and (iii) the matters set out in section 19 of the Act **(clause 9(1)(g))**	Assessment against Part 2 of the RMA provided in section 6.9 of the AEE – pages 84 – 88. Assessment against the purpose of this Act, including the matters listed in section 19, is provided in section 6.1 of the AEE – pages 55 – 59.	✓
An assessment of the activity against any relevant provisions in any of the following documents: (i) a national environmental standard: (ii) other regulations made under the Resource Management Act 1991:	An assessment against the rules, requirements and conditions	✓

In accordance with clauses 9-12 of Schedule 6 of the COVID-19 Recovery (Fast-track Consenting) Act 2020 the following information must be provided for resource consents for listed or referred projects: (all clauses in this checklist are from Schedule 6 of the Act)	Application Reference (Section and page)	✓
(iii) a national policy statement: (iv) a New Zealand coastal policy statement: (v) a regional policy statement or proposed regional policy statement: (vi) a plan or proposed plan; (vii) a planning document recognised by a relevant iwi authority and lodged with a local authority Including an assessment of the activity against: • Any relevant objective, policy, or rules in any of the documents listed above. • Any requirement, condition, or permission in any of the documents listed above • Any other requirements in any of those documents **(clause 9(1)(h)) and clause 9(2) and (3))**	of the relevant National Environmental Standards, Regional Plan and District Plan is included in Appendix 4. The consent requirements are identified in section 1.4 of the AEE – pages 4 and 5. An assessment against the relevant objectives and policies from the relevant National Policy Statements, Regional Policy Statement, Regional Plan, and District Plan is provided in section 6 of the AEE – page 59 – 84. The relevant objectives and policies from the National Policy Statements, Regional Policy Statement, and Regional Plan are included at Appendix 15	
Information about any Treaty settlements, that apply in the project area, including the identification of the relevant provisions in those Treaty settlements, and a summary of any redress provided by those settlements	The relevant Treaty Settlement is provided in	✓

In accordance with clauses 9-12 of Schedule 6 of the COVID-19 Recovery (Fast-track Consenting) Act 2020 the following information must be provided for resource consents for listed or referred projects: (all clauses in this checklist are from Schedule 6 of the Act)	Application Reference (Section and page)	✓
that affects natural and physical resources relevant to the project or project area **(clause 9(1)(i))**	section 7 of the AEE – page 89.	
The conditions proposed for the consent. **(clause 9(1)(j))**	The proposed consent conditions are included at Appendix 8.	✓
An assessment of the activity's effects on the environment, which must: • Include the information required by clause 10 of Schedule 6; and • Cover the matters specified in clause 11 of Schedule 6. **(clauses 9(4) 10 and 11)**	An assessment of the activity's effects is provided in section 5 of the AEE – pages 34 – 54. No parties have been identified as being affected. The relevant technical assessments upon which the assessment is based are included as Appendices.	✓
A cultural impact assessment: • Prepared by or on behalf of the relevant iwi authority or authorities; or • If one is not provided, a statement of any reasons given by the iwi authority for not providing it **(clause 9(5))**	A cultural impact assessment has not been provided based on the feedback provided by Taranaki Iwi. Refer to the correspondence attached at Appendix 1. This is referenced in section 5.6 of the AEE – page 45.	✓

In accordance with clauses 9-12 of Schedule 6 of the COVID-19 Recovery (Fast-track Consenting) Act 2020 the following information must be provided for resource consents for listed or referred projects: **(all clauses in this checklist are from Schedule 6 of the Act)**	**Application Reference (Section and page)**	✓
If a permitted activity is part of the proposal to which the consent application relates, include a description that demonstrates that the activity complies with the requirements, conditions, and permissions for the permitted activity. **(clause 9(6)(a))**	Those aspects of the proposal that are permitted are identified in section 1.5 of the AEE and are addressed in the rule assessment included as Appendix 4.	✓
If the activity is to occur in an area that is within the scope of a planning document prepared by a customary marine title group under section 85 of the Marine and Coastal Area (Takutai Moana) Act 2011, include an assessment of the activity against any resource management matters set out in the planning document. **(clause 9(6)(b))**	N/A	N/A
In the case of a referred project, all additional information required by the referral order **(clause 9(6)(c))**	N/A – the referral order does not identify any additional information.	N/A
If the application is for subdivision, in addition to the information required under clause 9, an application for a subdivision in a project area must include information that adequately defines: • The position of all new boundaries; • The areas of all new allotments, unless the subdivision involves a cross lease, company lease or unit plan; • The locations and areas of new reserves to be created, including any esplanade reserves and esplanade strips • The locations and areas of existing esplanade reserves, esplanade strips and access strips • The location and areas of any part of the bed of a river or lake to be vested in a territorial authority under section 237A of the Resource Management Act 1991 • The locations and areas of any land within the coastal marine area that is to become part of the common marine and coastal area under section 237A of the Resource Management Act 1991 • The locations and areas of land to be set aside as new roads **(clause 12(1))**	N/A – the project does not include subdivision	N/A

In accordance with clauses 9-12 of Schedule 6 of the COVID-19 Recovery (Fast-track Consenting) Act 2020 the following information must be provided for resource consents for listed or referred projects: (all clauses in this checklist are from Schedule 6 of the Act)	Application Reference (Section and page)	✓
If the application is for reclamation(s), in addition to the information required under clause 9, information must also be included to show the area to be reclaimed, including the following: • The location of the area to be reclaimed • If practicable, the position of all new boundaries • Any part of the reclaimed area to be set aside as an esplanade reserve or esplanade strip **(clause 12(2))**	N/A – the project does not involve reclamation.	N/A

Other restrictions or obligations	Application Reference (Section and page)	✓
In the case of a listed project, the application complies with any restrictions or obligations in Schedule 2 OR In the case of a referred project, the application complies with any restrictions or obligations in Schedule 3 and the referral order	N/A – the proposal does not relate to a listed project.	N/A
Confirmation that the project does not include any of the activities set out in clause 2(4) of Schedule 6	Page i in the introductory section of the AEE confirms that the project does not include any of the activities set out in clause 2(4) of Schedule 6.	✓

Evidence of authorisation	Application Reference (Section and page)	✓
Evidence of authorisation if you are making this application on behalf of the applicant who must be a person authorised in accordance with section 15 of the Act	An email from Steve Hawkins on behalf of Energy Farms Limited is attached to this application form confirming that I (Thomas Keogh) have authorisation to make the application on their behalf.	✓

Reyburn and Bryant

From: Steve Hawkins <steve@energyfarms.co.nz>
Sent: Thursday, 5 October 2023 2:12 PM
To: Thomas Keogh
Cc: Todd Wilson
Subject: Application

5

Hi Thomas,

Energy Farms Limited authorise Thomas Keogh of Reyburn and Bryant to lodge the application for the Ōpunake Solar Farm with the Environmental Protection Agency on our behalf.

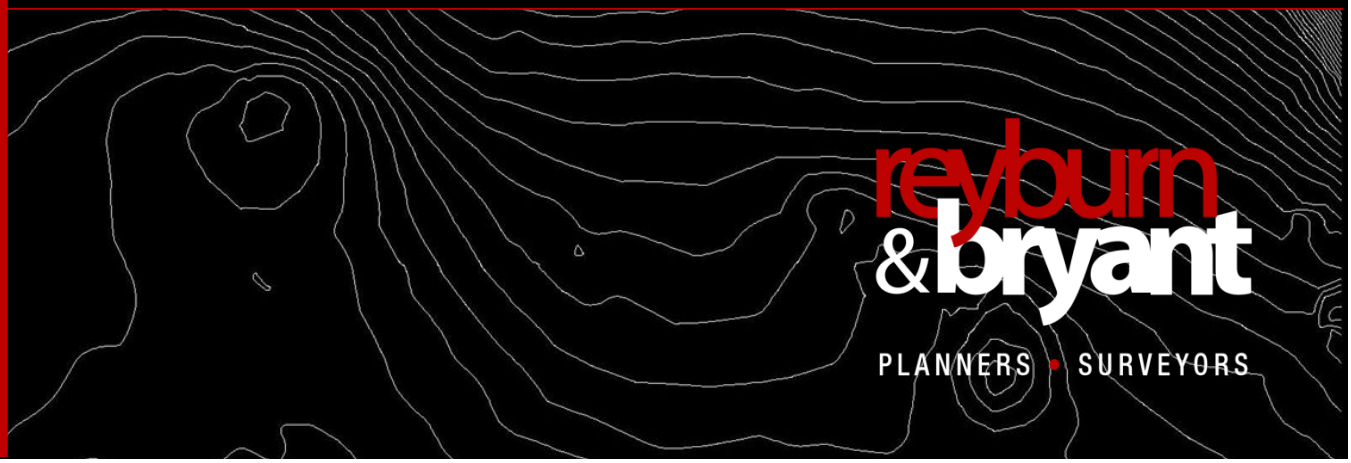
Thanks

Steve Hawkins
Energy Farms Limited
+64 21 945332

Application for land use consent

ENERGY FARMS LIMITED – THE ŌPUNAKE SOLAR FARM

574 and 575 Upper Kina Road, Ōpunake



Application for land use consent

ENERGY FARMS LIMITED – THE ŌPUNAKE SOLAR FARM

574 and 575 Upper Kina Road, Ōpunake

Report prepared for:	Energy Farms Limited
Author	Thomas Keogh, Senior Planner
Reviewed by:	Brett Hood, Planner/Director
Consent authority:	Environmental Protection Authority
Report reference:	16788
Report status:	Final
Date:	October 2023

Reyburn and Bryant
P.O. Box 191
Whangarei 0140
Telephone: (09) 438 3563

APPLICATION FOR RESOURCE CONSENT IN ACCORDANCE WITH SCHEDULE 6 OF THE COVID-19 RECOVERY (FAST-TRACK CONSENTING) ACT 2020

To: Environmental Protection Authority,
Level 10,
215 Lambton Quay,
Wellington 6011

1. **Energy Farms Limited** applies to the Environmental Protection Authority for land use consent under Schedule 6 of the Covid-19 Recovery (Fast Track Consenting) Act, 2020. The resource consent requirements are detailed in section 1.5 of this report.
2. The activity to which the application relates is to construct and operate the Ōpunake Solar Farm on the subject site. Project details are provided in section 3 of this report.
3. The location of the activity is 574 and 575 Upper Kina Road, Ōpunake. The site details are listed in Table 1 and a description of the site is provided in section 2 of this report.
4. Ingrid and Michael McKie own 574 Upper Kina Road. Shae Fleming and Conaugh Gibbs own 575 Upper Kina Road. Energy Farms Limited have the sites under contract.
5. The application relates solely to the referred project under Schedule 101 of Schedule 101 of the COVID-19 Recovery (Fast-track Consenting) Referred Projects Order 2020. There are no other activities to which this application relates.
6. No other resource consents are needed for the proposed activity.
7. The proposal does not include any of the activities set out in clause 2(4) of Schedule 6 of the COVID-19 (Fast-track Consenting) Act 2020.
8. We attach an assessment of effects on the environment that:
   (a) includes the information required by clause 10 of Schedule 6 of the COVID-19 Recovery (Fast-track Consenting) Act 2020; and
   (b) addresses the matters specified in clause 11 of Schedule 6 of the COVID-19 Recovery (Fast-track Consenting) Act 2020; and
   (c) includes such detail as corresponds with the scale and significance of the effects that the activity may have on the environment.

9. We attach an assessment of the proposed activity against the purpose of the COVID-19 Recovery (Fast-track Consenting) Act 2020.

10. We attach an assessment of the proposed activity against the matters set out in Part 2 of the Resource Management Act, 1991.

11. We attach an assessment of the proposed activity against relevant provisions of documents referred to in clause 9 of Schedule 6 of the COVID-19 Recovery (Fast-track Consenting) Act 2020.

    A check list of the relevant matters referred to in Clause 9 of Schedule 6 of the COVID-19 Recovery (Fast-track Consenting) Act 2020 is included as **Appendix 1**.

4. No other information is required to be included by the relevant statutory documents or regulations.

Signature of applicant (*or* person authorised to sign on behalf of applicant)

Thomas Keogh

13 October 2023

Date

Address for service:	Reyburn and Bryant 1999 Ltd PO Box 191, Whangarei
Telephone:	(09) 438 3563
Email:	thomas@reyburnandbryant.co.nz
Contact person:	Thomas Keogh

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15. Relevant Taranaki Regional Policy Statement and Regional Fresh Water Plan for Taranaki objectives and policies
16. Taranaki Iwi recommended consent conditions

ABBREVIATIONS

Act	COVID-19 (Fast-track Consenting) Act 2020
AEE	Assessment of Environmental Effects
ADP	Accidental Discovery Protocol
BESS	Battery Energy Storage System
CEMP	Construction Environmental Management Plan
CIA	Cultural Impact Assessment
CNMP	Construction Noise Management Plan
CTMP	Construction Traffic Management Plan
DoC	Department of Conservation
DSI	Detailed Site Investigation
EFL	Energy Farms Limited
EIA	Ecological Impact Assessment
EMRP	Ecological Management and Restoration Plan
ESCP	Erosion and Sediment Control Plan
FTE	Full Time Equivalent
GDP	Gross Domestic Product
HAIL	Hazardous Activities and Industries List
HGV	Heavy Goods Vehicle
LUC	Land Use Classification
NES-CS	National Environmental Standard for Assessment and Managing Contaminants in Soil to Protect Human Health 2011
NES-F	National Environmental Standard for Freshwater
NPS-FM	National Policy Statement for Freshwater Management
NPS-HPL	National Policy Statement
NPS-REG	National Policy Statement for Renewable Energy
NPV	Net Present Value
Project	The Ōpunake Solar Farm
PSI	Preliminary Site Investigation
RAP	Remedial Action Plan
RFWPT	Regional Fresh Water Plan for Taranaki
RMA	Resource Management Act, 1991
RPS	Regional Policy Statement for the Taranaki
SCLA	Simon Cocker Landscape Architecture

STDC	South Taranaki District Council
STDP	South Taranaki District Plan
TRC	Taranaki Regional Council

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1. INTRODUCTION

1.1 Executive summary

This Assessment of Environmental Effects (AEE) has been prepared for Energy Farms Limited (EFL), who seeks to construct and operate the Ōpunake Solar Farm (the "Project") on the subject site located at 574 and 575 Upper Kina Road, Ōpunake.

The Project has been referred under section 27 of the COVID-19 (Fast-track Consenting) Act 2020 (the "Act") and is gazetted in Schedule 101 of the COVID-19 Recovery (Fast-track Consenting) Referred Projects Order 2020. This application relates solely to the referred project under Schedule 101.

This AEE has been prepared in accordance with Clause 9 of Schedule 6 of the Act. A check list is included as **Appendix 1**.

Based on the preliminary design (see the solar farm site layout plan attached at **Appendix 2**), the solar farm will have an approximate project area of 180ha and a peak output of 80 – 110 megawatts. A security fence will be established around the portion of the site accommodating solar infrastructure. Key aspects of the Project are:

- The installation of approximately 152,000 photovoltaic panels. The solar panels will be attached to steel tracking systems. The tracking systems will allow the panels to rotate to maximise the solar resource and will be attached to the ground via piled pitches.
- The establishment of approximately 11 inverter stations across the site.
- The construction of a substation.
- A Battery Energy Storage System (BESS) within the substation area.
- The interconnection of the solar farm into the national grid via the existing 33 kV Powerco overhead transmission lines that traverse the site.
- Earthworks to establish internal access roads and pads for the inverters and substation.
- Trenching to establish the cabling that will connect the various components of the solar farm.
- The installation of culverts to facilitate access over the watercourses that traverse the site.
- The upgrading of two existing vehicle crossings.

- The retention of one of the existing dwellings to use as a site office during and after construction.
- A range of mitigation landscaping.
- Ecological rehabilitation, consisting of terrestrial and riparian planting.

The Project requires consent as a discretionary activity under the South Taranaki District Plan (STDP), the National Environmental Standard for Assessment and Managing Contaminants in Soil to Protect Human Health 2011 (NES-CS), and The National Environmental Standards for Freshwater 2020 (NES-F); and as a controlled activity under the Regional Fresh Water Plan for Taranaki (RFWPT).

To assist with this AEE (and the design process), several expert assessments have been undertaken. These include a civil report, ecological impact assessment, contaminated soils report, acoustic assessment, traffic impact assessment, landscape assessment, economic assessment, and archaeological assessment. EFL has also consulted with Taranaki Iwi, who have provided a set of recommended consent conditions as opposed to commissioning a Cultural Impact Assessment (CIA).

In accordance with the technical reports, the adverse effects facilitated by the Project can be avoided, remedied, or mitigated to be less than minor.

The proposal achieves with the purpose of the Act, aligns with the relevant district, regional and national statutory documents, and is consistent the purpose of the Resource Management Act, 1991 (RMA).

1.2 Background

1.2.1 Energy Farms Limited

EFL is a New Zealand energy company that has currently committed to developing seven utility scale solar farms across New Zealand.

The Ōpunake Solar Project is one of two EFL solar farms that have been referred under the Act. The Ōpunake Solar Farm is gazetted in Schedule 101 in the COVID-19 Recovery (Fast-track Consenting) Referred Projects Order 2020.

Due to the Act being repealed, the other currently anticipated EFL solar farms will likely progress through the standard consenting process under the RMA.

That said, the Natural and Built Environments Act 2023 that has now been enacted also provides for a similar fast track process, which may be used for some of the other currently anticipated EFL solar farm projects.

5

1.2.2 The Ōpunake Solar Farm

The location for the Project was determined based on the ideal combination of solar resource, ability to connect to the existing network, as well as the ability to achieve a low impact/low disturbance design.

As with each of the seven currently anticipated EFL solar farms, the Project will make use of multi-use land management practices by adopting livestock farming and grazing in conjunction with the solar activity. This concept, known as agrisolar, is now commonplace. Where utilised, it has proven to be successful for both the proponents and the graziers, providing benefits such as lowering operating costs and improving livestock wellbeing.

Projections from energy sector organisations forecast a need to double the total electricity supply in Aotearoa New Zealand by 2050. Through commitments made under the Paris Agreement in 2015, the Climate Change Climate Change Response (Zero Carbon) Amendment Act 2019, and Aotearoa New Zealand's First Emissions Reduction Plan, the forecast demand for electricity must be met by renewable generation. The Project is a significant piece of renewable energy infrastructure that will assist in meeting these targets.

The Project also supports the New Zealand government's strategy of:

- 100% renewable electricity generation by 2030; and
- A net zero carbon future by 2050.

1.3 Property details

Applicant	Energy Farms Limited
Location	574 and 575 Upper Kina Road, Ōpunake
Records of title	TNC3/1386 TNE4/973[1]
Legal descriptions	Lot 15 DP 682 Lot 3 DP 682
Area	76.5462ha 112.0473ha
Owners	[redacted]

[1] There are no memorials of any relevance registered on the titles, a copy of which is attached at **Appendix 3**.

	[redacted] (EFL have the sites under contract)
Relevant District Plan	South Taranaki District Plan
Zone	Rural
Notations	River/stream
Relevant Regional Plan	Regional Fresh Water Plan for Taranaki
Notations	None
Other relevant legislation	▪ The National Policy Statement for Renewable Energy Generation 2011 (NPS-REG) ▪ The National Policy Statement for Freshwater Management 2020 (NPS-FM) ▪ The National Environmental Standard for Fresh Water 2020 (NES-F) ▪ The National Environmental Standard for Assessment and Managing Contaminants in Soil to Protect Human Health 2011 (NES-CS) ▪ The National Policy Statement for Highly Productive Land (NPS-HPL) ▪ The Regional Policy Statement for Taranaki (RPS)

Table 1: Property details.

1.4 Resource consents required

All necessary resource consents are sought under the STDP, RFWPT, NES-CS and NES-F to enable to construction and operation of the Project. The consenting requirements are identified in Table 2 below. A full rule assessment is included at **Appendix 4**.

Rule	Consent Type	Description	Activity status
STDP			
Rule 13.1.4	Land use	'Large scale renewable electricity generation activities' in the Rural Zone require resource consent under this rule.	Discretionary activity
RFWPT			

Rule 27	Land use	The area and volume of earthworks exceeds the limits listed under Rules 25 and 26, meaning that the associated discharge of stormwater requires consent as a controlled activity under this rule.	Controlled activity
NES-CS			
Section 11	Land use	It is possible that earthworks could occur on a piece(s) of land that has accommodated a HAIL activity, and a Detailed Site Investigation (DSI) has not been provided.	Discretionary activity
NES-F			
Section 45(1)	Land use	The ecological rehabilitation proposed as part of this application could result in the need to remove vegetation within, or within 10m of a natural wetland.	Discretionary activity
Section 45(2)	Land use	The construction phase of the Project could facilitate the need to undertake earthworks within 10m of a natural wetland. Consent is sought on a precautionary basis.	Discretionary activity
Section 71	Land use	While the final designs are yet to be completed, some of the proposed culverts may not comply with the relevant requirements under section 70(2) of the NES-F.	Discretionary activity

Table 2: Resource consent requirements.

The Project is a discretionary activity under the STDP, NES-CS, and NES-F; and is a controlled activity under the RFWPT.

Overall, the Project requires resource consent as a **discretionary activity**.

Consent is in any event sought for all activities associated with the proposal, rather than for the authorisation of breaches of specific rules. As a fully

discretionary activity, all relevant matters can in any event be taken into account.

1.5 Permitted activities

The following aspects of the Project are permitted under the relevant statutory documents. They are addressed in the rule assessment:

- The landscaping and ecological rehabilitation works (noting that any vegetation removal within a natural wetland requires consent under the NES-F).
- Any outdoor lighting associated with the Project.
- The ongoing use and removal of existing buildings.
- The farming aspect of the Project.
- The on-site management of stormwater associated with the ongoing operation of the solar farm.
- The upgrade of the two existing vehicle crossings.
- Any signage associated with the Project.
- The interconnection of the solar farm into the national grid.
- The noise emitted during the construction and operation of the Project.

1.6 Other statutory approvals required

No other statutory approvals are required to give effect to the Project.

