

IN THE MATTER of a direct referral under the
Resource Management Act 1991 (**RMA**)

AND

IN THE MATTER of an application by Far North
Solar Farms limited to the South Wairarapa
District Council for resource consents to enable
the establishment and operation of a 175-
megawatt peak solar farm located on various
sites at Moroa Road, Greytown

**SECTION 87F REPORT OF NICHOLAS JAMES POLLARD ON BEHALF OF SOUTH
WAIRARAPA DISTRICT COUNCIL**

9 OCTOBER 2023

Preamble

- (a) This report is prepared under section 87F(3) and (4) of the Resource Management Act 1991 (RMA). It sets out the advice of the reporting planner. The reporting planner's recommendation is not the decision on the application. A decision will only be made after the Court has conducted a hearing on the application.
- (b) While the RMA is silent as to whether reports prepared under section 87F should include a recommendation as to whether consent should be granted or declined. This report has analysed the application against the relevant statutory criteria, and the reporting planner has not provided a recommendation as to whether the application should be granted or declined. The reasons for this are set out in this report.
- (c) This report has been prepared without knowledge of the content of any evidence or submissions that will be made to the Court; consequently, for the benefit of submitters I record that my assessment is not binding on the Environment Court.
- (d) To assist the Court, a set of draft conditions of consent have been prepared and will be subject to any amendments that may be proposed by the parties and such further amendments that the Court may deem necessary.

Application Details:

Consent Number	RM220103
Applicant	Far North Solar Farm Limited
Lodgement date	21 December 2022
Description of Activity	Land use consent
Site Address	415 Moroa Road, Greytown; 312 Bidwills Cutting Road, Greytown; 1942 State Highway 2, Greytown; 18 Pharazyns Road, Featherston
Legal Description of Site	Pt LOT 6 DP 8803 (WN391/56) Pt LOT 7 DP 8803 (WN391/56) Pt LOT 10 DP 3106 (WN583/131, WN583/132) SECTION 27 MOROA SETT (WNE1/330) LOT 1 DP 52574 BLKS IV WAIRARAPA SD BLK (WN22A/575) PT SEC 122 MOROA DISTRICT (WN36B/542) LOT 1 DP 76478 (WN43B/286)
Valuation number/s	1823010500 1823009903 1823020800 1825018800
Zone	Rural (Primary Production)
Type of Consent Sought	Land Use
Operative District Plan rule/s	<i>Rural (Primary Production) Zone Rules – Chapter 4</i> <i>4.5.5 Restricted Discretionary Activities</i> <i>The following are Restricted Discretionary Activities:</i> <i>(c) Any activity that is not required for primary production and residential purposes that requires either: (a) the construction or use of a building over</i>

	<p>25m² in gross floor area; or (b) the external storage of goods, products or vehicles (including contractors yards); and is not otherwise listed as controlled, restricted discretionary, discretionary or non-complying activity.</p> <p>4.5.5 Restricted Discretionary Activities The following are Restricted Discretionary Activities:</p> <p>(e) Any activity that does not meet one or more of the standards for permitted or controlled activities. Discretion is restricted to the following matters:</p> <p>(i) Avoiding, remedying or mitigating of any effects deriving from non-compliance with the particular standard(s) that is not met.</p> <p>Standard 4.5.2(c) (ii) requires a 25m setback from the road boundary of an unsealed road. The proposed solar panels will be located approximately 12m from the Moroa Road boundary.</p> <p><i>District Wide Land Use Rules</i> 21.6 Discretionary Activities The following are Discretionary Activities:</p> <p>(a) Any activity that does not comply with the standards for permitted activities or is otherwise not specified as a controlled or restricted discretionary activity.</p>
Activity Status	Discretionary Activity under the Wairarapa Combined District Plan
Site visit undertaken	Yes – 29 March 2023 and
Pre-application meeting held with Council	15 June 2022, not attended by report author
Further information requested	Yes – 2 February 2023, 27 June 2023 Refer Section 5.0 of the report
Related Resource Consents	N/A
Further information/additional reports received	Yes – 1 March 2023, 11 August 2023 Refer Section 5.0 of the report
Peer Reviews	<ul style="list-style-type: none"> • Assessment of Landscape Effects – Emma McRae, Dated 7 March 2023 • Far North Solar Farms- Greytown solar farm: Acoustic review – Jon Styles, Dated 12 September 2023 • Roading Conditions prepared by South Wairarapa District Council Roading Engineer Anup Dahal, dated 29 September 2023 • Water Services Resource Consent Conditions – Assessment of Application – Lindsay Blakie dated 25 August 2022

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Attachment 1: Summary of submissions and submissions

Attachment 2: Peer reviews and recommended conditions

Attachment 3: Objectives and Policies

Attachment 4: s92 Request and Responses Pre-Notification

Attachment 5: s92 Request and Responses Post-Notification

Attachment 6: Additional Information

Attachment 7: Draft Conditions

1.0 Introduction

- 1.1 My full name is Nicholas James Pollard. I am an Associate Partner at Boffa Miskell Limited.
- 1.2 I have a Bachelor of Science (1997) and a Masters degree in Planning (Practice) (2006) and a Masters degree in Urban Design (2010) all from the University of Auckland. I have been a full member of the New Zealand Planning Institute since 2014. I am also a member of the Resource Management Law Association. I have completed Making Good Decisions in 2022 and am an accredited Hearings Commissioner.
- 1.3 I have 17 years planning and resource management experience. I have been a planning consultant with Boffa Miskell Limited since 2015. Prior to that I had been employed in the public sector working for the Waitakere City Council and the Auckland Council. My roles included regulatory planning, plan preparation and urban design review.
- 1.4 I was engaged in June 2023 to provide planning services to South Wairarapa District Council in relation to processing the resource consent application. I am familiar with site having conducted a site visit on 29 