1.7 Statutory context

The COVID-19 (Fast-track Consenting) Act 2020

Clause 31 of Schedule 6 of the Act sets out the matters to which the panel must have regard to when considering an application for a referred project.

Clause 31 Consideration of consent applications for referred projects

Matters to which panel must have regard

i. *When considering a consent application in relation to a referred project and any comments received in response to an invitation given under section 17(3), a panel must, subject to Part 2 of the Resource Management Act 1991 and the purpose of this Act, have regard to—*
   - *(a) any actual and potential effects on the environment of allowing the activity; and*
   - *(b) any measure proposed or agreed to by the consent applicant to ensure positive effects on the environment to offset or compensate for any adverse effects that will or may result from allowing the activity; and*
   - *(c) any relevant provisions of any of the documents listed in clause 29(2); and*

(d) any other matter the panel considers relevant and reasonably necessary to determine the consent application.

ii. In respect of the matters listed under subclause (1), a panel must apply section 6 of this Act (Treaty of Waitangi) instead of section 8 of the Resource Management Act 1991 (Treaty of Waitangi).

iii. If a consent application relates to an activity in an area where a planning document prepared by a customary marine title group under section 85 of the Marine and Coastal Area (Takutai Moana) Act 2011 applies, a panel must have regard to any resource management matters in that document until all obligations under section 93 of that Act have been met by the relevant local authority.

Matters which panel may or must disregard

iv. When forming an opinion for the purposes of subsection (1)(a), a panel may disregard an adverse effect of the activity on the environment if a national environmental standard or the plan permits an activity with that effect.

v. A panel must not,—

(a) when considering a consent application, have regard to—

i. trade competition or the effects of trade competition; or

ii. any effect on a person who has given written approval to the application:

(b) grant a resource consent that is contrary to—

i. section 107 of the Resource Management Act 1991 (restriction on grant of certain discharge permits); or

ii. section 217 of that Act (effect of water conservation order); or

iii. an Order in Council in force under section 152 of that Act (relating to authorisations for coastal tendering); or

iv. any regulations made under that Act; or

v. wāhi tapu conditions included in a customary marine title order or agreement; or

vi. section 55(2) of the Marine and Coastal Area (Takutai Moana) Act 2011 (effect of protected customary rights on resource consent applications).

vi. A panel considering a consent application must disregard subclause (5)(a)(ii) if the person withdraws the approval in a written notice received by the panel before the date of the hearing (if any) or, if there is no hearing, before the application is determined.

Other matters relevant to decisions

vii. A panel may grant a resource consent on the basis that the activity concerned is a controlled, restricted discretionary, discretionary, or non-complying activity, regardless of what type of activity the application was expressed to be for.

viii. A panel may decline a consent application on the ground that the information provided by the consent applicant is inadequate to determine the application.

ix. In making an assessment on the adequacy of the information, a panel must have regard to whether any request made to the consent applicant for further information or reports resulted in further information or any report being made available.

x. If a Treaty settlement imposes an obligation on a local authority or other decision maker when determining an application for a resource consent, a panel must comply with that obligation as if it were the local authority or other decision maker (see example relating to clause 29(4)).

xi. Subclause (10) is subject to clause 5 of Schedule 5 (conduct of hearings and other procedural matters in context of Treaty settlements).

xii. *A panel must decline a consent application for a referred project if that is necessary to comply with section 6 (Treaty of Waitangi)*

Clause 32 of Schedule 6 of the Act sets out further matters relevant to considering applications for referred projects.

Clause 32 Further matters relevant to considering consent applications for referred projects

(1) Sections 104A to 104D, 105 to 107, and 138A(1), (2), (5), and (6) of the Resource Management Act 1991 apply to a panel's consideration of a consent application for a referred project.

(2) The provisions referred to in subclause (1) apply with all necessary modifications, including that a reference to a consent authority must be read as a reference to a panel.

(3) To avoid doubt, section 104E of the Resource Management Act 1991 does not apply to a panel's consideration of a resource consent for a referred project.

The Resource Management Act, 1991

Section 104B of the RMA is associated with determining applications for discretionary and non-complying activities.

Section 104B Determination of applications for discretionary or non-complying activities

After considering an application for a resource consent for a discretionary activity or non-complying activity, a consent authority—

(a) may grant or refuse the application; and

(b) if it grants the application, may impose conditions under section 108.

This report focuses on the following relevant matters in clause 31 of the Act:

- The actual and potential environmental effects (c31(1)(a) of the Act).
- The relevant provisions of the NPS-REG (c31(1)(c) the Act).
- The relevant provisions of the NPS-FM (c31(1)(c) the Act).
- The relevant provisions of the NPS-HPL (c31(1)(c) the Act).
- The relevant provisions of the NES-F (c31(1)(c) the Act).
- The relevant provisions of the NES-CS (c31(1)(c) the Act).
- The relevant provisions of the RPS (c31(1)(c) of the Act).
- The relevant provisions of the RFWPT (c31(1)(c) of the Act).
- The relevant provisions of the STDP (c31(1)(c) of the Act).

2. THE SITE

2.1 Location

The site consists of two titles that have a combined area of 188.5935ha. TNC3/1386 is located to the southern side, while TNE4/973 is located on the northern side of Upper Kina Road.

Figure 1 identifies the site within the surrounding locality.

Figure: The subject site (Source: Google Earth).

2.2 Existing land use, buildings/structures, and access

2.2.1 Existing land use

The site is currently used as part of a dairy farming unit.

2.2.2 Existing buildings and associated access

TNC3/1386

There is a single vehicle crossing that facilitates access to a central internal access road on this title.

There are two existing farmhouses, a milking shed, and a range of other farming related accessory buildings located adjacent to the central access road. The dwellings are located in the northern portion of the title in relative proximity to Upper Kina Road.

The existing buildings and associated access arrangements are identified in Figure 2 below.

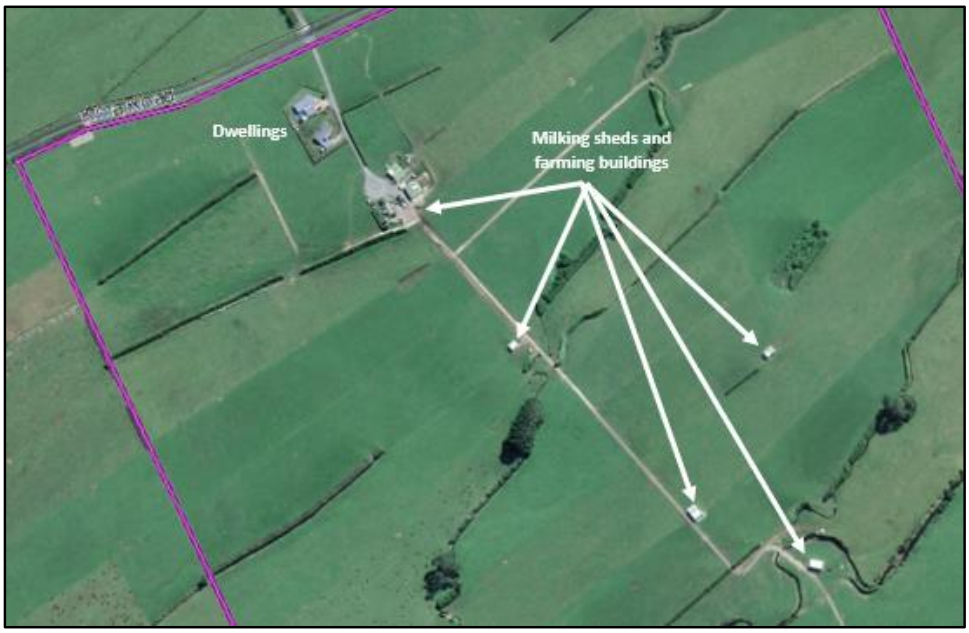

Figure 1: Existing buildings and associated accessways (Source: Google Earth).

TNE4/973

There are two existing farmhouses, a milking shed, and a range of other farming related accessory buildings located on this title. There is a vehicle crossing associated with each of the farmhouses. The eastern-most crossing also facilitates access to the milking shed.

The existing buildings and associated access arrangements are identified in Figure 3 below.

Figure 2: Existing buildings and associated accessways (Source: Google Earth).

2.2.3 Existing electricity infrastructure

There is a 33kV line that traverses TNC3/1386 and several other existing electricity lines located in proximity to the site. The 33kV line is owned by Powerco and connects to Transpower's Ōpunake substation. The existing infrastructure is shown in Figure 4 below.

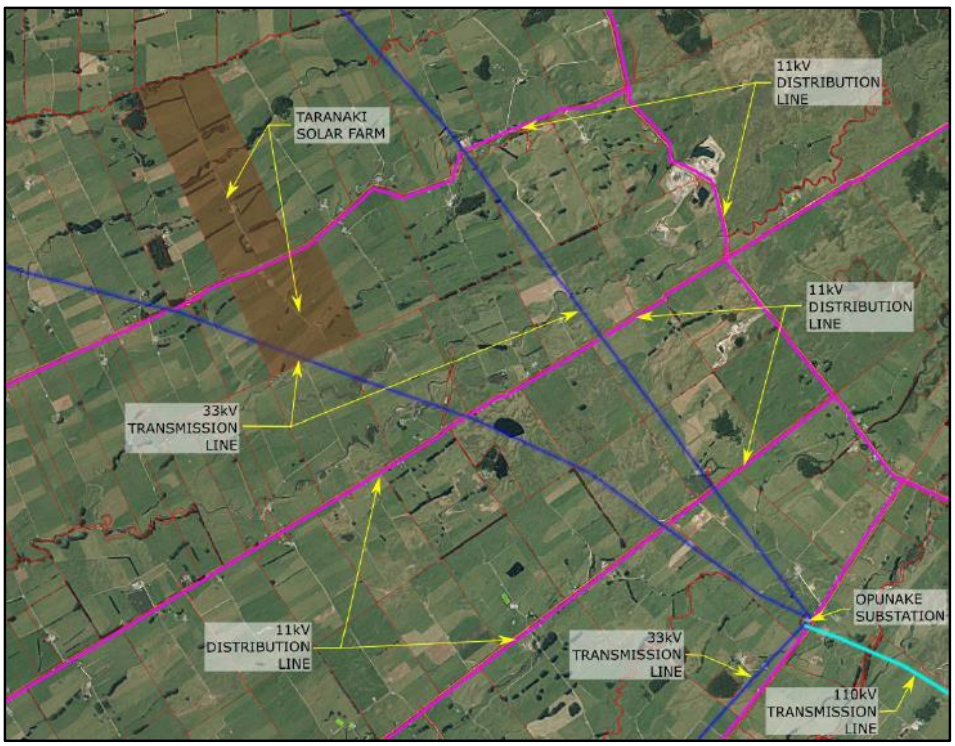

Figure 3: Existing electricity infrastructure (Source: Auercon).

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2.3 Natural features

2.3.1 Ecological features and associated values

Beca has completed an Ecological Impact Assessment (EIA) in support of the proposal (**Appendix 5**). The report identifies and assigns a 'value' to the ecological features located on the subject site.

The features and associated values are summarised below.

Terrestrial vegetation

The main areas of terrestrial vegetation consist of a remnant stand of native vegetation in the northern portion of TNE4/973, established mixed native/exotic vegetation along the riparian margins of the intermittent and permanent streams, shelterbelts consisting of mature pine, and patches of exotic weeds.

Beca have assessed the individual native trees and areas of mixed native/exotic vegetation as having 'moderate' ecological value, the mature exotic trees as having 'negligible' ecological value, and the patches of remnant native vegetation as having 'moderate' ecological value.

Watercourses

TNE4/973 includes the Moutoti Stream along its northern boundary, Oaoiti Stream, various unnamed modified tributaries (both permanent and intermittent), and artificial drainage channels. The artificial channels have no natural portions from their headwaters to their confluence with another river/stream.

TNC3/1386 includes the Manganui Stream and two associated permanent tributaries, as well as two straightened intermittent streams.

Overall, there are six permanent streams, seven intermittent streams, and over 3km of artificial watercourses located across the site. The watercourses are identified in Figure 5 while the ecological values are summarised below.

- Permanent named streams (Moutoti, Oaoiti and Manganui): The characteristics of these streams are similar. All are hard bottomed with areas of riparian vegetation providing good habitat for macroinvertebrates and moderate habitat for fish and eels. There is limited erosion associated with the permanent named streams located on TNE4/973, although there is extensive erosion around the Manganui Stream located on TNC3/1386. Overall, these watercourses are assessed as having 'high' ecological values due to high ratings for

rarity/distinctiveness, diversity and pattern, and ecological context, and a moderate rating for representativeness.

- Permanent unnamed streams: The characteristics of these streams are similar. Tall riparian vegetation along the streams is sparse, although the riparian margins are partially planted. The Beca EIA summarises the range of existing landscaping. There are also a range of existing culverts in the streams associated with the farm races. Overall, these watercourses are assessed as having 'moderate' ecological values due to moderate ratings for representativeness and ecological context and low ratings for rarity/distinctiveness, and diversity and pattern.
- Intermittent streams: The seven intermittent streams have relatively similar characteristics. Beca outlines that the streams have been straightened over time. The riparian margins are either sparse or have reasonably contiguous riparian vegetation. Vegetation consists of mainly exotic species. Each of the streams are hard bottomed and have above-ground water present, with depths ranging from 20cm – 40cm. Overall, these watercourses are assessed as having 'low' ecological values due to low ratings for rarity/distinctiveness, diversity and pattern, ecological context, and representativeness.
- Rural drainage networks: The farm drains within the site are not permanently wet, with riparian margins consisting of mainly exotic vegetation. The drains are straight and channelised, limiting the potential for freshwater habitat. There is also limited connectivity to the other permanent and intermittent streams on the site. The main purpose of these drains is to lower the water table, reduce surface flood risk, reduce contaminant load on waterways, and optimise soil moisture. Overall, the drainage networks are assessed as having 'low' to negligible ecological values due to very low ratings for rarity/distinctiveness, diversity and pattern, ecological context, and representativeness.

In accordance with the requirements of the NPS-FM, Beca considers the potential ecological value of the permanent watercourses as 'high', and the potential values of the intermittent watercourses as 'moderate'.

The watercourses are identified in Figure 5 below.

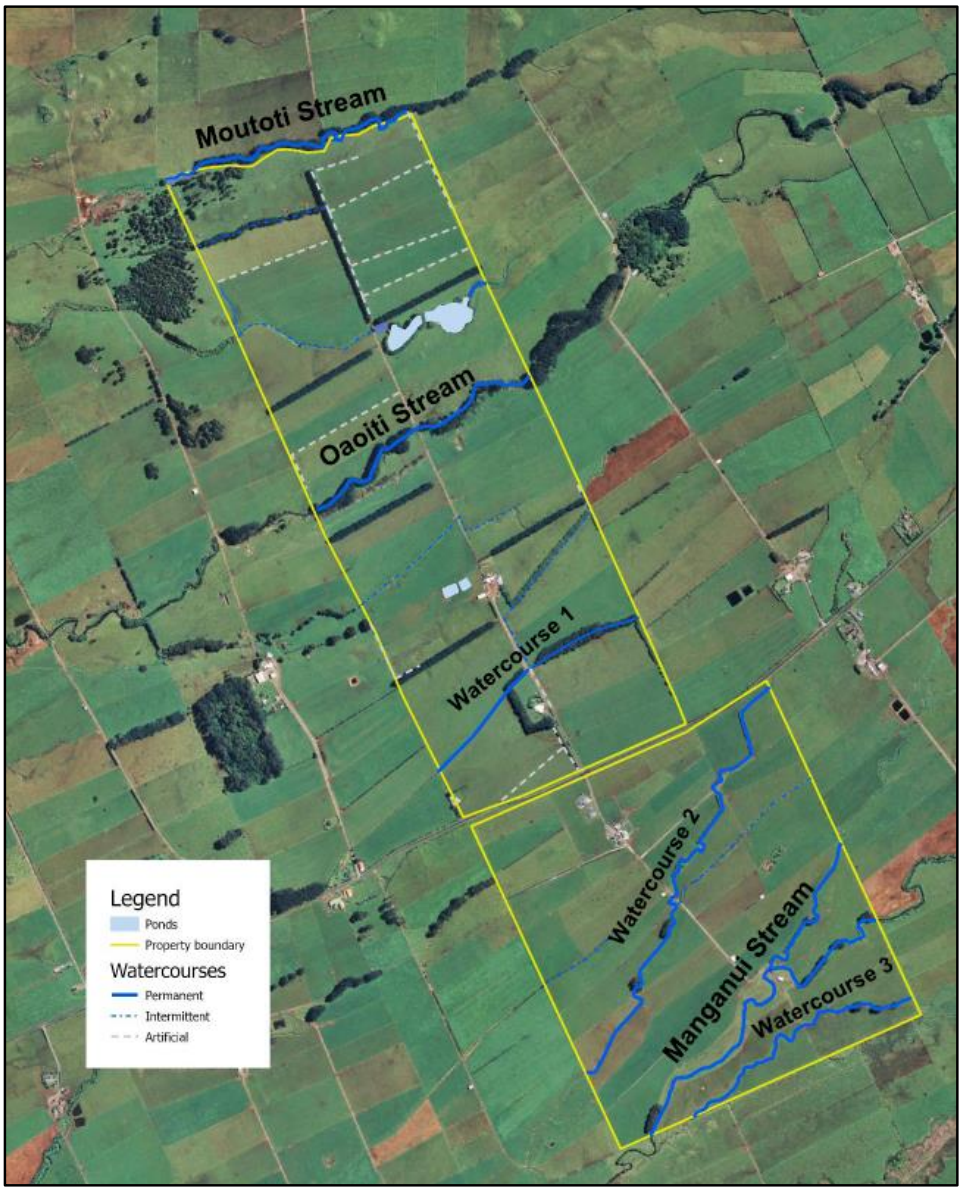

Figure 4: Watercourses (Source: Beca EIA).

Wetlands

Beca has identified seven wetlands on TNE4/973 – no wetlands have been identified on TNC3/1386. One is classified as a riverine, three as palustrine, and three as lacustrine wetlands.

Ongoing grazing, stock trampling, and drainage has led to these wetlands being in a significantly degraded state. Nevertheless, they have retained enough characteristics to be classified as 'natural wetlands' in accordance with the New Zealand Wetland Delineation Protocols and the NPS-FM. Overall, Beca concludes that the ecological value of the seven wetlands is 'low' due to

low ratings for representativeness, diversity, and pattern, and a moderate rating for rarity/distinctiveness.

The wetlands are identified in Figure 6 below.

Figure 5: The seven wetlands located on the site (Source: Beca EIA).

Ponds

Beca has identified four artificially constructed ponds on TNE4/973 – there are no ponds on TNC3/1386.

The two northern ponds include wetland margins and have some limited shading from taller vegetation. There is some stock access to the ponds, which reduces the water quality. While artificially constructed, the ponds provide

potential habitat for waterbirds and Beca therefore concludes that they have 'moderate' ecological value.

The two southern ponds are located in proximity to the cow shed. The ponds are artificially constructed and have limited to no shading while stock also have access. There is also limited connectivity to nearby watercourses, and the ponds are unlikely to provide habitat for native species. Overall, Beca conclude that the two southern ponds have 'low' ecological value.

The four ponds are identified in Figure 5 above.

Fauna

Beca has undertaken a review of relevant literature and anecdotal records to identify the range of fauna that could be present at the site. The findings are summarised below.

- Bats: While there are no records available within 25km of the site, long tailed bats are present throughout the North Island. While there are no records for the site, some of the mature trees located on the site are suitable for bat roosts. In the absence of survey data, Beca considers the potential bat values for the site as 'high'.
- Herpetofauna: Two species of native skinks have been recorded within 5km of the site. While there are no records for the site, there are a number of habitat features located on the site that are suitable for native skinks. In the absence of survey data, Beca considers the potential herpetofauna values for the site as 'high'.
- Avifauna: Based on a review of New Zealand eBird records, a large number (28) of common native and exotic bird species have been identified in the vicinity of the subject site. Due to the presence of suitable habitat and nearby records including nationally uncommon species, Beca has assessed the potential avifauna values for the site as 'moderate'.
- Freshwater fauna: While no live fish were observed during the site visits, eDNA records suggest the presence of at-risk/declining species (kōaro and redfin bully). Beca therefore concludes that the freshwater fish values associated with the permanent streams on the site are 'high'.

  Beca has also considered the potential presence of macroinvertebrates, concluding that the Oaoiti Stream has 'moderate' and the Manganui Stream has 'low' macroinvertebrate values.

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2.3.2 Topography

The site slopes moderately from east to west at about 1:20 to 1:30. The highest point is located approximately halfway along the eastern boundary (RL 120m) and the lowest is where the Oaoiti Stream intercepts with the western site boundary (RL 114m).

2.3.3 Land Use Capability (LUC) soil composition

Under the LUC system, the soils at the site are classified as a mix of nz2s-12 and nz3s-15. Refer to Figure 7 below.

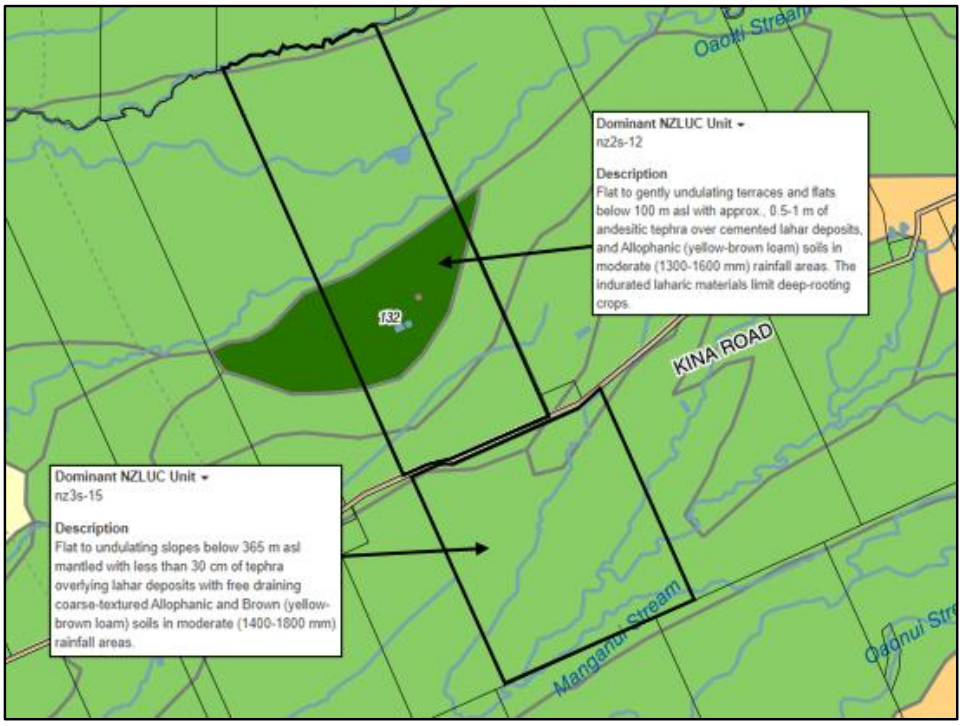

Figure 6: LUC soil classification (Source: Manaaki Landcare Research).

2.4 Archaeology

Geometria has undertaken an archaeological assessment for the subject site (**Appendix 6**).

Geometria notes that there are no recorded archaeological sites on the subject property or in the immediately surrounding area. The nearest recorded archaeological site is located approximately 1.3km to the west and is an unnamed pa.

During a site visit in November 2021, Geometria inspected all paddocks, exposed surfaces, and eroded scarps for archaeological material. No

archaeological material was encountered and no surface features that could present past anthropogenic activity were observed.

Notwithstanding the above, Geometria note that there is a small area at the northern end of 575 Kina Road that was identified as 'old clearing' on the 1984 map DP 682. It notes that the use of 'old clearing' on early survey plans often refers to land cleared by Māori for gardening or settlement. Test pitting and probing in this area did not identify any archaeological deposits. Without any definitive evidence of past activity, Geometria conclude that this cannot be interpreted as an archaeological site, that the associated archaeological potential is low, and that the Project can either proceed in accordance with an Accidental Discovery Protocol (ADP) or a precautionary authority from Heritage New Zealand Pouhere Taonga – this is not a statutory requirement.

3. THE SURROUNDING ENVIRONMENT

3.1 General description

The subject site is located approximately 7.6km inland from the coast, 50km south-west of New Plymouth and 10km west of Mount Taranaki.

The surrounding environment is generally rural in nature. There are a range of allotment sizes, with individual and clusters of rural-residential lots interspersed amongst larger agricultural blocks. Dwellings are, for the most part, located sporadically along road frontages.

The generally flat landform within the surrounding area affords views across the landscape, within relatively minor undulations or features, such as hedgerows, having the ability to contain views.

Notwithstanding the above, the Simon Cocker Landscape Architecture (SCLA) landscape assessment (**Appendix 7**) notes that the landscape is dominated by the rising slopes of Mount Taranaki, which imparts an unmistakable character.

The patterning of the landscape is also influenced by the Mount Taranaki, with watercourses and roads radiating outwards. This is also reflected in the cadastral pattern, with rectangular blocks aligned perpendicular to the roads.

The site is located within the Egmont Ecological District. Historically, lowland vegetation would have consisted of tawa, kohekohe, rewarewa, hinau, podocarp forest, kahikatea forest, and pukatea forest. However, the site and the surrounds have been largely cleared of vegetation to facilitate the horticultural use of the land with only a few areas of indigenous vegetation remaining.

Transpower's Opunake substation is located approximately 4.5km to the south-east of the site at 909 Ihaia Road.

3.2 Adjoining property details

Figure 8 below shows the properties that have been identified as being 'adjacent' to the subject site in accordance with clause 9(1)(d) in schedule 6 of the Act.

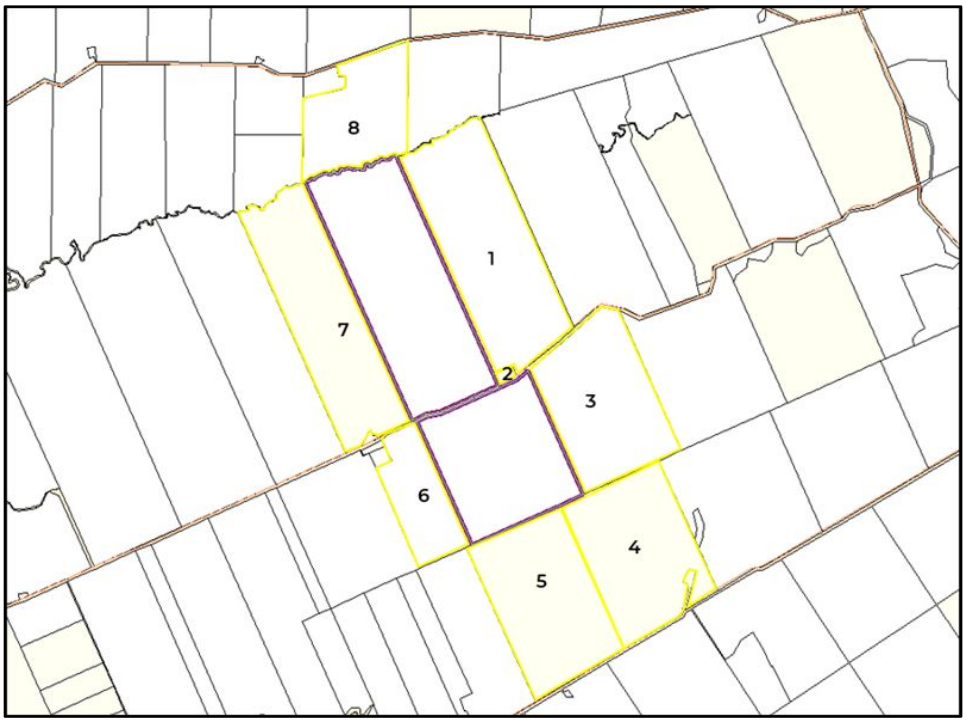

Figure 7: Adjoining properties (Source: Quickmap).

Table 3 below shows the legal description, title reference, address, owners, and occupiers of the adjoining properties.

Ref	Legal description	Address	Owner	Occupier
1	Pt Lot 4 DP 682	647 Kina Road	[redacted]	[redacted]
2	Section 63 Block VI Opunake Survey District	647 Kina Road	[redacted]	N/A – vacant
3	Lot 16 DP 682	654/656 Kina Road	The Proprietors of Parininihi Ki Waitotara Block (fee simple)	Kina Dairies Limited have a leasehold on the property – occupied by [redacted]

4	Lot 2 DP 534613	669/685 Arawhata Road	[redacted]	[redacted]
5	Lot 28 DP 682	605 Arawhata Road	The Proprietors of Parininihi Ki Waitotara Block (fee simple)	Milky Shore Farms Limited have a leasehold on the property – occupied by [redacted]
6	Lot 2 DP 15114	Kina Road – no address	[redacted]	N/A – vacant
7	Lot 2 DP 488449	511 Kina Road	[redacted] and Mullanville Farms Limited	Unable to identify who occupies this property at present.
8	Lot 2 DP 20721	570 Ngariki Road	[redacted]	[redacted]

Table 3: Adjoining property owner and occupier details.

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4. PROJECT DESCRIPTION

4.1 General

The proposal is to construct and operate the Ōpunake Solar Farm on the subject site.

Beca have prepared a solar farm site layout plan (**Appendix 2**), which and is reproduced in Figure 9 below for ease of reference.

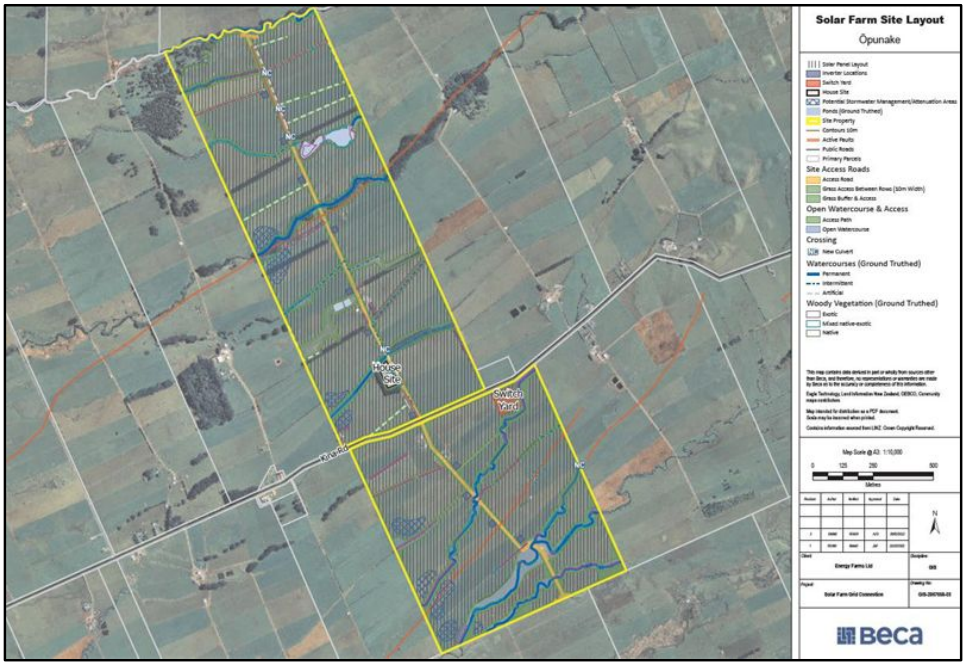

Figure 8: Solar farm site layout (Source: Beca).

4.2 Detailed design process

The proposal description is based on preliminary technical investigations undertaken, and a subsequent solar farm layout plan prepared to support the resource consent application.

EFL has engaged Aurecon, who is currently working to complete the detailed design for the Project. This could facilitate changes to the layout.

The proposed consent conditions (**Appendix 8**) seek to account for the detailed design process by requiring the submission and certification of a final solar farm site layout plan in general accordance with the plan submitted with this application prior to construction. This application seeks consent for the maximum potential project area, so any changes are likely to result in a reduction in the footprint.

The proposed conditions therefore specifically allow for changes that do not increase the approved project area.

4.3 Ongoing agricultural use of land

The existing ground cover (pasture) will largely be retained across the site. EFL has therefore produced a design that will allow the ongoing use of the land for productive agricultural uses in conjunction with the solar farm. The concept, known as agrisolar, has been a common theme in New Zealand's early utility scale solar farms.

In this instance, the solar farm will also be used as an active sheep farm and research facility for alternative agrisolar methods. This will ensure that productive agricultural use of the land continues in conjunction with the solar farm.

4.4 Solar infrastructure

4.4.1 The solar panels and frames

The proposed solar farm will consist of solar panels mounted on steel tracking systems.

The tracking systems are arranged in rows that run north to south, with the panels facing east-west. The tracking systems will be attached to the ground via a series of pitches.

The space between rows will be approximately 10m, providing a gap of approximately 5.2m between panels when in a horizontal position. The relatively wide gap between rows allows farm vehicle and maintenance access.

The panels will be 2P (two panels in portrait, as opposed to a single panel). They will not be static – they will be able to rotate to maximise the solar resource. The range of rotation is +/- 55° and will be facilitated by small electrical motors located at the end of each row.

When in a horizontal position, the panels will have a maximum height of approximately 2.35m. When fully rotated, the height will increase to approximately 4.8m. The height of the panels above ground level enables the agricultural use of the land below the panels in conjunction with the solar farm.

The preliminary design undertaken by Beca includes a total of 152,000 panels (+/- 5%), which will produce approximately 80 – 110 megawatts peak of electricity.

The arrangement is shown on the solar farm site layout plan – further detail is provided in the Beca civil report (**Appendix 9**).

4.4.2 Inverter stations

There will be approximately 11 inverters established across the site. The inverters will consist of factory assembled modules, each with an approximate area of 30m^2.

The inverters convert the DC power generated from the panels to AC and are an intermediate step between the panels and the on-site substation. They will be located adjacent to the main internal access road. The approximate location is shown on the solar farm site layout plan.

4.4.3 Substation and grid interconnection point

Each of the inverters will connect to a central substation area containing switching gear. The design of the substation area is currently being completed by Aurecon as part of the detailed design process. The approximate location of the substation area is shown on the solar farm layout plan.

The substation will serve as the interconnection point for the solar farm into the grid. The connection will be made via the existing 33 kV Powerco overhead transmission lines that traverses the site. Limited infrastructure will be required to facilitate the connection.

EFL has initiated the interconnection process with Powerco and Transpower.

4.4.4 Battery energy storage system

The solar farm will include a BESS. This will provide the ability to store electricity generated by the solar farm, allowing for a controlled and optimised release back into the grid.

The storage facility will consist of approximately 6 – 7 Tesla 3MW megapack batteries. Each megapack battery is approximately 9.12m wide, 1.65m deep and 2.79m high. The batteries will be stored in a shed located adjacent to the substation area as shown on the solar farm site layout plan.

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4.5 Operational details

Once constructed, EFL anticipates that there will be two employees located on-site – one managing the solar operation and one managing the agricultural activities. There will also be regular maintenance activities.

4.6 Existing buildings and vegetation

4.6.1 Removal

The western dwelling and farming buildings located on TNE4/973 and the existing built form located on TNC3/1386 will be removed to facilitate the Project.

The majority of exotic vegetation located on the site will be removed to facilitate the Project. Any indigenous vegetation located within 10m of the riparian management zone will not be removed.

4.6.2 Retention

The eastern dwelling located on TNE4/973 will be retained. The dwelling will be used as a site office while the accessory buildings will provide storage during construction and will facilitate the ongoing agricultural use of the land once the solar farm is operational.

The existing remnant stand of native vegetation in the northern portion of TNE4/973 will be retained.

4.7 Security fencing

The portion of the site containing solar infrastructure will be fenced. The fencing will have a maximum height of 2.2m with a 3-strand barbed wire top.

4.8 Access and parking

The existing vehicle crossing associated with each site will be retained and will facilitate access to the two parts of the farm. The crossings will be upgraded in accordance with the relevant STDC requirements.

Given that no significant traffic is anticipated once the farm is operational, the existing curtilage areas around the dwelling that will be retained on TNE4/973 will be utilised for parking. Additional clean aggregate will be added as required.

Within the site, there will be two forms of access track:

- An all-weather access road will run through the centre of the site. This has been located to utilise the existing internal access roads where possible. The road will have a minimum width of 4m (adequate to allow for inspections, maintenance, and replacements to be undertaken via tractors and trailers, farm bikes or utility vehicles) and a gravelled surface; and
- A 5m wide access strips (to remain in grass) will be provided at the end of the rows, adjacent to the larger watercourses, and around the perimeter of the solar farm. These tracks will facilitate maintenance of the solar equipment and the watercourses.

The proposed access tracks will facilitate the construction of approximately four new culverts within the watercourses that traverse the site. The design of the culverts is being undertaken as part of the detailed design process.

The location of the vehicle crossings, access tracks, and culverts are shown on the solar farm site layout plan.

4.9 Stormwater management

Beca has provided a stormwater assessment as part of the civil report. The assessment considers the characteristics of the relevant catchments, the influence of the solar farm on stormwater runoff, and provides a set of stormwater management measures. The management measures proposed by Beca are summarised below.

- Avoid works immediately adjacent to the existing watercourses.
- Drain new tracks, access roads, the substation, and any other formed areas by sheet flow overland into vegetated areas or via planted swales to nearby watercourses.
- Adopt an adaptive management approach to:
  - Maintain pasture (or other vegetation) throughout the site, including beneath the panels.
  - Place rock riprap or re-vegetate where scour or soil erosion is identified.
  - Encourage riparian margin re-vegetation and measures to prevent stock entering watercourses (to minimise potential for stream bank erosion).

While not considered necessary (assuming adequate pasture cover is maintained), Beca has considered what sort of attenuation would be required if vegetative cover was not, for some reason, maintained beneath the panels.

Beca has subsequently identified several areas within the site that could be used for attenuation. These areas are shown on the solar farm site layout plan.

The attenuation areas are located at low points upstream of existing or proposed culverts. If monitoring over time showed that there was significant vegetation loss or that there was evidence of stormwater discharge effects, the upstream end of the culvert could be modified so that flows attenuate upstream in the identified areas. The predicted ponding depths in a 100-year ARI storm are less than 1.5m, so panels could still be located in these areas above flood levels.

The stormwater recommendations from the Beca civil report have been encapsulated within the proposed consent conditions.

4.10 Signage

Any signage established as part of the Project will comply with the permitted activity criteria outlined in the STDP.

4.11 Earthworks

Earthworks are required to create all-weather access roads, prepare platforms for the substation and inverters, and to complete the trenching that will accommodate the cables that will connect the various aspects of the solar farm.

Beca has considered the required earthworks as part of the civil report. Table 4 below outlines the approximate area and volume of earthworks required to facilitate the construction of the roads and platforms.

Facility	Area of disturbed Ground (m^2)	Topsoil removal (m^3)	Bulk Earthworks (m^3)	Respread topsoil (m^3)
All- Weather access roads. (2.7 km)	25,000	8,000	4,000	8,000
Switch Yard	5,700	1,700	2,000	1,700
Inverters	1,000	300	300	300
Total	**31,700**	**10,000**	**6,300**	**10,000**

Table 4: Earthworks summary (Source: Beca civil report).

With respect to trenching, Beca outlines that these will be approximately 300mm – 500 mm wide and 1m deep. They will be progressively dug, the cables laid, and the trench backfilled. Noting that the total length of solar panels will be some 77km, the area and quantity of the associated earthworks will significantly exceed those outlined in Table 4.

It is proposed that the earthworks are undertaken in accordance with an Erosion and Sediment Control Plan (ESCP). Further details on the management plan are provided in section 4.17 of this report.

4.12 Landscaping

As part of the landscape assessment, SCLA has provided a landscape mitigation plan. SCLA notes that the mitigation strategy recognises the landscape change that will occur as part of the proposal. The change can be visually 'concealed' from proximate locations to the south, west, and north-east on Upper Kina Road. Boundary screen planting along the western and eastern edges of the site will screen views from external locations within those quadrants. Riparian planting along the Moutoti Stream will screen views from Ngariki Road.

The landscape mitigation plan is included as Figure 2 in Appendix 1 of the SCLA report. The key details are summarised below.

- Locally appropriate riparian planting along the margins of the Moutoti Stream. In addition to the ecological benefits that this will provide, this will serve to screen views from Ngariki Road.
- 3m wide planting strips/screens along the Upper Kina Road frontage, and along portions of the western and eastern boundaries. It is proposed to use Cryptomeria japonica planted in a staggered double row and maintained as a hedge to a height of approximately 4m.

The proposed consent conditions require the implementation of the SCLA landscape mitigation plan.

4.13 Ecological management and restoration

Beca has recommended a range of ecological management and restoration measures. The measures will ensure that any adverse effects on the ecological values associated with the site and surrounding environment are appropriately managed as detailed in section 5.5 of this report.

The range of proposed measures, which are summarised below, will be implemented as part of an Ecological Management and Restoration Plan (EMRP). The proposed consent conditions require the preparation, certification, and implementation of the EMRP.

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4.13.1 Avifauna

Beca recommends that potential impacts on nesting adult native birds and both their eggs and unfledged chicks should be avoided by timing vegetation clearance to avoid the nesting season (September to February for most species). If clearance during the peak of the nesting season is unavoidable (noting that it coincides with the earthworks season), then the relevant areas should be checked by a suitably qualified ecologist and/or arborist for nesting birds immediately prior to vegetation removal and if any active nests are detected, vegetation clearance in the immediate vicinity should be delayed until a suitably qualified ecologist confirms that the nests are no longer active.

4.13.2 Herpetofauna

Beca recommends that a habitat risk assessment and survey for lizards is undertaken by a suitably qualified herpetologist to identify high risk habitat within construction areas at the property prior to the commencement of works. If lizards are present, then a management plan will need to be developed and implemented by a DOC-permitted herpetologist and any lizards relocated to suitable protected habitat.

4.13.3 Bats

Beca recommends that a bat survey is conducted by an appropriately qualified ecologist prior to the commencement of works. If bats are present, then a management plan will need to be developed and implemented. The plan will outline roost tree management, tree felling protocol, and appropriate mitigation for loss of roost trees.

4.13.4 Freshwater fish

Beca recommends that, where habitat disturbance and/or dewatering cannot be avoided, protocols to avoid injury/mortality of native fish should be implemented. These measures will include fish rescue and relocation in areas where standing water is present, with impacted habitat to be isolated and fish translocated to a suitable aquatic habitat outside of the works footprint.

4.13.5 Wetland management and restoration, and riparian planting

Beca recommends that indigenous plantings within and around natural wetlands takes place within the site, and that the wetlands are fenced to exclude stock.

Riparian planting will also be undertaken along the Moutoti Stream, with opportunities also available along the range of other watercourses that traverse the site. These measures will be finalised as part of the EMRP.

4.13.6 Erosion and sediment controls

Beca recommends that erosion and sediment controls are established in accordance with best practice. An ESCP is proposed as detailed in section 4.14 of this report.

4.13.7 Watercourse management and stormwater design

Beca recommends that all new tracks, access roads, and any other formed areas are drained to vegetated areas to reduce the risk of erosion and scour and to enhance the treatment of stormwater.

With respect to the proposed culverts, Beca recommends that they are installed in summer conditions when there is no flow in the impacted streams. Any in-stream works will also require the implementation of appropriate erosion and sediment control measures, consideration of fish passage guidelines, and design considerations to ensure minimal disruption to in-stream habitat or freshwater fauna.

Beca also recommends that stock is excluded from the watercourses to minimise the potential for stream bank erosion and runoff effects.

4.14 Construction details and management

4.14.1 Construction details

It is anticipated that the construction phase of the Project will take approximately 14 months to complete. It will consist of a range of general construction related activities. The expected sequence of these activities is detailed below.

- Ecological investigations: The ecological investigations that need to be completed prior to construction commencing will be completed and any associated management measures implemented.
- Site establishment: This will include the construction of stabilised entrances, temporary laydown areas, and any stream crossings required to facilitate the construction phase.
- Site clearance: Vegetation and buildings will then be cleared from the site.
- Earthworks activities: Once the site is cleared, the range of earthworks detailed in section 4.11 of this report will be undertaken. This will facilitate

the construction of the internal access roads, pads for the substation and inverters, and the trenching required to lay the cables.

- Installation of infrastructure: This will include the installation of the frames (piling of pitches and establishment of metal tracking systems) and panels, the inverters, and the substation. This phase will also include construction of the infrastructure required to connect the solar farm into the grid.
- Mitigation landscaping and ecological restoration: These aspects of the Project will then be implemented. Some measures may be implemented earlier in the process.

The sequencing and associated activities will be finalised in accordance with the proposed management plans and associated consent conditions.

Hawthorn Geddes have provided a traffic assessment (**Appendix 10**) that considers the traffic associated with the construction phase. In this regard, the Hawthorn Geddes report estimates that:

- The Heavy Goods Vehicle (HGV) movements associated with the construction phase will be approximately 3,375 (2,100 for container deliveries and 1,275 for hardfill deliveries).
- Of the 14-month construction phase, three months will be associated with hardfill deliveries and 11 months with container deliveries.
- Containerised materials will be delivered from Port Taranaki via State Highway 45 (SH45) to Ōkato, then via Old South Road, Oxford Road, Saunders Road, Wiremu Road, and Kina Road to the site. Hardfill will be delivered from one of several local quarries, via Wiremu Road and Kina Road, to the subject site. The report provides information on the formation standards of, and the level of existing traffic movements along, the identified routes.

4.14.2 Construction management

To assist with the management of the construction phase, the following management plans are proposed. These have been encapsulated within the proposed consent conditions.

- Construction Environmental Management Plan (CEMP): The CEMP will provide the blueprint for how the range of construction activities will be undertaken and managed. The CEMP will cover the following matters:
  - The expected duration (timing and staging) of the works.

- An ESCP, with a specific focus on ensuring that sediment does not enter the waterways.
- Diagrams and/or plans showing the locations of any cut and fill operations, disposal sites for unsuitable materials, and the locations where erosion and silt control structures/measures are to be established.
- Details of surface revegetation of disturbed sites and other surface covering measures to minimise erosion and sediment runoff following construction.
- Measures to minimise sediment being deposited on public roads.
- Measures to ensure sediment or dust discharge from the earthworks do not create a nuisance on neighbouring properties.
- Measures to prevent spillage of fuel, oil, and similar contaminants.
- Contingency containment and clean-up provisions in the event of accidental spillage of hazardous substances.
- Means of ensuring contractor compliance with the CEMP.
- The name and contact telephone number of the person responsible for monitoring and maintaining all erosion and sediment control measures.
- Contingency provisions for the potential effects of large/high intensity rain events.

▪ Construction Traffic Management Plan (CTMP): The Hawthorn Geddes TIA recommends a set of management measures. The measures, which are summarised below, will be incorporated within the CTMP and other relevant consent conditions.

- HGV deliveries to be made via the identified routes.
- Schedule HGV deliveries outside of peak traffic times and spread across the day to minimise the associated impact.
- Provide signage along Upper Kina Road, between the site access point and the intersection with Wiremu Road and along Wiremu Road near the intersection with Upper Kina Road, to notify road users of increased HGV movements.
- Construct the vehicle crossings in accordance with the relevant STDC standards.

▪ Construction Noise Management Plan (CNMP): Marshall Day have provided an acoustic assessment for the proposed solar farm (**Appendix 11**). While the

report identifies that the proposal will comply with the construction noise requirements under the STDP, a CNMP will be prepared and implemented to limit the potential effects of the construction activities on surrounding property owners. A consent condition is proposed to this effect.

5. ASSESSMENT OF ENVIRONMENTAL EFFECTS

5.1 Introduction

The following assessment has been prepared in accordance with clause 9(4) under schedule 6 of the Act.

Clause 9(4) requires that the assessment covers the relevant requirements under clauses 10 and 11 under schedule 6 of the Act. Tables 5 and 6 below provide a checklist against both clauses for completeness.

Clause 10		
Clause	**Description**	**Report reference**
1. An assessment of an activity's effects on the environment under clause 9(4) must include the following information:		
1(a)	An assessment of the actual or potential effects on the environment:	The following assessment addresses all actual and potential effects on the environment.
1(b)	If the activity includes the use of hazardous installations, an assessment of any risks to the environment that are likely to arise from such use:	The proposal will involve the use of some hazardous substances (oil associated with the various transformers located across the site and lithium-ion storage batteries within the BESS). However, the quantities will not exceed the thresholds for upper or lower tier major hazard facilities as prescribed in Schedule 2 of the Health and Safety at Work (Major Hazard Facilities) Regulations 2016. Accordingly, the Project does not involve the use of any hazardous installations.
1(c)	If the activity includes the discharge of any contaminant, a description of— (i) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and (ii) any possible alternative methods of discharge, including discharge into any other receiving environment:	The proposal will not facilitate the discharge of any contaminant. The management of stormwater runoff during the earthworks phase is addressed in section 5.4.

1(d)	A description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect of the activity:	Mitigation measures are detailed in the following assessment.
1(e)	Identification of persons who may be affected by the activity and any response to the views of any persons consulted, including the views of iwi or hapū that have been consulted in relation to the proposal:	No persons are considered to be affected by the proposal. The views of Taranaki Iwi are detailed in section 5.6.
1(f)	If iwi or hapū elect not to respond when consulted on the proposal, any reasons that they have specified for that decision:	The views of Taranaki Iwi are detailed in section 5.6.
1(g)	If the scale and significance of the activity's effects are such that monitoring is required, a description of how the effects will be monitored and by whom, if the activity is approved:	Monitoring requirements are detailed in the following assessment where relevant.
1(h)	An assessment of any effects of the activity on the exercise of a protected customary right.	N/A
2	Subclause (1)(e) does not oblige a consent applicant to consult any person, although a failure by the applicant to consult, or to consult adequately, may be taken into account by a panel in determining a consent application.	Acknowledged.
3	A consent application need not include any additional information specified in a relevant policy statement or plan that would be required in an assessment of environmental effects under clause 6(2) or 7(2) of Schedule 4 of the Resource Management Act 1991.	Acknowledged.

Table 5: Checklist - clause 10 of the Act.

Clause 11		
Clause	**Description**	**Report reference**
The assessment of an activity's effects on the environment under clause 9(4) must cover the following matters:		
(a)	Any effect on the people in the neighbourhood and, if relevant, the wider community, including any social, economic, or cultural effects:	The following assessment considers effects on people in the neighbourhood and wider community where relevant.
(b)	Any physical effect on the locality, including landscape and visual effects:	Section 5.2 of this report specifically considers landscape and visual effects.

(c)	Any effect on ecosystems, including effects on plants or animals and physical disturbance of habitats in the vicinity:	Section 5.3 considers the ecological effects of the proposal.
(d)	Any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations:	The following assessment considers the effects on natural and physical resources in the required context.
(e)	Any discharge of contaminants into the environment and options for the treatment and disposal of contaminants:	No contaminants will be discharged. The discharge of stormwater during earthworks is addressed in section 5.3 and 5.4.
(f)	The unreasonable emission of noise:	Noise effects are addressed in section 5.8.
(g)	Any risk to the neighbourhood, the wider community, or the environment through natural hazards or hazardous installations.	Natural hazards are addressed in section 5.4. There will be no hazardous installations as outlined in Table 5.

Table 6: Checklist - clause 11 of the Act.

5.2 Landscape, rural character, and visual effects

5.2.1 Introduction

SCLA has assessed the potential landscape, rural character, and visual effects associated with the Project. They have also considered the potential cumulative effects generated by the proposal on these matters.

The conclusions from this assessment are summarised below. Further detail is provided in the SCLA report (**Appendix 7**).

5.2.2 Rural character and landscape effects

With regards to effects on rural character and landscape values, SCLA state that these derive from changes to the physical landscape, which may give rise to changes in its character and how it is experienced. The assessment is based on a combination of the sensitivity of the landscape, visibility, and the nature and scale of the development proposal.

Regarding existing landscape values, SCLA notes that there are no sites of landscape, ecological, archaeological, or cultural value identified on or within the immediate vicinity of the site. The landscape displays a distinguishable landscape structure, characteristic patterns of landform and land cover often masked by land use, together with some features worthy of conservation and

some detracting features. SCLA concludes that the landscape quality is at most 'ordinary'.

In terms of changes facilitated by the proposal, SCLA notes that:

- The proposal will facilitate very small and localised changes to abiotic attributes. The solar farm has been designed to utilise the existing site profile, with the proposed earthworks largely associated with trenching and the formation of internal access roads. The hydrological patterns associated with the site will be maintained, with existing stream alignments retained and riparian margins enhanced.
- There will be very little change to the biotic attributes associated with the site, with the proposal facilitating a net gain in ecological values. Whilst neutral initially, SCLA conclude that the proposal will have a positive impact on the biotic attributes of the site as the various ecological and landscape measures establish.
- Land use attributes will largely be retained. There will be no fragmentation of the scale of the site with the pattern of expansive paddocks maintained (although overlain with panels). The pasture cover will be preserved, allowing for the ongoing agricultural use of the land in conjunction with the solar farm. The proposed landscaping will also reflect existing vegetation features within the wider area.
- There will be no impacts on any archaeological or heritage values.

When the changes facilitated by the proposal are considered in the context of the 'ordinary' quality of the existing landscape, the SCLA report concludes that the effects of the proposal on rural character and landscape values will be 'low'.

5.2.3 Visual effects

The SCLA report assesses the potential visual effects of the Project on eight main viewing groups. Four relate to public and four relate to private viewpoints. The private viewpoints relate to approximately 20 properties.

The SCLA conclusions are summarised below. Table 5 from the SCLA report provides specific conclusions for all individual properties that are included in the private viewpoint groups.

Public viewpoint: users of Upper Kina Road

The boundaries with Upper Kina Road (both to the north and south) are currently open, with views into the site possible from a distance of some 400m to the east and 350m to the west.

However, the mitigation planting includes a screen along the Upper Kina Road boundaries on both sides of the road. Once established, this will prevent views into the site for users of the road.

Given the above, SCLA concludes that the adverse visual effects on this transitory group will be 'moderate' initially, diminishing to 'low' as the mitigation planting establishes.

Private viewpoint: Occupants of dwellings on Upper Kina Road

This group consists of 10 single storey dwellings located on eight properties.

Due to a combination of separation distances, orientation of dwellings away from the subject site, and a range of intervening vegetation and built form, SCLA conclude that any adverse visual effects will be 'very low'.

However, SCLA have concluded that the adverse visual effects on the dwellings located on Lot 1 DP 488449 and Lot 2 DP 8540 will be 'low to moderate' and 'moderate' respectively initially. The adverse effects will diminish to be 'very low' and 'low' respectively as the proposed landscaping establishes. This equates to less than minor in RMA terms.

Public viewpoint: users of Ngariki Road

There are only limited glimpse views available into the site across the rural landscape from Ngariki Road. Those views are largely fragmented by vegetation, with the remaining views to be screened as the proposed landscaping establishes.

SCLA therefore concludes that the adverse visual effects on this transitory group will be 'very low'.

Private viewpoint: occupants of dwellings on Ngariki Road

This group consists of seven single storey dwellings located on six properties.

Due to a combination of separation distances, orientation of dwellings away from the subject site, and a range of intervening vegetation and built form, SCLA conclude that any adverse visual effects will either be 'nil' or 'very low'. This equates to less than minor in RMA terms.

Public viewpoint: users of Arawhata Road

SCLA identifies that very limited glimpse views are available of the site from Arawhata Road. Given that it is separated from the site by some 2km – 2.2km, SCLA conclude that any adverse visual effects will be 'nil'.

Private viewpoint: occupants of dwellings on Arawhata Road

This group consists of various dwellings/properties located along Arawhata Road to the south of the subject site.

SCLA identifies that there are a range of long views available across the rural landscape into the site, although most are fragmented by existing vegetation. The views that are available will be screened when the proposed landscaping establishes. SCLA therefore concludes that any adverse visual effects on this viewing group will be 'very low'.

Public viewpoint: users of Wiremu Road

Upper Kina Road connects with Wiremu Road approximately 2.5km to the east of the subject site. While views of the proposed solar farm could be available, SCLA note that these will be tempered by the large separation distance. Overall, SCLA concludes that the adverse visual effects on this viewing group will be 'low'.

Private viewpoint: occupants of dwellings on Wiremu Road

This group consists of various dwellings/properties located along Wiremu Road to the east of the subject site. There are a limited number of dwellings that occupy the elevated land. While the Project may be viewed as part of the western panorama from these dwellings, SCLA notes that the prominence of the activity will be moderated by the separation distance. SCLA concludes that any adverse visual effects on this group will be 'low'.

5.2.4 Cumulative effects

SCLA has considered the potential cumulative effects of the Project in relation to the definition provided under Te Tangi a Te Manu (New Zealand Landscape Guidelines).

SCLA is not aware of any other solar farms within the immediate visual catchment or proximate to the immediate visual catchment of the subject site that have been granted consent and has therefore concluded that the Project will not generate a cumulative effect.

5.2.5 Overall conclusion

Key conclusions with respect to landscape, rural character, and visual effects are as follows:

- Rural character and landscape effects will be 'low'. This equates to less than minor.

- Visual effects from public viewpoints will range from 'low' to 'nil' once the mitigation planting establishes. This equates to less than minor.
- Visual effects on most private viewpoints will range from 'low' to 'very low', which equates to less than minor. There are two properties where the effects will be at least 'low to moderate', although the adverse effects will diminish to be 'low' or 'very low' as the proposed landscaping establishes. This equates to less than minor.
- The Project will not facilitate an adverse cumulative landscape or visual effect.

5.3 Effects on ecological values

5.3.1 Introduction

Beca has assessed the potential ecological effects associated with the construction and operation of the proposed solar farm. It is noted that effects have been avoided through design where possible. Where effects cannot be avoided, Beca have recommended management measures to remedy or mitigate the associated effects.

The management measures are summarised in section 4.13 of this report. They will be implemented as part of an EMRP. The proposed consent conditions require the preparation, certification, and implementation of the plan.

The conclusions of the Beca assessment are summarised below. Further detail is provided in the Beca EIA (**Appendix 5**).

5.3.2 Construction phase effects (temporary)

Construction phase effects considered by Beca include potential injury and/or mortality of fauna, vegetation clearance and loss of terrestrial habitat, and earthworks leading to the deposition of suspended sediment into watercourses.

Injury and/or mortality of fauna

Construction phase activities and the associated clearance of exotic vegetation have the potential to cause injury or mortality to wildlife such as birds, bats, lizards, and freshwater fish. These activities can also result in displacement.

While Beca considers the magnitude of effects on avifauna as 'low', the EMRP will require that the clearance of vegetation is completed outside of the nesting season where possible. Where this cannot be achieved, the EMRP will

require that the areas of vegetation are checked by an ecologist or arborist prior to clearance. Beca also recommends that a suitable management plan is put in place to assess bird mortality that may occur on-site due to avifauna colliding with the panels. A condition of consent is proposed to this effect. Given these measures, Beca concludes that the adverse effects will be 'low'. This equates to less than minor.

In regard to bats and lizards, the EMRP will require that surveys are undertaken prior to construction works commencing. If the presence of either is detected, then the EMRP will require the preparation of management plans. These plans could include the salvage and relocation for lizards, and roost tree management, tree felling protocols, and appropriate mitigation for loss of roost trees for bats. Given these measures, Beca concludes that the adverse effects will be 'low'. This equates to less than minor.

With regards to freshwater fish, adverse effects have been avoided by adopting a 10m setback from the intermittent and permanent watercourses where feasible. Beca considers the magnitude of adverse effects as 'low' (less than minor). Regardless, where habitat disturbance or dewatering cannot be avoided, the EMRP will specify protocols to avoid injury or mortality of native fish. These will include fish rescue and relocation. This will ensure that any adverse effects on freshwater fish are less than minor.

Vegetation clearance and loss of terrestrial habitat

Beca estimate that approximately 5,128m^2 of exotic vegetation will be removed to facilitate the Project. While the terrestrial vegetation has 'negligible' botanical values, it does provide potential habitat as outlined above. While Beca considers the magnitude of this effect to be 'low', the EMRP will facilitate riparian and/or terrestrial planting within the site with the aim of establishing riparian shading and enhancing native habitat provision. On this basis, Beca concludes that the adverse effects will be 'low'. This equates to less than minor.

Earthworks and deposition of suspended sediments

Sediment control measures will be implemented as part of the proposed CEMP and associated ESCP, with the key focus being to prevent sediment laden water entering watercourses. Pasture will also be retained throughout the site, with a consent condition requiring an adaptive management approach to ensure this occurs. Given these mitigation measures, Beca concludes that the associated adverse effects on the wetlands and watercourses on the site will be 'low' at most (less than minor).

5.3.3 Operational phase effects

Operational phase effects considered by Beca include increased impervious surface landcover and potential alterations to hydrology, alteration to permanent watercourses, and loss of potential ecological value.

Increased impervious surface landcover and potential changes to hydrology

In accordance with the conclusions of the Beca civil report, the Project is not expected to result in any significant changes to the hydrological characteristics of the site assuming that the existing grass cover is maintained. Noting that stormwater from the panels will not be collected and discharged (it will continue to discharge into the same catchment), close-to-natural recharge to the nearest down-gradient streams and wetlands is expected. This will avoid the risk of depletion.

Remedial measures are also proposed should unanticipated effects occur once the solar farm is operational. Stormwater from impervious surfaces (roads, inverters, and the substation) will be managed via drainage to vegetated areas.

Given these measures, Beca concludes that the adverse effects associated with the increased impervious surfaces will be 'low' at most (less than minor).

Alteration to permanent watercourses

Alteration to the alignment of the permanent watercourses has been avoided through the design of the solar farm. While the installation of culverts is required to facilitate internal access across the site, these works will be undertaken with reference to fish passage guidelines, with design considerations to ensure minimal disruption to in-stream habitat. Stock will also be prevented from entering the watercourses.

Noting the range of management measures proposed, Beca concludes that the adverse effects associated with the alteration of permanent watercourses will be 'low' (less than minor).

Loss of potential ecological value

The NPS-FM requires that consideration is given to the loss of the potential value of watercourses.

Given that the proposal will not prohibit any actions that could be implemented on the site to increase the ecological value of the streams (fencing, planting of indigenous species and removal of exotic weeds), Beca

concludes that any adverse effects on the loss of potential ecological value of the watercourses will be 'negligible'.

5.3.4 Overall conclusion

The Beca report concludes that the adverse effects associated with the construction and operation of the Project on ecological values have been avoided where possible through design and can otherwise be minimised through the implementation of management plans. Overall, the adverse effects on ecological values will be less than minor.

The implementation of terrestrial and/or riparian planting could also result in a net gain in ecological value due to increased indigenous dominance, habitat, and ecosystem services provision.

5.4 Operational stormwater runoff and flood hazards

5.4.1 Introduction

Beca has assessed the potential adverse effects associated with operational stormwater runoff from the proposed solar farm, including the impact on natural hazards.

The conclusions from this assessment are summarised below. Further detail is provided in the Beca civil report (**Appendix 9**).

5.4.2 Stormwater runoff

Beca identifies that the impact of stormwater runoff from any development is influenced significantly by any associated change in ground cover. If a development reduces the percentage of pervious coverage or the type of vegetation cover, then stormwater runoff will be impacted.

Beca outlines that solar panels can cover approximately half of the land area when in a horizontal position – similar to an urban catchment. However, the implications for runoff vary vastly from an urban catchment due to runoff being diverted beneath adjacent panels onto pasture. Beca have referenced a study that suggests that the addition of solar panels over grassy fields does not have much effect on the volume of runoff, peak discharge, nor the time to peak.

In this instance, EFL proposes to retain the area beneath the panels in pasture to allow for agricultural activities to occur in conjunction with the solar farm. The installation of the panels is therefore not expected to have a significant impact on stormwater runoff.

For the above reasons, the Beca civil report concludes that there will be no significant change to the stormwater discharge volumes or rates and that stormwater attenuation is therefore not required.

While runoff is unlikely to be increased, Beca notes that there are likely to be changes to how stormwater is conveyed through the site. While there is potential for flows to concentrate and channelise locally as they discharge from panels and access roads, the risk is low due to the flat, pastured nature of the site. Should this occur, it will be managed through reactive revegetation or local rock protection in accordance with the proposed consent conditions.

Noting that the stormwater management measures summarised in section 4.9 of this report have been encapsulated within the proposed consent conditions, Beca concludes that the Project will have negligible effects on stormwater runoff. The Project will also facilitate positive stormwater effects in terms of stream health and stream bank erosion reduction through riparian margin restoration, which will be undertaken in accordance with the EMRP.

5.4.3 Flood hazards

Beca notes that there are no mapped flood hazard areas within or downstream of the site.

Noting that stormwater will be appropriately managed so that any adverse effects are negligible, the Project will have negligible effects on flood risk.

5.4.4 Overall conclusion

Any adverse effects associated with operational stormwater runoff and flood hazards will avoided, remedied, or mitigated to be negligible.

5.5 Effects on productive rural values

While adverse effects on productive rural values is a relevant consideration, it is noted that the Rural Zone is the most logical and practical location for a solar farm of this scale in the South Taranaki district. This is due to the area of land required with a suitable topography and vegetative cover, the need for unrestricted access to the solar resource, the proximity and subsequent ability to establish a connection to the local network, as well as the ability to achieve a low impact/low disturbance design. These, in addition to the range of positive effects that the proposal will facilitate, are all factors that the expert consenting panel should have regard to when considering the adverse effects of the Project on productive rural values.

Notwithstanding the above, the proposed solar farm has been specifically designed to operate in parallel with the ongoing agricultural use of the site. This will be achieved by retaining the majority of the pasture cover associated with the site, including the area below the panels. This will ensure that the life supporting capacity of the soil is retained, and the productive rural activities can occur in conjunction with the solar farm.

To take advantage of the retained pastoral coverage, EFL will continue grazing the land in conjunction with the solar farm. This will be in the form of grazing sheep.

While the solar farm will occupy some of the productive land within the site, the land can be easily re-purposed for productive purposes should the solar farm be decommissioned. This means that there will be no irreversible loss of highly productive land as a result of the Project.

The solar farm is not sensitive to any existing productive rural activities occurring, or potential productive rural activities that could reasonably be expected to establish within the surrounding environment. This will ensure that there are no reverse sensitivity effects associated with the Project.

Having regard to the above, any adverse effects associated with the Project on productive rural values will be avoided, remedied, or mitigated to be less than minor.

5.6 Cultural effects

While there are no recorded archaeological or cultural features associated with the subject site, EFL has consulted with Taranaki Iwi to gain a better understanding of the potential effects of the proposal on cultural values.

In accordance with the email attached at **Appendix 12**, Taranaki Iwi have confirmed that they will not be providing a CIA with respect to the proposed solar farm. Instead, Taranaki Iwi have provided a set of recommended consent conditions to assist with the management of effects on cultural values. A copy of the recommended conditions is attached at **Appendix 16**. These have been incorporated into the full set of proposed consent conditions attached at **Appendix 8**.

The incorporation of the recommendations provided by Taranaki Iwi will ensure that any adverse cultural effects associated with the Project will be less than minor.

5.7 Archaeological effects

The Geometria report (**Appendix 6**) identifies that there are no archaeological sites located on the subject site or in close proximity, and that no archaeological material or surface features that may represent past anthropogenic activity were observed during the site visits.

While there is a small area at the northern end of 575 Kina Road that was identified as 'old clearing' on an old survey map, the implementation of an ADP will ensure that any adverse effects on the potential archaeological values associated with this area are avoided. A condition of consent is proposed to this effect. Geometria has confirmed that there is no legal requirement to obtain an authority from Heritage New Zealand Pouhere Taonga with respect to the Project.

Any adverse archaeological effects associated with the Project will therefore be less than minor.

5.8 Noise effects

5.8.1 Introduction

Marshall Day has assessed the potential noise effects associated with the construction and operation of the proposed solar farm.

The conclusions from this assessment are summarised below. Further detail is provided in the Marshall Day report (**Appendix 11**).

5.8.2 Construction noise

Marshall Day has based the assessment of construction noise on the following activities:

- Delivery of panels, inverters, and other infrastructure via trucks and small cranes.
- Earthworks using trucks, loaders, and excavators.
- Piling of the pitches that will attach the tracking systems and panels to the ground. These may be hammered, vibro-piled, or bored depending on ground conditions.

The assessment has been undertaken on the basis of the works being completed over a period exceeding 20 weeks and between the hours of 7:30 to 18:00, Monday to Saturday. Therefore, the 'long-term duration' construction

noise limits would apply (70dB LAeq and 85 dB LAFmax). The noise limits apply at 1m outside the façades of occupied buildings.

Table 7 below shows the noise levels expected from relevant equipment 1m from the façade of a building relative to distance from the noise source.

Item/Activity	Operating Sound Power Level ($dB L_{WA}$)	Noise Level ($dB L_{Aeq}$)				70dBA Limit Setback (m)
		100m	150m	200m	500m	
Large Trucks	108	60	56	52	43	40
Excavators and other earthmoving plant	106	58	54	50	41	33
Impact piling (no mitigation)	123	75	71	67	58	158
Impact piling (small or with dolly)	114	66	62	58	49	69
Vibropiling (excavator driving small piles)	106	58	54	50	41	33
Bored or screw piles (small rig)	103	55	51	47	38	25
Concrete truck & pump	103	55	51	47	38	25
Truck idling	91	43	39	35	26	6

Table 7: Activity specific noise levels at 1m from a building facade without screening (Source: Marshall Day acoustic assessment).

Marshall Day identifies that the works area is at least 260m from the façades of surrounding sensitive receivers. The construction phase of the Project will therefore comply with the construction noise limits and any associated adverse effects will be less than minor.

Notwithstanding the above, a CNMP will be prepared and implemented to minimise the potential effects of the construction activities on surrounding property owners. A consent condition is proposed to this effect.

5.8.3 Operational noise

Marshall Day has concluded that operational noise will readily comply with the permitted activity daytime and night-time noise limits outlined in the STDP.

Notwithstanding the above, the Marshall Day report provides discussion around whether the operation noise is 'reasonable'. The following is a summary of the key points:

- The operational noise would be low overall and within all national and international guidelines for environmental noise levels that are typically applied within New Zealand.

- Given the low overall noise level from the solar farm, daytime solar farm noise levels are considered to be reasonable and would have little effect on amenity.
- The solar farm is expected to be audible at night for the nearest existing dwellings. Noise from the solar farm would be more noticeable and annoying if the sound sources (e.g., inverters) are appreciably tonal.

Given the last point, Marshall Day recommends that the final selection of mechanical plant infrastructure should avoid and/or mitigate tonal characteristics as far as practicable. This will be achieved by undertaking a noise tonality assessment (as defined by NZS6802:2008) and considering attenuation options. A condition of consent to this effect is proposed.

Provided that the tonal character of the proposed mechanical plant (including the inverters) can be avoided and/or mitigated, Marshall Day concludes that noise from the solar farm will be 'reasonable' in terms of the RMA.

Given the above, any adverse effects associated with the operational noise from the solar farm will be avoided, remedied, or mitigated to be less than minor.

5.8.4 Overall conclusions

Key conclusions with respect to noise effects are as follows:

- Construction noise will comply with the relevant standards. Any potential effects will be further avoided by the implementation of a CNMP. The associated effects will be less than minor.
- Operational noise will readily comply with the relevant noise limits from the STDP. Given that a consent condition is proposed to manage the tonal character of mechanical plant infrastructure, noise from the operation of the solar farm will be 'reasonable' in terms of the RMA. The associated effects will be less than minor.

5.9 Traffic effects

5.9.1 Introduction

Hawthorn Geddes has assessed the potential traffic effects associated with the construction and operation of the Project.

The conclusions from this assessment are summarised below. Further detail is provided in the Hawthorn Geddes report (**Appendix 10**).

5

5.9.2 Construction traffic

The construction phase will be the main generator of traffic associated with the Project. The Hawthorn Geddes report provides details on the associated traffic volumes and routes – the key points are summarised in section 4.14 of this report.

The Hawthorn Geddes report concludes that the estimated increase in traffic levels within the relevant transport routes will not result in the need for upgrades to the relevant intersections in accordance with AUSTROADS Guide to Traffic Management. This is assuming that the movements are staggered across working hours – this will be required by the proposed CTMP.

The relevant routes consist of sealed roads, meaning that the construction traffic will not result in any nuisance effects. There are also no restrictions to the construction of suitable site access points in accordance with the relevant STDC requirements, with this being required by a proposed consent condition.

Notwithstanding the above, it is proposed that the CTMP encapsulates the recommendations of the Hawthorn Geddes report (summarised in section 4.17 of this report) and is implemented for the duration of the construction phase of the Project. A consent condition is proposed to this effect.

In accordance with the conclusions of the Hawthorn Geddes report, the implementation of the CTMP will ensure that any adverse effects associated with the construction phase of the Project on the safety and efficiency of the adjoining roading network will be less than minor.

5.9.3 Operational traffic

Once operational, there is not expected to be any significant traffic generated by the Project. Hawthorn Geddes notes that traffic movements are expected to consist of cleaners and general building maintenance staff, delivery staff, ground staff, people tending to the agricultural activities, and people entering the substation area for operational and maintenance reasons.

Hawthorn Geddes concludes that the traffic movements associated with the above activities will be negligible in the context of the existing roading network. On that basis, any adverse effects associated with the operational traffic associated with the Project will be negligible.

5.9.4 Overall conclusions

Key conclusions with respect to traffic effects are as follows:

- The proposed vehicle crossings will be constructed in accordance with STDC requirements. This is required by the proposed consent conditions.
- A CTMP will be prepared in accordance with the recommendations of the HG report. Compliance with this plan will ensure that any adverse traffic effects associated with the construction phase of the Project are less than minor.
- The traffic movements facilitated by the operation of the Project are insignificant in the context of the surrounding traffic network and any associated adverse effects will be negligible.

5.10 Effects on amenity values

5.10.1 Introduction

There are a range of elements that contribute to amenity values. However, the aspects of the Project that have the greatest potential to impact amenity values are increased noise and traffic (particularly during construction operations), and visual effects. Also relevant is the amenity expectations for Rural Zone expressed in the STDP.

5.10.2 South Taranaki District Plan expectations

The relevant Rural Zone provisions that relate to amenity values are objective 2.1.3 and policies 2.1.8 and 2.1.9. These provisions seek to maintain rural amenity by:

- Ensuring that land use and development is of an appropriate nature, scale, intensity, and location to maintain and, where appropriate, enhance rural amenity values.
- Managing the effects of noise, vibration, odour, dust, traffic, glare, and other nuisances.
- Avoiding reverse sensitivity effects.

5.10.3 Technical assessments

The SCLA report concludes that visual effects from all public and private viewpoints will, once the mitigation planting establishes, be mitigated to be less than minor.

The Marshall Day report concludes that operational and construction noise will comply with the relevant STDP noise limits and that the inclusion of a consent condition requiring an assessment of mechanical plant infrastructure tonality

at the detailed design phase will ensure that the noise is reasonable in the context of the RMA.

The Hawthorn Geddes report concludes that the effects associated with the ongoing operation of the solar farm will be negligible, and that the imposition of a CTMP will ensure that the adverse effects associated with the construction phase will be less than minor.

5.10.4 Overall conclusions

Having considered the amenity expectations of the STDP and the relevant technical assessments, the adverse effects of the Project on amenity values can be managed through appropriate conditions of consent such that they are less than minor.

5.11 Effects on human health – contaminated soils

Beca has provided a Preliminary Site Investigation (PSI) report for the Project (**Appendix 13**).

The PSI identifies a number of areas on the site that are captured by the Hazardous Activities and Industries List (HAIL). The areas relate to:

1. Various structures that, due to their age, could have asbestos containing material (HAIL category E1) and/or lead-based paint (HAIL category I).
2. Two above ground diesel tanks (HAIL category A17).
3. A burn pile and (HAIL category G5).
4. Small-scale external treated timber storage activities (HAIL category A18).
5. An old car body (Hail category A18).

The areas are shown in Figures 10 and 11 below.

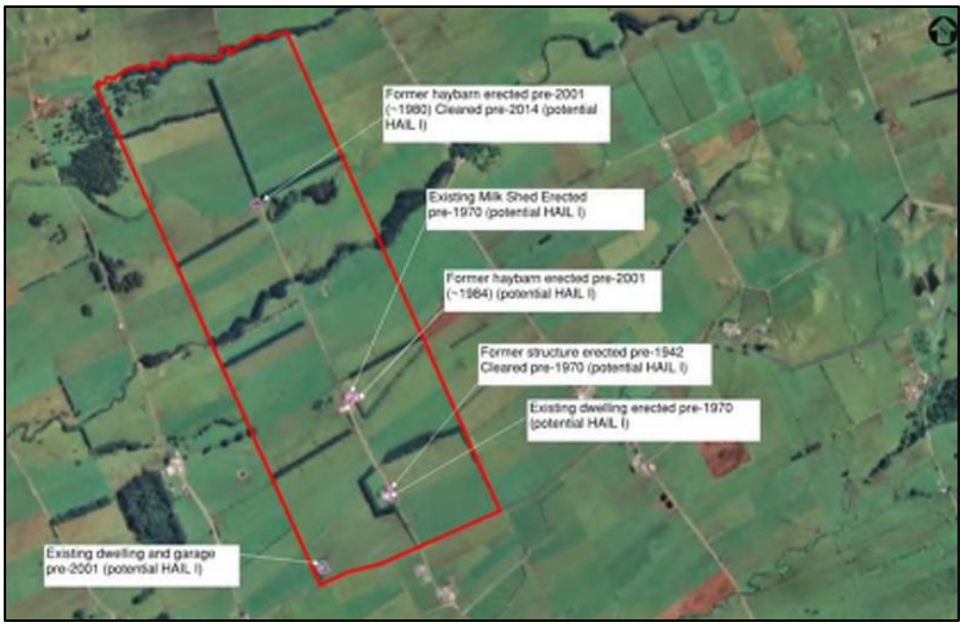

Figure 9: Areas of TNE4/973 containing HAIL activities (Source: Beca PSI).

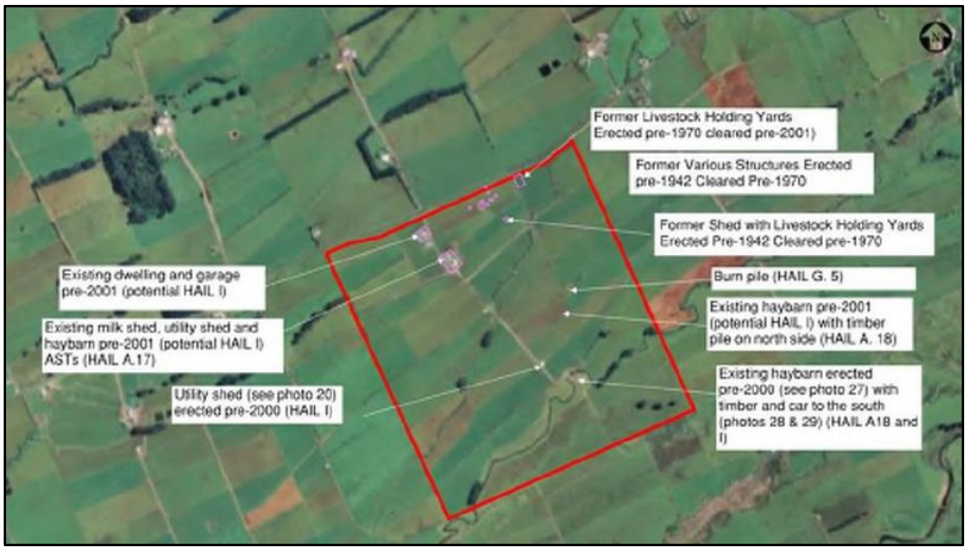

Figure 10: Area of TNC3/1386 containing HAIL activities (Source: Beca PSI).

Beca has identified the following as potential exposure pathways associated with the Project and identified HAIL areas:

- Exposure of workers to contaminants in soils and groundwater during site development - dermal contact, ingestion, or inhalation of dust.
- Sediment and runoff directly into surface water.

In terms of the NES-CS, the earthworks have the potential to trigger consent if the permitted activity thresholds cannot be complied with – Beca have confirmed that 'changing the use' of the site is not relevant in this instance given that the site will not be routinely occupied once operational.

Given the above, a condition of consent is proposed requiring that a Detailed Site Investigation (DSI) is undertaken for the relevant areas if the detailed design reveals that earthworks will not comply with the permitted thresholds. The condition also requires that any management measures identified as part of the DSI are implemented (i.e. a Remedial Action Plan (RAP) or site management plan). If required, the DSI will be completed prior to any construction works commencing.

The completion of a DSI and implementation of any subsequent management measures will ensure that any potential adverse effects on human health associated with the Project are avoided to be less than minor.

5.12 Positive effects

5.12.1 Introduction

The proposal will facilitate a range of positive effects, which include but are not limited to the following.

5.12.2 Economic contribution

The economic effects associated with the proposal have been assessed by Urban Economics (**Appendix 14**). The key conclusions of the assessment are summarised as follows:

- The construction of the proposed solar farm will result in an increase in construction sector output, contributing $306 million to Gross Domestic Product (GDP) and generating 306 Full-time Equivalent Employees (FTE).
- The ongoing operation of the proposed solar farm and ongoing agricultural use of the land will create ongoing employment in the energy and agricultural sectors, contributing $21.2 million to GDP and generating 64 FTE jobs per annum. This equates to a Net Present Value (NPV) of $342 million over a 30-year period.

In accordance with the Urban Economics assessment, the proposal will generate significant positive effects for a range of sectors.

5.12.3 The sustainable management of natural and physical resources

The combining of solar and agricultural land uses maximises productivity and the sustainable use of available natural and physical resources. The proposal will also remove up to 195,000 T of carbon emissions that would otherwise be generated by burning coal and will facilitate a net gain in ecological value as detailed in section 5.3 of this report.

5.12.4 Achieving Government targets

The proposed solar farm will contribute positively with respect to achieving the following New Zealand government targets:

- An aspirational target of 100% renewable electricity by 2030.
- Reaching net zero for long-lived gases by 2050.
- Meeting associated commitments made under the 'Paris Agreement in 2015', the 'Climate Change Climate Change Response (Zero Carbon) Amendment Act 2019', and 'Te hau mārohi ki anamata – Towards a productive, sustainable and inclusive economy – Aotearoa New Zealand's First Emissions Reduction Plan'.

These goals percolate through national, regional, and local policy documents and plans.

5.12.5 Net gain in ecological values

As outlined in the Beca EIA, the implementation of the proposed EMRP will facilitate a net gain in ecological value due to increased indigenous dominance, habitat and ecosystem services provision.

5.12.6 Contribution to well-functioning urban environments

A sustainable and reliable supply of electricity is a key ingredient for well-functioning urban environments.

The proposal will increase the supply of electricity and will improve the security of that supply (resilience) for the Taranaki region.

The proposed solar farm will produce enough power to supply approximately 41,800 homes. That electricity will be produced in a sustainable manner from a reliable resource. This will increase the resilience of the communities that are served by the Project and will directly contribute to well-functioning urban environments.

5.13 Effects conclusion

In accordance with the assessment provided in sections 5.1 – 5.12 of this application, any adverse effects associated with the Project can be avoided, remedied, or mitigated to be less than minor. No parties have been identified as being affected by the Project.

The proposal will also facilitate a range of positive effects as outlined in section 5.12.

6. STATUTORY ASSESSMENT

6.1 COVID-19 Recovery (Fast-track Consenting) Act 2020

6.1.1 Introduction

Clause 9 of Schedule 6 requires that an application include an assessment against the 'purpose' of the Act.

Clause 4 of the Act states the purpose as follows:

The purpose of this Act is to urgently promote employment to support New Zealand's recovery from the economic and social impacts of COVID-19 and to support the certainty of ongoing investment across New Zealand, while continuing to promote the sustainable management of natural and physical resources.

Clause 19 of the Act lists the relevant matters to be considered when assessing whether the proposal will help achieve its purpose. The following assesses the Project against the matters listed in clause 19. This covers and expands on the matters that the Minister[2] outlined in the referral order as to why the Project meets the purpose of the Act.

6.1.2 Economic benefits (clause 19(a))

As detailed in section 5.12.2 of this report, the proposal will facilitate a range of economic benefits. This is based on the Urban Economics assessment (**Appendix 14**).

The Urban Economics report outlines that the proposal will create a range of employment opportunities in the construction, energy, and agricultural sectors. Notably, local spending in the Covid-19 impacted retail and hospitality sector is likely to experience a boost from the increased local employment that will be facilitated by the construction of the Project.

The following summarises the conclusions of the Urban Economics report in terms of the economic impact of the proposal.

- The construction of the proposed solar farm will result in an increase in construction sector output, contributing $37 million to GDP and generating 306 FTE.
- The ongoing operation of the proposed solar farm and ongoing agricultural use of the land will create ongoing employment in the energy and

[2] The reference to the Minister relates jointly to the Minister for the Environment and of Conservation.

agricultural sectors, contributing $21.2 million to GDP and generating 64 FTE per annum. This equates to a NPV of $342 million over a 30-year period.

It is noted that the Urban Economics report does not factor in the mitigation planting or ecological restoration that forms part of the proposal. These aspects will add further economic benefits through the purchasing of necessary materials and plants, and employment and spending associated with the implementation and maintenance of these aspects.

6.1.3 Social and cultural wellbeing (clause 19(b))

With respect to cultural well-being, as detailed elsewhere in this report, EFL have consulted with Taranaki Iwi. Their involvement in the consenting process, along with the subsequent relationship that will be formed with EFL and any ongoing requirements resulting from the consultation will ensure that the Project provides for cultural well-being.

With respect to social well-being, the Urban Economics report concludes that the proposal will provide employment and create a reliable source of renewable energy. The Project is estimated to supply enough electricity per annum to power approximately 41,800 homes. In the face of increasing demand and limited supply, the increase in electricity supply and security will have considerable social benefits for current and future generations.

The proposal will also contribute to social well-being by assisting with climate change mitigation and improving health outcomes by reducing air pollution.

6.1.4 Speed of progression (clause 19(c))

Solar farms, particularly at the scale of the Project, are a relatively new phenomenon in the New Zealand context. The scale and unfamiliarity of the proposal would likely result in the timeframes being automatically doubled, could result in prolonged and unnecessary delays due to requests for further information, and also introduces the risk of the Project being publicly notified due to 'special circumstances'. Limited or public notification through the standard resource consent process would result in considerable delays for the Project.

Councils across the country have been experiencing longer than usual processing timeframes for resource consents due to resourcing issues created by Covid-19. This issue is shared by the external consultants that provide specialist input into resource consent processes.

Recent experience has seen Auckland Council, for example, take 14 months to make a notification decision for an electronic billboard and almost 2 years to process an application to vary a water take consent.

The consenting process under the Act is expected to provide much shorter timeframes and considerably more certainty for the applicant relative to the standard resource consent process under the RMA.

6.1.5 Public benefits (Clause (19(d))

Subclauses (i), (iii) – (v), (vii), and (ix) are relevant to the Project and are addressed below.

Generating employment (subclause (i))

Section 7.1.2 of this report details the range of employment opportunities that the Project will facilitate.

Contributing to well-functioning urban environments (subclause (iii))

Section 5.12.6 of this report details how the Project will contribute positively with respect to facilitating well-functioning urban environments.

Providing infrastructure that improves outcomes and increase productivity (subclause (iv))

Section 6.1.2 of this report details how the Project will improve economic and employment outcomes.

Projections from energy sector organisations forecast a need to double the total electricity supply in Aotearoa New Zealand by 2050. Through commitments made under the 'Paris Agreement in 2015', the 'Climate Change Climate Change Response (Zero Carbon) Amendment Act 2019' and the 'Towards a productive, sustainable and inclusive economy, Aotearoa New Zealand's First Emissions Reduction Plan', the forecast demand in electricity supply must be met by renewable generation. If New Zealand is unable to meet the demand for electricity, this will have an adverse impact on productivity. The proposal will contribute to meeting demand via a renewable resource and will therefore contribute to increasing productivity.

A reliable source of electricity also facilitates the ongoing operation of businesses at times where other electricity sources may be interrupted. This in turn increases productivity.

A shift away from using fossil fuels to produce electricity will reduce emissions, which in turn will improve public health. This has a flow on effect on

productivity in that people (including children) take fewer sick days and workplaces have fewer absences.

The proposal will also improve environmental outcomes as outlined below.

Improving environmental outcomes (subclause (v))

There are several ways that the proposal will contribute to improving environmental outcomes.

Adverse effects on the environment will be avoided, remedied, or mitigated during the construction phase of the Project through a range of management measures. The implementation of terrestrial and/or riparian planting will also result in a net gain in ecological value due to increased indigenous dominance, habitat, and ecosystem services provision. This will be achieved via an EMRP, which will be created in accordance with the proposed conditions of consent.

In addition to the ecological enhancement, the proposal will result in a shift from dairy to sheep farming. Stock will be prevented from entering the waterways. No contaminants will be discharged from the solar panels or associated infrastructure. This will contribute to an improvement in the water quality of the waterways located on the site, which will in-turn facilitate an overall improvement in freshwater quality within the wider receiving environment.

With respect to air quality, the Project will facilitate an improvement in environmental outcomes by reducing the reliance on burning fossil fuels to generate electricity. The output of the solar farm will remove up to 195,000 T of carbon emissions that would have otherwise been generated by burning coal. This is an important outcome for New Zealand, as signalled by the Governments strategies of 100% renewable electricity generation by 2030 and a net zero carbon future by 2050. These strategies are reinforced through the NPS-REG, with the policy direction permeating through other national, regional and district planning documents.

New Zealand's efforts to mitigate climate change and transition to a low-emission economy (subclause (vii))

The Project will directly contribute to New Zealand's efforts to mitigate climate change and transition more quickly to a low emissions economy.

As outlined above, the Project will remove up to 195,000 T of carbon emissions that would have otherwise been generated by burning coal. The Project will therefore reduce the emission of greenhouse gases through the generation of electricity in a sustainable manner from a renewable resource.

As outlined above, the Project will also assist in meeting Government targets, which are focussed on transitioning to a low-emission economy.

Strengthening resilience, in terms of managing the risks from natural hazards and climate change (ix)

The ongoing use of finite resources, particularly the burning of fossil fuels, to produce power has a clearly negative impact with respect to climate change. As the climate continues to warm as a result of these activities, our environment, economy, and society become more susceptible to the various risks posed by natural hazards and climate change.

By actively encouraging New Zealand's transition to a low emissions economy, the Project contributes to lowering the risk posed by natural hazards whose frequency and severity are being increased by climate change.

The solar farm will also contribute to an enhanced, diversified, and varied electricity supply for the areas that it serves. Noting that natural hazards are unavoidable and can have direct impacts on the provision of electricity, an enhanced, diversified, and varied supply will directly strengthen environmental, economic, and social resilience.

6.1.6 Significant adverse effects (Clause (19(e))

In accordance with section 5 of this report, the Project will not facilitate any significant adverse effects.

6.1.7 Conclusion

The Project will deliver a significant piece of renewable energy infrastructure that will directly help achieve the purpose of the Act as outlined in schedule 4. Specifically, the Project will progress in a manner that urgently promotes employment that will support New Zealand's recovery from the economic and social impacts of COVID-19 and will support the certainty of ongoing investment across New Zealand, while continuing to promote the sustainable management of natural and physical resources as outlined in sections 6.1.1 – 6.1.6 of this AEE.

6.2 The National Policy Statement for Renewable Energy Generation

6.2.1 Introduction

The NPS-REG contains an objective and policies to enable the sustainable management of renewable electricity generation under the RMA. The stated

matters of national significance to which this national policy statement applies are:

a. *the need to develop, operate, maintain and upgrade renewable electricity generation activities throughout New Zealand; and*
b. *the benefits of renewable electricity generation.*

The single objective is:

To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation.

The NPS-REG seeks to achieve the objective through a range of policies. The policies are grouped under several sub-headings. The following provisions are directly relevant to the proposal:

a. *Recognising the benefits of renewable electricity generation activities.*
b. *Acknowledging the practical implications of achieving New Zealand's target for electricity generation from renewable resources.*
c. *Acknowledging the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities.*

6.2.2 Assessment

Policy A states that "decision-makers shall recognise the benefits and provide for the national significance of renewable electricity generation activities". The policy goes on to describe the benefits as including (relevantly) "maintaining or increasing electricity generation capacity while avoiding greenhouse gas emission", "maintaining or increasing security of electricity supply at local, regional and national levels", "using renewable resources rather than finite resources", "the reversibility of adverse effects on the environment", and "avoiding reliance on imported fuels for the purposes of generating electricity".

The Project is in complete alignment with Policy A.

Policy B recognises the importance of retaining existing renewable electricity generation activities in order to achieve national targets for the generation of electricity from renewable sources. It also notes that significant development of renewable electricity generation will be required to meet those targets.

The Project is in complete alignment with Policy B, delivering a significant renewable electricity generation activity that will directly contribute to achieving the targets.

Policy C1 recognises the practical constraints of establishing, operating, maintaining, and upgrading renewable electricity generation activities,

including the need to locate the activity where the resource is available, the efficiencies associated with the utilisation of existing infrastructure, and the need to connect renewable electricity generation activities to the national grid.

The subject site is an ideal location for the Project due to the combination of land availability, access to the solar resource, ability to connect to the existing network, as well as the ability to achieve a low impact/low disturbance design. These are aspects of the proposal that the expert consenting panel should have particular regard to when considering the application, in accordance with this policy.

Policy C2 states that "When considering any residual environmental effects of renewable electricity generation activities that cannot be avoided, remedied or mitigated, decision-makers shall have regard to offsetting measures or environmental compensation including measures or compensation which benefit the local environment and community affected".

As outlined in sections 5 of this report, there are no residual effects which require compensation or offsetting. The Project therefore aligns with this policy.

6.2.3 Conclusion

The proposal is consistent with the objective and relevant policies of the NPS-REG.

6.3 The National Policy Statement for Highly Productive Land

6.3.1 Introduction

The NPS-HPL came into effect on 17 October 2022. The overarching objective of the document is to protect highly productive land for use in land-based production, both now and for future generations.

In accordance with clause 3.5(7), all consenting authorities are now required to apply the NPS-HPL where references to highly productive land are references to land that is zoned Rural (or Rural Production) and that has a soil classification of LUC 1 – 3.

The subject site is zoned Rural under the STDP, and the soils are a mix of class 2 and 3 as outlined in section 2.3 of this report. The NPS-HPL is therefore a relevant consideration for this application. An assessment is provided below.

5

6.3.2 Assessment

The NPS-HPL includes 9 policies that sit under the single objective. Policies 1, 4, 8 and 9 are of particular relevance to this application and are addressed below.

- **Policy 1:** ***Highly productive land is recognised as a resource with finite characteristics and long-term values for land-based primary production.***

This application acknowledges the productive capacity of the subject land. The proposal seeks to recognise and protect the finite characteristics and long-term values that make the subject land suitable for land-based primary production by retaining the majority of the pasture cover within the site (including the area below the panels) and continuing agricultural land uses in conjunction with the solar farm. Should the solar farm activity cease to exist, all land can be easily repurposed for productive rural activities.

These aspects will ensure that the finite characteristics and long-term values that make the land highly productive and suitable for land-based primary production are recognised and maintained.

- **Policy 4:** ***The use of highly productive land for land-based primary production is prioritised and supported.***

As outlined above, the proposal will facilitate the ongoing use of the subject site for land-based primary production activities in conjunction with the proposed solar farm. This ensures that the ongoing use of the land for land-based primary production activities is prioritised and supported in conjunction with the solar farm.

- **Policy 8:** ***Highly productive land is protected from inappropriate use and development.***

Clause 3.9 from the NPS-HPL is directly relevant to policy 8, providing guidance on what is considered an 'appropriate use or development' of highly productive land.

Subclause (1) requires that territorial authorities *avoid the inappropriate use or development of highly productive land that is not land-based primary production*. Subclause (2) provides more explicit direction, listing a range of scenarios that a use or development must align with in order not to be considered inappropriate. If one of the scenarios apply, the measures in subclause (3) must also be applied. The requirements of subclause (2) and (3) are addressed in more detail below.

Clause 3.9(2)

Of the scenarios listed under subclause 2, point (j) is of most relevance to the Project:

(j) it is associated with one of the following, and there is a functional or operational need for the use or development to be on the highly productive land:

(i) the maintenance, operation, upgrade, or expansion of specified infrastructure:

Specified infrastructure

The definition for 'specified infrastructure' in the NPS-HPL includes *infrastructure that delivers a service operated by a lifeline utility.* The Civil Defence Emergency Act 2002 specifies that *an entity that generates electricity for distribution through a network or distributes electricity through a network* is a lifeline utility. Given that the Project will generate electricity for distribution through the national grid, the Project is considered as 'specified infrastructure' under the NPS-HPL.

While the Project is 'specified infrastructure', it is acknowledged that subclause (2)(j)(i) does not specifically provide for the 'construction' of such infrastructure. Notwithstanding this, the 'guidance to implementation' document released by the Ministry for the Environment (MfE)[3] provides further guidance. With respect to subclause (2)(j)(i) and specified infrastructure, the guidance document states that:

this test recognises that the functional and operational needs of specified infrastructure (as defined in Clause 1.3 of the NPS-HPL) means that they may need to be located on HPL – such as where a new road or transmission lines may need to traverse over an area of HPL. Further, in many cases, the presence of specified infrastructure on HPL does not preclude the balance of the HPL being used by land-based primary production. For example, land surrounding structures used for infrastructure can often be used for animal grazing or some forms of horticulture.

The specific example referred to includes a 'new road or transmission lines' (emphasis added). In accordance with the specific guidance provided by MfE, subclause 2(j)(i) therefore provides for both new and existing activities that meet the definition of specified infrastructure.

Given the above, the Project is therefore provided for as an appropriate use of highly productive land under subclause (2)(j)(i) of the NPS-HPL.

[3]National Policy Statement for Highly Productive Land – Guide to Implementation. March 2023.

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Functional or operational need

The National Planning Standards include a definition for functional and operational need. Operational need is of most relevance to the proposal – the definition is included below.

Operational need *means the need for a proposal or activity to traverse, locate or operate in a particular environment because of technical, logistical or operational characteristics or constraints.*

The following technical, logistical, and operational characteristics and constraints mean that there is an operational need for the Project to locate and operate on the subject site.

- Proximity and access to existing transmission infrastructure: Access to the National Grid is a necessity for a renewable energy generation activity of the scale of the Project. There are existing 33 kV lines that traverse the subject site. These existing lines will facilitate the interconnection of the Project into the national grid via Transpower's Opunake substation, which is also located in relative proximity to the subject site. The presence of these lines and the proximity of the Transpower substation facilitate the efficient and sustainable use of existing resources and avoid the need to construct new extensive infrastructure to connect the Project into the grid. This avoids the associated adverse environmental effects.
- Access to the solar resource: The subject site facilitates reliable access to the solar resource, which is a key operational need for the Project.
- Characteristics of land and ability to achieve a low impact design: The subject site provides an area of land that is of a sufficient size and that has a suitable topography and shape to accommodate the Project.

  The land does not have any natural features or characteristics that prevent a low-impact design. Section 2.3 of this AEE identifies that the site accommodates various natural features, while section 5 details how the adverse effects on those features will be avoided, remedied or mitigated, and how the Project will facilitate positive effects on some aspects.

  The location of the site also ensures that there is a limited viewing audience within the surrounding environment. This limits the potential for adverse visual effects associated with the Project.

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Clause 3.9(3)

Clause 3.9(3) requires that territorial authorities take measures to ensure that any use or development of highly productive land:

(a) minimises or mitigates any actual loss or potential cumulative loss of the availability and productive capacity of highly productive land in their district; and

(b) avoids if possible, or otherwise mitigates, any actual or potential reverse sensitivity effects on land-based primary production activities from the use or development.

Clause 3.9(3)(a)

A range of measures have been employed to ensure that the Project minimises the loss of availability and productive capacity of highly productive land. Specifically:

- The characteristics of the site (discussed above in relation to 'operational need') and specific design of the solar farm ensure that no bulk earthworks are required to prepare the land for installation of the solar panels. The panels will be established on tracking systems over the existing topography, with the tracking systems attached to the ground via piled pitches. This ensures that the existing soils and associated pasture cover will be retained across the site. This will facilitate the ongoing use of the site for land-based primary production, with EFL proposing to graze sheep in conjunction with the solar farm activity.
- While some earthworks will be required to form internal access roads, these have been located to utilise existing access roads as much as practicably possible. While the main access road will be gravelled, most access tracks across the site will be retained in grass.
- While some hardstand area will be required to accommodate the substation area, this has been located near Kina Road to avoid the fragmentation of highly productive land as much as practicably possible. The detailed design of the substation area is also being undertaken with a key focus being to limit the area of associated hardstand while still satisfying the relevant technical requirements.
- Beyond the solar infrastructure, no additional buildings will be constructed. An existing dwelling will be retained and used as a site office during construction and operation of the Project.
- There are no parts of the site or directly adjoining land that are not identified as being highly productive land under the NPS-HPL. This means that there are no alternative designs or layouts that could further minimise the loss of

the availability or productive capacity of the highly productive land associated with the site.

- Should the Project cease to exist, all land on the site can be easily repurposed for a range of land-based primary production activities.

Clause 3.9(3)(b)

The solar farm is not sensitive to any existing, or any potential land-based primary production activities that could reasonably be expected to establish on land within the surrounding area. There will be no reverse sensitivity effects associated with the Project on land-based primary production activities.

- **Policy 9:** ***Reverse sensitivity effects are managed so as not to constrain land-based primary production activities on highly productive land.***

As outlined above, the solar farm is not sensitive to any existing, or any potential land-based primary production activities that could reasonably be expected to establish on land within the surrounding area. There will be no reverse sensitivity effects associated with the Project.

6.3.3 Conclusion

The Project is consistent with the objective and policies of the NPS-HPL as outlined above.

6.4 The National Environmental Standards for Freshwater

The NES-F regulates activities that pose risks to the health of freshwater and freshwater ecosystems. The regulations came into effect on 2 September 2020.

While the NES-F includes a number of rules that are relevant to this proposal, it does not include any objectives or policies. Therefore, no further assessment has been provided under the NES-F. The adverse effects associated with the activities for which consent is sought under the NES-F are addressed in section 5 of this report, while the relevant objectives and policies from the NPS-FM are addressed in section 7.5 of this report.

6.5 The National Policy Statement for Freshwater Management

6.5.1 Introduction

The NPS-FM provides consent authorities with updated direction on how they should manage freshwater under the RMA. The document came into effect on 3 September 2020.

The NPS-FM does not contain any rules but does include a single objective and 15 policies. Policies 3, 5, 9, and 15 are of most relevance to this application – they are copied below for ease of reference.

***Policy 3**: Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.*

***Policy 5**: Freshwater is managed through a National Objectives Framework to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.*

***Policy 9**: The habitats of indigenous freshwater species are protected.*

***Policy 15**: Communities are enabled to provide for their social, economic, and cultural wellbeing in a way that is consistent with this National Policy Statement.*

6.5.2 Assessment

The proposal is consistent with the relevant objective and policies from the NPS-FM for the following reasons.

- The alteration of the alignment of watercourses has been avoided through design. With regards to the installation or remediation of culverts:
  - This will be undertaken with reference to fish passage design guidelines.
  - The works will occur in summer conditions when there is no flow in the streams. Dirty water diversion bunds will be installed around the work site to divert runoff around the area of exposed soil in rainfall events.
  - Where habitat disturbance or dewatering cannot be avoided, the proposed EMRP will specify protocols to avoid injury or mortality of native fish (rescue and relocation).
- With regards to the proposed earthworks:

- Sediment control measures will be implemented as part of the proposed CEMP and associated ESCP, with the key focus being to prevent sediment laden water entering watercourses.

- With regards to the wetlands:
  - The solar farm has been designed around these, ensuring that all are retained.
  - The Project is not expected to result in any significant changes to the hydrological characteristics of the site assuming that the existing grass cover is maintained – conditions of consent are proposed to ensure that this occurs. Noting that stormwater from the panels will not be collected and discharged (it will continue to discharge into the same catchment), close-to-natural recharge to the nearest down-gradient streams and wetlands is expected. This will avoid any changes to the hydrological processes that feed the wetlands.
- The Project will facilitate the implementation of an EMRP, which will incorporate a range of riparian planting, will require that waterways and wetlands are fenced to prevent stock, and will include animal pest and plant weed controls. These measures will result in a net gain in ecological value due to increased indigenous dominance, habitat, and ecosystem services provision.
- With regards to the potential ecological values of the freshwater systems, given that the proposal will not prohibit any actions that could be implemented on the site to increase the ecological value of the streams (fencing, planting of indigenous species and removal of exotic weeds), Beca concludes that any adverse effects on the loss of potential ecological value of the watercourses will be 'negligible'.

Given the above, the management of freshwater will be integrated as part of the overall Project (policy 3), the health and well-being of the waterways and wetlands located on the site will be improved (policy 4), while the habitats of freshwater species will be maintained (policy 9) in accordance with the NPS-FM.

6.5.3 Conclusion

The proposal is consistent with the objective and relevant policies of the NPS-FM.

6.6 Regional Policy Statement for Taranaki

6.6.1 Introduction

The RPS was made operative in January 2010. Its purpose is to promote the sustainable management of natural and physical resources in the Taranaki region by providing an overview of the resource management issues and identifying polices and methods to achieve the integrated management of the region's natural and physical resources.

The RPS has overarching relevance to the consideration of resource consent applications made under the STDP and RFWPT. While the STDP was prepared under the RPS, the RFWPT was not. The RPS therefore has heightened relevance for this application.

The RPS contains policy guidance on a number of matters that are relevant to the Project. The relevant objectives and policies are identified and considered in the context of the proposal below. While the objectives and policies have not been copied into this report for brevity, they have been included at **Appendix 15** for ease of reference.

6.6.2 Assessment

Part 5: Land and soil

Part 5.1: Protecting our soil from accelerated erosion – AER objective 1 and policy 1

These provisions are focused on ensuring the sustainable use and development of land and soil in a manner that avoids, remedies, or mitigates the adverse effects associated with accelerated soil erosion.

The earthworks associated with the Project are largely associated with forming internal access roads and pads for the substation and inverters, and undertaking the trenching. No bulk earthworks are required to establish the solar farm. The proposed earthworks will be undertaken in accordance with best practice, with the relevant management measures to be specified in an ESCP – a consent condition is proposed to this effect.

This will ensure that the Project does not facilitate accelerated erosion in accordance with these provisions.

Part 6: Fresh water

Part 6.2: Maintaining and enhancing the quality of water in our rivers, streams, lakes, and wetlands – WQU objective 1 and policies 1 and 2

These provisions seek to maintain and enhance surface water quality via sustainable land management practices.

In accordance with WQU policy 1 and 2, a 10m setback has been adopted from the intermittent and permanent watercourses that traverse the site. The riparian buffer will either be retained in grass or will be planted in accordance with the proposed EMRP. Stock will also be prevented from entering the watercourses.

The wetlands have also been avoided through design and their enhancement will be a focus of the EMRP.

Stormwater during the construction phase will also be managed in accordance with the proposed ESCP. This will ensure that the water is treated as much as practicably possible and in accordance with best practice before being discharged.

The proposal will therefore maintain, and has the potential to enhance, the surface water quality associated with the subject site in accordance with these provisions.

Part 6.4: Protecting the natural character of wetlands – WET objective 1 and policies 1 and 2

These provisions seek to protect the natural character of wetlands from the adverse effects of inappropriate subdivision, use, and development. Enhancement is also encouraged.

As outlined above, the wetlands located on the site have been identified as part of the Beca EIA and have been avoided through the design of the Project.

Potential adverse effects on wetlands during the construction phase will be avoided through the implementation of appropriate erosion and sediment controls, which will be designed and implemented as part of the proposed ESCP.

Once operational, the Beca civil report confirms that there will be no major changes to the hydrological processes associated with the site. This will ensure that there are no changes to the processes that feed the wetlands.

The enhancement of the wetlands will also be a key focus of the proposed EMRP. This will include the fencing of the wetlands, weed plant and animal pest control, and replanting.

The natural character of the wetlands will therefore be maintained and enhanced in accordance with the intent of these provisions.

Part 6.6: Managing effects associated with the use and disturbances to river and lake beds – RLB objective 1 and policy 1

These provisions look to enable the appropriate use of and disturbance of river and lake beds in a manner that avoids, remedies or mitigates any associated adverse effects.

Works within the beds of the rivers that traverse the site has been avoided as much as practicably possible through the design of the Project. However, there is a need to construct a number of culverts to facilitate internal access across the development.

The potential adverse effects associated with the construction phase of the culverts will be avoided where possible by the timing of works when flows within the streams are low. Where disturbance and/or dewatering cannot be avoided, protocols to avoid injury/mortality of native fish will be implemented. These measures will include fish rescue and relocation in areas where standing water is present, with impacted habitat to be isolated and fish translocated to a suitable aquatic habitat outside of the works footprint. The measures will be specified as part of the proposed EMRP.

In terms of the potential ongoing adverse effects of the culverts, the design and installation of the culverts will also be undertaken with reference to fish passage design guidelines. The designs will also be undertaken to ensure that there is no reduction in the capacity of the waterways to convey flood waters and to avoid adverse effects of flooding on adjacent properties.

The ongoing consultation with Taranaki Iwi will ensure that the proposed culverts do not adversely affect their relationship with the water bodies.

The installation of the culverts is therefore an appropriate use of the river beds and the associated adverse effects will be avoided, remedied or mitigated in accordance with these provisions.

Part 7: Air and climate change

Part 7.2: Responding to the effects of climate change – CCH objective 1 and policy 2

These provisions look to avoid, remedy, or mitigate the adverse effects associated with climate change. The associated explanation details how TRC are required to have particular regard to the benefits derived from the development of renewable energy.

As outlined previously, the Project will remove up to 195,000 T of carbon emissions that would have otherwise been generated by burning coal. The Project will therefore reduce the emission of greenhouse gases through the generation of electricity in a sustainable manner from a renewable resource.

This is an important outcome for New Zealand, as signalled by the Governments strategies of 100% renewable electricity generation by 2030 and a net zero carbon future by 2050. These strategies are reinforced through the NPS-REG, with the policy direction permeating through other national, regional and district planning documents.

By actively encouraging New Zealand's transition to a low emissions economy, the Project contributes to lowering the risk posed by natural hazards whose frequency and severity are being increased by climate change.

The proposal is in complete alignment with these provisions, and the benefits that this major piece of renewable energy infrastructure will generate with respect to assisting manage the adverse effects on the Taranaki region should be recognised by the expert consenting panel.

Part 9: Indigenous biodiversity

Part 9.1: Maintaining and enhancing indigenous biodiversity – BIO objective 1 and policies 1 and 2

These provisions are focused on maintaining and enhancing indigenous biodiversity, including ecological landscapes, ecosystems, and ecological processes, habitats, communities, species, and populations.

As detailed in section 5.3 of this report, the Beca EIA concludes that the adverse effects associated with the construction and operation of the Project on ecological values have been avoided where possible through design and can otherwise be minimised through the implementation of management plans.

The implementation of terrestrial and/or riparian planting could also result in a net gain in ecological value due to increased indigenous dominance, habitat, and ecosystem services provision.

The project will therefore ensure that the indigenous biodiversity values associated with the site are maintained and, in some instances, enhanced in accordance with these provisions.

Part 10: Natural features and landscapes, historic heritage and amenity value

Part 10.2: Protecting our historic heritage – HIS objective 1 and policy 2

These provisions seek to protect historic heritage from inappropriate subdivision, use, and development.

The Geometria archaeological report concludes that there are no archaeological sites located on the subject site or in close proximity, and that no archaeological material or surface features that may represent past anthropogenic activity were observed during the site visits.

While there is a small area at the northern end of 575 Kina Road that was identified as 'old clearing' on an old survey map, the implementation of an ADP will ensure that any adverse effects on the potential archaeological values associated with this area are avoided. A condition of consent is proposed to this effect.

The Project will therefore ensure that historic heritage values are maintained in accordance with these provisions.

Part 10.3: Maintaining and enhancing amenity values – AMY objective 1 and policy 1

These provisions seek to manage the adverse effects of resource use and development on amenity values.

Section 5.10 of this AEE details how the adverse effects associated with the Project on the amenity values associated with the surrounding environment will be managed to be less than minor. This is based on the conclusions of the SCLA landscape assessment, the Marshall Day acoustic assessment, and the Hawthorn Geddes traffic assessment.

AMY policy 1 also states that any positive effects will be fully considered and balanced against adverse effects. Section 5.12 of this AEE summarises the range of positive effects that the Project will generate. These should be balanced against any adverse effects in accordance with policy 1.

Part 14: Energy

Part 14.1: Sustainably managing energy – ENE objectives 1 and 2 and policies 1 and 3

These provisions are focused on promoting the development and production of energy to meet the needs of the region and New Zealand, and promoting the use and development of renewable sources of energy in a manner that avoids, remedies, or mitigates adverse effects.

The Project is in complete alignment with these provisions, facilitating a significant piece of renewable energy infrastructure that will assist in meeting

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the energy needs of the region and New Zealand. As detailed in section 5 of this report, any adverse effects associated with the development and operation of the Project can be avoided, remedied, or mitigated so that they are appropriate.

Part 16: Statement of resource management issues of significance to iwi

Part 16.1: Taking into account the principles of the Treaty of Waitangi – TOW objective 1 and policies 1 and 2

These provisions seek to ensure that the principles of the Treaty of Waitangi are taken into account.

Section 6.10.5 of this AEE details how the proposal gives effect to the principles of the Treaty of Waitangi. These include the principle of partnership, which encompasses a duty to consult, act in good faith, and make informed decisions; and the principle of active protection, which encompasses a duty to ensure Māori interests are protected.

Given the conclusions reached in section 6.10.5, the Project aligns with these provisions from the RPS.

Part 16.2: Recognising kaitiakitanga – KTA objective 1 and policy 1

These provisions seek to ensure that particular regard is given to kaitiakitanga in managing the use, development, and protection of natural and physical resources.

In accordance with policy 1, the ongoing consultation with Taranaki Iwi will provide greater insight into how kaitiakitanga can be recognised and integrated as part of the Project.

Part 16.3: Recognising and providing for the relationship of Māori with ancestral lands, water, sites, wāhi tapu and other taonga – REL objective 1 and policies 3, 4, and 7

These provisions seek to recognise and provide for the cultural and traditional relationships of Māori with their ancestral lands, water, air, coastal environment, wāhi tapu, and other sites and taonga.

EFL have consulted with Taranaki Iwi, attending a hui in early August and incorporating their recommendations in the proposed conditions. The ongoing consultation with Taranaki Iwi will facilitate their involvement in the resource management process and will ensure that their cultural and traditional relationships are provided for. A range of measures have also been implemented to recognise and protect the mauri of the watercourses and

wetlands located on the site (setbacks, riparian rehabilitation, and the imposition of an ESCP for the construction phase).

These measures ensure that the cultural and traditional relationships of Māori are provided for in accordance with these provisions.

Part 16.4: Recognising cultural and spiritual values of tangata whenua in resource management processes – CSV objective 1 and policy 1

These provisions seek that the cultural and spiritual values of iwi are considered in the management of natural and physical resources.

As outlined above, the ongoing consultation with Taranaki Iwi will ensure that their cultural and spiritual values are considered and factored into the Project. This will ensure alignment with these provisions.

6.6.3 Conclusion

Overall, the proposal is consistent with the relevant objectives and policies from the RPS.

6.7 Regional Fresh Water Plan for Taranaki

6.7.1 Introduction

The RFWPT was made operative in October 2001. It contains policy guidance on a number of matters that are relevant to the Project. The relevant objectives and policies are identified and assessed in the context of the proposal below.

The objectives and policies from Part 3 of the RFWPT have not been considered as they mirror those from the RPS. Refer to section 6.6 of this AEE for an assessment of the relevant matters from the RPS.

While the objectives and policies have not been copied into this report for brevity, they have been included at **Appendix 15** for ease of reference.

6.7.2 Assessment

Section 3 – Natural, ecological and amenity values and public spaces

Protection and enhancement of natural, ecological and amenity values – objectives 3.1.2 – 3.1.5 and policies 3.1.2 and 3.1.3

These provisions are focused on protecting and enhancing the natural, ecological, and amenity values of rivers, streams, and wetlands.

The design of the solar farm has been specifically undertaken to avoid disturbance to the watercourses and wetlands located on the site as much as practicably possible. This includes a 10m setback from the intermittent and

permanent watercourses, and the avoidance of the wetland areas. The enhancement of the riparian margins and the wetlands will also be a key focus of the proposed ERMP.

An ESCP will also be prepared and implemented for the duration of the construction phase, ensuring that the earthworks and associated management of stormwater does not detract from the values of the watercourses or wetlands.

The design of the culverts will be undertaken with reference to fish passage design guidelines, while the construction works will be timed and undertaken to avoid injury/mortality of native fish. These measures will be specified in the ERMP.

Overall, the Project will protect and enhance the natural, ecological, and amenity values of the watercourses and wetlands located on the site, and therefore aligns with these provisions from the RFWPT.

Section 4 – Tangata Whenua

Recognising and providing for iwi and hapu of Taranaki and their culture tapu and other taonga – objective 4.1.1 and policies 4.1.1 – 4.1.3

These provisions largely mirror those from the RPS that relate to iwi and hapu.

In accordance with the assessment of the RPS provisions, EFL have initiated consultation with Taranaki Iwi, attending a hui in early August. The ongoing consultation with Taranaki Iwi will facilitate their involvement in the resource management process and will ensure that their cultural and traditional relationships are provided for.

A range of measures have also been implemented to recognise and protect the mauri of the watercourses and to protect the associated mahinga kai (setbacks, riparian rehabilitation, and the imposition of an ESCP for the construction phase).

These measures ensure that the Project aligns with these provisions from the RFWPT.

Section 5 – Use and development of fresh water

Enabling appropriate use and development of fresh water – objective 5.1.1

This objective seeks to enable the development of fresh water resources and the beds of rivers to provide for their social, economic, and cultural wellbeing in a sustainable manner.

Works within the beds of the rivers that traverse the site has been avoided as much as practicably possible through the design of the Project. However, there is a need to construct several culverts to facilitate internal access across the development.

The potential adverse effects associated with the construction phase of the culverts will be avoided where possible by the timing of works when flows within the streams are low. Where disturbance and/or dewatering cannot be avoided, protocols to avoid injury/mortality of native fish will be implemented. These measures will include fish rescue and relocation in areas where standing water is present, with impacted habitat to be isolated and fish translocated to a suitable aquatic habitat outside of the works footprint. The measures will be specified as part of the proposed EMRP.

In terms of the potential ongoing adverse effects of the culverts, the design and installation will also be undertaken with reference to fish passage design guidelines. The designs will also be undertaken to ensure that there is no reduction in the capacity of the waterways to convey flood waters and to avoid adverse effects of flooding on adjacent properties.

6.7.3 Conclusion

Overall, the proposal is consistent with the relevant objectives and policies of the RFWPT.

6.8 South Taranaki District Plan

6.8.1 Introduction

The objectives and policies are contained in Section 2 of the STDP. The objectives and policies cover a range of topics. Those of relevance to the Project are contained in sections 2.1 Rural Zone, 2.7 Tangata Whenua, 2.8 Transportation, 2.10 Energy, 2.17 Indigenous biodiversity, and 2.18 Waterbodies.

The following assesses the Project in the context of the relevant objectives and policies of the STDP.

6.8.2 Assessment

Section 2.1 – Rural Zone

Rural amenity and character

Objective 2.1.3 *To ensure that subdivision, land use and development in the rural environment is of a nature, scale, intensity and location that maintains and, where appropriate, enhances rural character and amenity values.*

Policy 2.1.8 *Manage the adverse effects of noise, vibration, odour, dust, traffic, glare and other nuisances from land use activities and development through relevant performance standards and appropriate spatial buffers and setback requirements for specific activities.*

Policy 2.1.9 *Ensure that new land use activities are of a nature, scale, intensity and location consistent with maintaining the character and amenity of the rural environment, and avoids or mitigates potential reverse sensitivity effects.*

Policy 2.1.13 *Reduce obtrusive built elements in the rural environment by integrating building location and design with the surrounding landform and landscape qualities, while recognising that the location and design of some buildings, and infrastructure is influenced by their function and/or resource constraints.*

Policy 2.1.14 *Avoid, remedy or mitigate adverse effects on rural privacy and rural character in the Rural Zone by maintaining road and site boundary setbacks for all buildings, while recognising that the degree of privacy and rural spaciousness is different in areas comprising existing smaller rural-residential lots.*

The Rural Zone is the most logical and practical location for a solar farm of this scale. This is due to the area of land required with a suitable topography and vegetative cover, the need for unrestricted access to the solar resource, the proximity and subsequent ability to establish a connection to the local network, as well as the ability to achieve a low impact/low disturbance design.

Notwithstanding the above, the Project has been specifically designed to maintain the amenity and character values associated with the surrounding rural environment. As outlined previously, section 5.10 of this AEE details how the adverse effects associated with the Project on the amenity values associated with the surrounding environment will be managed to be less than minor. This is based on the conclusions of the SCLA landscape assessment, the Marshall Day acoustic assessment, and the Hawthorn Geddes traffic assessment.

Productive function of the Rural Zone

Objective 2.1.4 *To enable the efficient and effective functioning of farming and rural based activities, and ensure that activities are not inhibited by adverse effects of new incompatible land uses.*

Policy 2.1.9 *Ensure that new land use activities are of a nature, scale, intensity and location consistent with maintaining the character and amenity of the rural environment, and avoids or mitigates potential reverse sensitivity effects.*

Policy 2.1.11 *Provide for the establishment and operation of new non-farming activities and the ongoing operation of existing lawfully established activities which are*

compatible and / or associated with farming activities in the rural environment, provided they avoid, remedy or mitigate adverse effects.

Policy 2.1.12 *Minimise, and where possible, avoid subdivision, land use and development that has the potential to inhibit the efficient use and development of versatile land for farming purposes or other lawfully established rural activities or rural industrial activities in an adjoining Rural Industrial Zone.*

The potential effects of the Project with respect to productive rural values and versatile soils are addressed in sections 5.5 and 6.3 of this AEE. The nature of the proposed development and ongoing use of the site for agricultural purposes in conjunction with the proposed solar farm will ensure that the soils are managed sustainably and will maintain the predominant primary production nature of the Rural Zone.

The solar farm is not sensitive to any existing productive rural activities occurring, or potential productive rural activities that could reasonably be expected to establish within the surrounding environment. This will ensure that there are no reverse sensitivity effects associated with the Project.

Section 2.7 – Tangata Whenua

Tangata Whenua

Objective 2.7.6 *To recognise and provide for the relationship of Tāngata Whenua and their culture and traditions (including mauri) with land, water, sites and areas of cultural and spiritual significance, wāhi tapu and other taonga.*

Objective 2.7.7 *To protect sites and areas of cultural and spiritual significance to Tāngata Whenua from the adverse effects of inappropriate subdivision, use, and development of resources.*

Policy 2.7.9 *To provide Tāngata Whenua with opportunities to participate in resource management processes and decision-making.*

Policy 2.7.10 *To have particular regard to the concept of Kaitiakitanga as defined by Tāngata Whenua of the District in respect of the management of natural and physical resources.*

Policy 2.7.12 *To actively engage with Tāngata Whenua when addressing matters of concern to Iwi and hapū, including recognition of the relationship of Tāngata Whenua and their culture and traditions with land, water, sites and areas of cultural and spiritual significance, wāhi tapu and other taonga.*

Policy 2.7.13 *To encourage, where appropriate, as part of the determination of resource consent applications, consultation with Tāngata Whenua be undertaken and reported to the decision-making authority.*

Policy 2.7.15 *Avoid effects in the first instance, and if they cannot be avoided, then remedy or mitigate any adverse effects of activities that could destroy, degrade or damage the cultural values associated with a site or area of cultural or spiritual significance when assessing proposals for subdivision, use and development.*

EFL have consulted with Taranaki Iwi, attending a hui in early August and incorporating their recommendations in the proposed conditions. The ongoing consultation with Taranaki Iwi will facilitate their involvement in the resource management process and will ensure that their cultural and traditional relationships are provided for.

Section 2.8 – Transportation

Objective 2.8.5 *Safe and efficient road and rail networks to ensure the reliable movement of people and goods.*

Objective 2.8.6 *Well-designed and located vehicle access and parking to ensure the safety of people, pedestrians, cyclists and vehicles and the efficient operation of the adjoining road network.*

Policy 2.8.11 *Establish a consistent approach to roading, access and subdivision design, in accordance with NZS 4404:2010 Land Development and Subdivision Infrastructure (including local amendments adopted by NPDC and STDC) and accepted national standards or guidelines and require all works to be designed and constructed to meet these standards.*

Policy 2.8.12 *Avoid, remedy or mitigate the adverse effects that may arise from increased traffic or changed traffic type, and new or changed access and intersections, through the use of standards and controls.*

Policy 2.8.13 *When activities provide off-street parking, ensure that it:*

(a) Is in proportion to the demand generated by all activities on the site. Parking areas may be shared by more than one activity where it can be demonstrated that the parking demand for each activity occurs at a different time or on a different day.

(b) Has both parking and loading spaces of such size, shape and layout to allow ingress and egress of vehicles without adversely affecting the safe and efficient function and operation of the adjoining road network.

(c) Is landscaped along road boundaries and adjacent to residential areas to maintain and protect amenity values.

The two existing vehicle crossings associated with the site will be upgraded in accordance with the relevant STDC requirements. A condition of consent to this effect is proposed. This will ensure safe and efficient access during the construction and operation of the Project.

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The construction traffic will also be managed in accordance with the recommendations of the Hawthorn Geddes TIA, which will involve the preparation of a CTMP. A condition of consent to this effect is proposed. This will ensure that the traffic generated during the construction phase of the Project does not detract from the safety or efficiency of the adjoining traffic network.

With respect to parking, given that no significant traffic movements are anticipated following the construction of the Project, no formal parking arrangements are proposed. Space for parking will be provided at the site office, which will be sufficient for the occasional visits associated with the operation of the solar farm.

Section 2.10 – Energy

Objective 2.10.5 *To recognise the significant local, regional and national benefits from the use and development of non-renewable energy resources by providing for the prospecting exploration, development and production of oil and gas energy activities.*

Objective 2.10.6 *To recognise the significant local, regional and national benefits from the use and development of renewable energy resources by providing for the investigation, development, operation, maintenance and upgrading of renewable energy activities, including electricity generation.*

Objective 2.10.7 *To ensure the adverse effects of oil and gas and renewable energy activities are avoided, remedied or mitigated, particularly adverse amenity, landscape and traffic effects on the District's infrastructure, sensitive environments, wāhi tapu sites/areas, sites of importance to Tāngata whenua, and nearby land uses and infrastructure, while recognising their technical, locational and operational constraints.*

Policy 2.10.10 *Ensure that the investigation, prospecting, exploration, development, use, production, and generation of energy resource activities, is managed in a way that recognises the national, regional and local benefits of the use and development of energy, while avoiding, remedying and mitigating adverse effects on the environment, including cumulative effects.*

Policy 2.10.11 *Ensure that investigation, prospecting, exploration, development, use, production, and generation of energy resource activities are appropriately located to:*

(a) avoid adverse effects of activities on the characteristics and qualities that contribute to:

(i) natural character in areas of the coastal environment identified as having outstanding natural character; and

(ii) the values of outstanding natural features and landscapes;

(b) avoid significant adverse effects and avoid, remedy or mitigate adverse effects of activities on the characteristics and qualities that contribute to natural character, or other natural features and landscapes, in all other areas of the coastal environment;

(c) avoid, remedy or mitigate adverse effects of activities on:

(i) the other special values and qualities of the coastal environment; and

(ii) the character and amenity values of the urban environment.

Policy 2.10.14 *In determining an application for resource consent for the use and development of renewable energy resources where any potential adverse effects are not fully understood or are uncertain and associated risks are considered to be acceptable, have regard to the merits of adopting adaptive management measures to avoid, remedy or mitigate any adverse effects on the environment.*

These provisions specifically require that regard is had to the benefits associated with renewable electricity generation activities. The range of positive effects facilitated by the proposal are detailed in section 5.12 of this report. The expert consenting panel should have particular regard to these positive effects when considering the Project in accordance with these provisions.

Section 5 of this report also details how any adverse effects on the environment will be avoided, remedied, or mitigated to be less than minor.

Section 2.17 – Indigenous biodiversity

Objective 2.17.3 *Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate subdivision, use and development.*

Objective 2.17.4 *The maintenance and enhancement of indigenous biodiversity through the protection, enhancement and restoration of indigenous habitats and indigenous vegetation.*

Policy 2.17.7 *Avoid, remedy or mitigate any significant adverse effects of subdivision, use and development that would result in a loss of indigenous biodiversity values such as:*

(a) Clearance, modification, damage or destruction of large areas of intact indigenous vegetation.

(b) Clearance of indigenous vegetation in regionally significant wetlands.

(c) Subdivision of land and location of buildings and works in close proximity to areas of significant indigenous vegetation and significant habitats of indigenous fauna.

(d) Uncontrolled stock grazing that can damage indigenous vegetation and regeneration.

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(e) *Increased exposure to invasive introduced plant and animal species that pose a threat to indigenous biodiversity.*

Policy 2.17.9 *Protect Significant Natural Areas, and maintain and enhance indigenous biodiversity values, having regard to the following matters:*

(a) *Actual or potential impacts on the significance of the affected area and on ecological values (including habitat, vegetation and fauna), and cultural, intrinsic and/or amenity values.*

(b) *The sustainability of the habitat or area of vegetation proposed to be modified or damaged or any adjoining habitat or area of vegetation to an area proposed to be affected.*

(c) *The representativeness of the affected vegetation or habitat and impact on its interrelationship or continuity with other habitats or areas of indigenous vegetation.*

(d) *Whether the affected area retains the presence of rare or distinctive, threatened or at risk, indigenous flora or fauna species.*

(e) *The extent to which the proposal is the minimum necessary to protect significant indigenous vegetation and significant habitats of indigenous fauna.*

(f) *Significant residual effects should be offset, or where 'no net loss' cannot reasonably be achieved, addressed by environmental compensation measures, proposed or agreed to by the applicant.*

As detailed in section 5.3 of this report, the Beca EIA concludes that the adverse effects associated with the construction and operation of the Project on ecological values have been avoided where possible through design and can otherwise be minimised through the implementation of management plans.

The implementation of terrestrial and/or riparian planting could also result in a net gain in ecological value due to increased indigenous dominance, habitat, and ecosystem services provision.

Section 2.18 - Waterbodies

Objective 2.18.4 *To preserve the natural character of the district's lakes, rivers, streams, wetlands and other waterbodies and protect them from inappropriate subdivision, use and development.*

Objective 2.18.7 *To maintain and enhance the recreational and amenity values of lakes, rivers, streams and other waterbodies.*

Policy 2.18.9 *Avoid, remedy or mitigate the adverse effects of subdivision, use and development that would detract from or compromise the natural character, ecological, recreation, amenity, heritage and cultural values of lakes, rivers and other waterbodies.*

Policy 2.18.10 Ensure that subdivision, use and development is of a scale, location, and design that protects the natural character of lakes, rivers and other waterbodies and maintains and enhances their values by having regard to the following matters in assessing proposals:

(a) Extent to which natural processes, elements and patterns that determine the natural character of the water body are sustained, and/or restored and rehabilitated;

(b) Degree of protection of vegetation cover and patterns, including use of a buffer or riparian margin;

(c) Compatibility with existing level of modification to the environment;

(d) Functional necessity to be located in or near the waterbody, and no reasonably practicable alternative locations exist;

(e) Ability to mitigate any potential adverse effects of subdivision, use and development; and

(f) Provision of public amenity and access to land acquired by Council for reserve purposes.

Policy 2.18.12 *Promote sustainable management practices in order to maintain and enhance the natural functioning of waterbodies, and improve water quality.*

Policy 2.18.13 *Promote and encourage the development and maintenance of riparian fencing and planting along waterbody margins.*

The design of the solar farm has been specifically undertaken to avoid disturbance to the watercourses and wetlands located on the site as much as practicably possible. This includes a 10m setback from the intermittent and permanent watercourses, and the avoidance of the wetland areas. The enhancement of the riparian margins and the wetlands will also be a key focus of the proposed ERMP.

An ESCP will also be prepared and implemented for the duration of the construction phase, ensuring that the earthworks and associated management of stormwater does not detract from the values of the watercourses or wetlands.

The design of the culverts will be undertaken with reference to fish passage design guidelines, while the construction works will be timed and undertaken to avoid injury/mortality of native fish. These measures will be specified in the ERMP.

6.8.3 Conclusion

Overall, the Project is consistent with the policy framework of the STDP.

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6.9 Part 2 – The Resource Management Act, 1991

6.9.1 Introduction

Clause 9(1)(g)(i) of Schedule 6 of the Act requires that an application includes an assessment against Part 2 of the RMA. An assessment against the relevant sections under Part 2 is provided below.

6.9.2 Section 5

The purpose of the RMA, as contained in Section 5, is to promote the sustainable management of natural and physical resources. Section 5(2) states that:

(2) In this Act, **sustainable management** *means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—*

(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

The proposal accords with the purpose of the RMA for the following reasons:

- The proposal represents a transition towards renewable energy, consistent with s7(j) of the RMA.
- The proposal will facilitate a range of positive effects as outlined in section 5.12 of this report. These include economic effects, sustainable management of natural resources, achieving Government targets, facilitating a net gain in ecological values, and contributing to well-functioning urban environments.
- Renewable energy will assist with meeting the foreseeable needs of current and future generations and will improve the long-term resilience and security of supply for the Taranaki region.
- The Rural Zone is the appropriate zone in which to locate the proposed solar farm with respect to the STDP, while the site-specific design will facilitate agricultural use of the land in conjunction with the solar farm.
- The proposal will facilitate an acceptable level of adverse effects, together with significant positive effects associated with the ecological rehabilitation and generation of renewable energy.

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6.9.3 Section 6

Section 6 of the RMA relates to matters of national importance that all persons exercising functions and powers under the RMA, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for. The matters are listed below.

(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:

(e) the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:

(f) the protection of historic heritage from inappropriate subdivision, use, and development:

(g) the protection of protected customary rights:

(h) the management of significant risks from natural hazards.

The proposal provides for the preservation of the natural character of the watercourses and wetlands (and their margins) on the subject site via appropriate setbacks, stock exclusion, and riparian planting. These measures will contribute to a net gain in ecological values, and the maintenance of the natural character of the waterways. This aligns with subclause (a).

The ongoing consultation process with Taranaki Iwi aligns with subclause (e).

The Beca civil report concludes that the proposal will have a negligible impact on flood risk. This ensures that the proposal aligns with subclause (h).

The proposal does not impact any of the other matters of national importance listed in section 6 of the RMA.

6.9.4 Section 7

Section 7 of the RMA outlines 'other matters' that consenting authorities are required to have regard to. The matters are listed below.

(a) kaitiakitanga:

(aa) the ethic of stewardship:

(b) the efficient use and development of natural and physical resources:

(ba) the efficiency of the end use of energy:

(c) the maintenance and enhancement of amenity values:

(d) intrinsic values of ecosystems:

(e) [Repealed]

(f) maintenance and enhancement of the quality of the environment:

(g) any finite characteristics of natural and physical resources:

(h) the protection of the habitat of trout and salmon:

(i) the effects of climate change:

(j) the benefits to be derived from the use and development of renewable energy.

Subclauses (a) and (aa) are directly addressed through the ongoing consultation with Taranaki Iwi.

The combining of solar and agricultural uses maximises the efficient use and development of natural and physical resources in accordance with subclause (b).

As detailed in section 5.10 of this report, the design of the solar farm has been undertaken to specifically maintain (and enhance where possible) amenity values in accordance with subclause (c).

Maintaining the intrinsic values of ecosystems is a key focus of the Project. This has been achieved by undertaking an ecological constraints assessment and avoiding impacts on ecological features through the design process. Where ecological features cannot be avoided, any associated effects will be remedied or mitigated in accordance with the Beca EIA and proposed EMRP.

Subclause (j) requires that regard be had to the benefits derived from the use and development of renewable energy. The benefits are detailed in section 5.12 of this report and are a key consideration with respect to this application.

The proposal does not impact any of the other matters listed in section 7 of the RMA.

6.9.5 Section 8

Section 8 of the RMA requires that consenting authorities take into account the principles of the Treaty of Waitangi.

While not specifically defined in the RMA, it is generally accepted that the following are appropriate principles to consider in the context of section 8 of the RMA:

- The principle of partnership, which encompasses a duty to consult, act in good faith, and make informed decisions.

- The principle of active protection, which encompasses a duty to ensure Māori interests are protected.

EFL has initiated consultation with Taranaki Iwi with respect to the Project. While a CIA will not be provided, EFL continues to consult in good faith and has attended a hui with Taranaki Iwi. This has facilitated the forming of a meaningful relationship and the ability to make informed decisions with respect the protection of Taranaki Iwi interests. This is achieved through a mutually agreed set of consent conditions where possible, or otherwise through a formal relationship agreement between EFL and Taranaki Iwi.

For these reasons, the proposal gives effect to the principles of the Treaty of Waitangi.

6.9.6 Conclusion

Overall, the proposal aligns with the purpose and principles as expressed in Part 2 of the RMA.

7. RELEVANT TREATY OF WAITANGI SETTLEMENT

7.1.1 Taranaki Iwi Claims Settlement Act 2016

The Taranaki Iwi Claims Settlement Act 2016 gives effect to the Taranaki Iwi Deed of Settlement. This is the only settlement of historical Treaty claims relating to the Project area.

Te Kāhui o Taranaki Trust is the sole post-settlement governance entity associated with the Treaty settlement under the Taranaki Iwi Claims Settlement Act 2016.

The Taranaki Iwi Deed of Settlement is the final settlement of all Taranaki Iwi's historical claims resulting from acts or omissions by the Crown before 21 September 1992. It includes an agreed historical account and Crown acknowledgements, cultural redress, and financial and commercial redress.

The subject site is located within the Taranaki Iwi area of interest as shown in part 1 of the Deed of Settlement Attachments.

In regard to the redress provided by the Taranaki Iwi Claims Settlement Act 2016, the most relevant matters are considered to be:

1. The involvement of Taranaki Iwi in the resource management process; and
2. The health of waterways, noting the range of watercourses included in the statutory acknowledgements (although none relate to the watercourses that traverse the site).

With regards to the involvement of Taranaki Iwi in the resource management process, EFL have and continue to consult, attending a hui in early August 2023 and incorporating their recommendations into the proposed consent conditions. This process will ensure Taranaki Iwi's involvement in this resource management process. It is also understood that the iwi will have the opportunity to nominate someone to sit on the expert consenting panel.

With regards to the health of waterways, the proposal will facilitate positive effects on the water quality of the watercourses and wetlands located on the site by adopting a 10m setback, rehabilitating the riparian margins, providing fencing to exclude stock, and converting the agricultural land use of the site from dairy to sheep. These measures, which will be finalised in consultation with Taranaki Iwi, will ensure that the health of the watercourses on the site are enhanced.

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8. CONCLUSION

The Project delivers a substantial renewable energy development that will directly contribute to achieving the purpose of the Act. This includes delivering a range of economic benefits for various industries that have been negatively impacted by the Covid-19 pandemic, contributing to social and cultural well-being, generating a range of public benefits, and avoiding significant adverse effects on the environment.

The consenting process under the Act will also allow the Project to proceed much sooner than it otherwise would under the RMA, allowing the range of benefits to also be delivered much sooner.

The actual and potential adverse effects associated with the construction and operation of the Project have been assessed in accordance with a range of relevant technical reports. The effects have been avoided through design where possible, and through a range of measures (imposed through consent conditions) aimed at remedying and mitigating the residual effects. While the adverse effects will be less than minor, they also need to be balanced against the range of positive effects associated with the Project.

The Project aligns with the policy direction of the relevant statutory documents, with the elevated importance assigned to the development of regionally and nationally significant renewable energy generation activities permeating through the national, regional, and district documents.

The Project will contribute to achieving the Government strategies and targets for transitioning to a low emission economy, achieving 100% renewable energy generation, and a net carbon zero future.

Having regard to the relevant requirements and considerations under the Act and RMA, the Project can be granted resource consent subject to appropriate conditions of consent.

Invitation to comment on applications for referral under the Covid-19 (Fast-track Consenting) Act 2020

You have been invited to provide comments to the Minister for the Environment (the Minister) on an application to refer a project to an expert consenting panel for fast-track consenting under the Covid-19 Recovery (Fast-track consenting) Act 2020 (FTCA).

The information below provides the context for this application, the reasons for the invitation to comment and information to assist you in responding. Please note that the Minister has requested that you reply within 10 working days from receipt of the application and invitation to comment. Under section 21(5) of the FTCA the Minister is not obliged to consider any comments provided after this time.

Overview of the fast-track process

The FTCA introduces a short-term consenting process to fast-track projects that can boost employment and economic recovery.

For a project to access the fast track process the Minister must first make a decision to refer the project to an expert consenting panel. The referral process involves seeking comment from local authorities and Ministers of the Crown. The Minister also has discretion to seek comment from any other person.

It is important to note that the Minister's role is not to undertake a detailed assessment of the merits or effects of the project at this stage.

The Minister's referral decision must be made in the context of the eligibility criteria in section 18 of the FTCA, and the matters in sections 19 and 23(5) of the FTCA. Specifically, section 18 requires the Minister to be satisfied that the proposed project:

- will help to achieve the purpose of the FTCA
- does not include an activity that is prohibited in the RMA, RMA regulations or a local authority plan or proposed plan
- does not occur on land returned under a Treaty settlement if the relevant landowners have not agreed in writing
- does not occur in a customary marine title area if the holder of the relevant customary marine title order has not agreed in writing

- does not occur in a protected customary rights area, and have a more than minor effect on the exercise of the protected customary right, if the holder of the relevant protected customary rights recognition order has not agreed in writing.

In considering whether a proposal would help achieve the purpose of the Act, section 19 of the FTCA specifies matters the Minister may consider. These include whether the project will give rise to economic costs and benefits for people or industries affected by COVID-19; whether the project will create a public benefit; the effect on social and cultural wellbeing of current and future generations, and whether there is potential for significant adverse effects.

Section 23(5) of the FTCA gives reasons why the Minister may decline to refer an application for fast-tracking, whether or not it meets the criteria in section 18. These include:

- the applicant has not provided enough information to determine whether the project meets the section 18 criteria
- it would be more appropriate for the proposed project, or part of the project, to go through standard consenting or designation processes under the RMA
- the proposed project is inconsistent with a relevant national policy statement
- directing the project to a panel would be inconsistent with a Treaty settlement
- the proposed project involves an activity that would occur on land that the Minister for Treaty of Waitangi negotiations considers necessary for Treaty settlement purposes
- the applicant has a poor history of environmental regulatory compliance
- there is insufficient time for the application to be referred and considered before the FTCA is repealed (ie, 8 July 2022).

Comments you choose to provide at this point will assist the Minister to determine whether a project will help to achieve the FTCA's purpose and should be referred. **Please note that your comments, including your name and contact details, will be made available on our website and to the applicant either in response to an Official Information Act request or as part of the Ministry's proactive release of information.**

Please advise if you object to the release of any information contained in your comments, including your name and contact details. You have the right to request access to or to correct any personal information you supply to the Ministry.

If the Minister decides to refer a project, it progresses to an expert consenting panel who makes a decision on whether to grant consents or notices of requirement. The decision will be made in accordance with the relevant decision-making considerations in the RMA and applying the purpose of the FTCA and section 6 of the Act (Treaty of Waitangi).

Guidance on comments sought

The comments the Minister invites from you at this stage of the fast-track process are intended to be high-level, and in the context of the matters in sections 18, 19 and 23 (outlined above).

For example, the Minister would like:

- your initial thoughts on whether this project could create benefits for your district / region
- your initial thoughts on significant issues that could arise from this project (if any)
- your view on whether it would be more appropriate for the project, or part of the project, to go through standard RMA consenting or designation processes

- a summary of the applicant's environmental regulatory compliance history (if they have a poor compliance history)
- a summary of any joint management agreement, Mana Whakahono ā Rohe, transfer of power, memorandum of understanding, or other relationship agreements under the RMA, including the parties involved
- information on any other significant matters you consider the Minister should be aware of when deciding whether a project should be referred to an expert consenting panel.

The letter from the Minister may also ask for your comment on other specific matters.

Additionally, section 6 of the FTCA requires any person performing functions and exercising powers under this FTCA to act consistently with the principles of the Treaty of Waitangi and Treaty settlements (including Treaty settlement deeds), and this also provides relevant context for your comments.

Please note you are not expected to undertake a detailed assessment of the effects of the proposal.

A template is attached for you to provide your comments on. Please use a separate form for each application.

If you wish to discuss this application, please contact Fast-track Consenting Team officials at# fasttrackconsenting@mfe.govt.nz.#

Opportunities for further comment and involvement

You will have a further opportunity to provide comments for any projects that the Minister refers to an expert consenting panel.

At that stage of the fast-track process, the applicant is required to lodge a detailed application for resource consents and/or notices of requirement with the Environmental Protection Authority. An application must include an environmental assessment and information about cultural impacts.

An expert consenting panel will be appointed for each project by the panel convener, who is a retired Environment Court judge. The panel must include a chair and one person nominated by the relevant local authorities, and one person nominated by the relevant iwi authorities. Further panel members may be included, as outlined in clause 3 of Schedule 5 of the FTCA. The panel convener will therefore seek nominations from the relevant groups for these positions prior to making the panel appointments.

The panel is responsible for fully assessing the merits of the proposed project and deciding whether to grant the resource consents and/or notices of requirement. The panel will be given any comments you provided earlier to the Minister, and must also invite further comment from you, relevant iwi authorities, Ministers of the Crown and other persons and groups referred to in clause 17 of Schedule 6 of the FTCA1#

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Comments on applications for referral under the COVID-19 Recovery (Fast-track Consenting) Act 2020

This form is for local authorities to provide comments to the Minister for the Environment on an application to refer a project to an expert consenting panel under the COVID-19 Recovery (Fast-track Consenting) Act 2020.

Local authority providing comment	South Taranaki District Council (STDC)
Contact person (if follow-up is required)	Liam Dagg Group Manager Environmental Services, STDC liam.dagg@stdc.govt.nz (06) 278 0555; 027 2487775

Comment form

Please use the table below to comment on the application.

Project name	The Opunake Solar Farm
General comment – potential benefits	The South Taranaki District Council (STDC) sees The Opunake Solar Farm as a significant advancement in renewable energy alternatives for the district and for New Zealand. We concur with the benefit statements in the project application. This project is a key step in achieving a transition into sustainable and renewable energy options for the region. The project aligns with the aspirational goals of both the Taranaki 2050 Roadmap and Tapuae Roa Economic Development Strategy which have both been developed to the region into a low-emissions economy. This project aligns with the climate change and environmental sustainability goals and targets in STDC's Environment and Sustainability Strategy. STDC notes that the intent is to optimise the use of productive farmland by having dual occupancy of the site. This has been identified within the application as constructing the solar panels at a height that enables continued use of the land below as grazing for stock. STDC sees this as a prime opportunity to set an example for other such solar projects and activities within the district. It is expected that the project will provide considerable employment opportunities in South Taranaki, which will bring people with highly technical knowledge and skill sets to the district, helping to improve the local economy and improving career opportunities for our rangatahi. Promoting employment and supporting investment in our District will also help us to recover from the economic and social impacts of Covid-19. Furthermore, the proposed site is located within reasonable proximity of Opunake and Hawera, two of the biggest towns within the South Taranaki district, which will encourage sustained employment for the towns and wider areas.

General comment – significant issues	Loss of productive farmland if dual occupancy of the site is not undertaken – grazing below the solar panels. Reverse sensitivity effects on sensitive activities (dwellings etc.) within the area, including noise and traffic from construction phase. Wetland and waterbody degradation if protection mechanisms are not implemented. Visual impact from surrounding properties but also a significant change on the South Taranaki landscape Remediation of site after the activity ceases – site will be listed with identified HAIL activity and subject to provisions of NES-CS. Further, is the intent to return the site to productive farmland as it is now or will it be used for a different purpose. Changes to ecological habitats and well-established areas that may impact flora and fauna species within the wider area. Natural Hazards (fault lines, waterbodies, lahar risk)
Is Fast-track appropriate?	Yes. Council believes it is appropriate for the project to go through the fast-track consenting process. It achieves the purpose of the Act, by contributing to New Zealand's efforts to mitigate climate change and transition more quickly to a low-emissions economy. The project meets the criteria specified in section 18 of the Act to have it referred to a consenting panel. As explained in the application, the timeframe for the project to be processed under this Act aligns with manufacturing of the solar panels, allowing the production of power to the Opunake substation to commence sooner.
Environmental compliance history	Energy Farms Limited does not have any negative environmental regulatory compliance or enforcement history with STDC.
Reports and assessments normally required	Under a normal land-use consent process, the project would be considered a discretionary activity by the STDC District Plan. It would require an Assessment of Environmental Effects that is proportionate to its significant scale. Chapter 20 of the STDC District Plan identifies general and specific information required for Large-scale renewable electricity generation activities. Reports and assessments required include: • Cultural Impact Assessment and Archaeological assessment • Landscape and Visual Effects assessment – to be undertaken in respect of surrounding properties AND the South Taranaki landscape as a whole. • Ecological assessment on indigenous vegetation, fauna, local catchments and how earthworks may disrupt natural landforms. • Traffic impact assessment report • Acoustic assessment report and provisions for safeguards and contingencies in relation to noise effects and effective reporting and monitoring methods of noise. • Engineering and Geotechnical report • Preliminary Site Investigation (PSI) or Detailed Site Investigation (DSI) in some instances.
Iwi and iwi authorities	STDC identifies Taranaki Iwi as the iwi authority for the project area. The project application does identify that consultation with treaty settlement entity Te Kahui o Taranaki has been sought on several occasions.

Relationship agreements under the RMA	There are no formal relationship agreements, beyond recurring Iwi Liaison Committee and Huinga a Iwi meetings that provide an opportunity for discussions between parties on projects such as this. Council is committed to developing Mana Whakahono a Rohe agreements if formally initiated by any of the four Iwi Authorities that cover the district. There are no identified statutory acknowledgements between the Crown and Taranaki Iwi that are relevant to the Kina Road project site where the solar panels are to be located.
Insert responses to other specific requests in the Minister's letter (if applicable)	**1. Are there any reasons that you consider it more appropriate for the project, or part of the project, to proceed through existing Resource Management Act 1991 (RMA) consenting processes rather than the processes in the FTCA?** No, STDC believes the project should be consented under the Covid-19 (Fast-track Consenting) Act 2020. The fast-tracking legislation provides a holistic and integrated framework for the project to be considered. By comparison, the District Plan does not provide a direct pathway for consenting of a project with this scale and complexity, with this due mainly to the number of district plan chapters that have to be considered in both quantifying and assessing the effects. This project would be limited notified if it came to Council as a resource consent, with this due mainly to the impacts on amenity and the breadth of the potential affected party catchment. We consider the fast-track consenting legislation provides an appropriate level of community input. **2. Does the applicant, or a company owned by the applicant, have any environmental regulatory compliance history in your district?** Energy Farms Limited have no environmental regulatory compliance history with STDC.
Other considerations	During the construction phase, dry grass is the highest fire risk and the primary sources of ignition are cigarettes, cutting and welding. This should be addressed in a comprehensive construction management plan, which we anticipate will be a standard condition of any consenting pathway. It is noted that the site of the proposed Solar Farm project is identified by Taranaki Regional Council's property information map as being Land Use Capability 2 and 3. Therefore, the project is subject to the provisions of the National Policy Statement for Highly Productive Land 2022. There are known fault lines located in and around Opunake. It is recommended that further consideration into these fault lines is undertaken as part of the assessment for an activity of this scale. The Hiringa Energy Green Hydrogen Project was assessed under the FTCA within the South Taranaki District. It is STDC's expectation that lessons are learnt from this previous consent and changes or improvements on the process will be applied for this and future consents passed through the Act process.

Note: All comments, including your name and contact details, will be made available to the public and the applicant either in response to an Official Information Act request or as part of the Ministry's proactive release of information. Please advise if you object to the release of any information contained in your comments, including your name and contact details. You have the right to request access to or to correct any personal information you supply to the Ministry.

Te Kaunihera ō Taranaki ki Te Tonga
South Taranaki District Council

Karakia

6. Karakia

Ruruku Whakakapi – Closing Prayer

Unuhia, unuhia	*Draw on, draw on,*
Unuhia ki te uru tapu nui	*Draw on the supreme sacredness*
Kia wātea, kia māmā te ngākau, te	*To clear, to free the heart, the body and the*
tinana, te wairua i te ara takatū	*spirit of mankind*
Kia wātea, ka wātea, āe rā, kua wātea	*To be clear, will be clear, yes is cleared.*
Rire rire hau pai marire!	*Deeply in peace!*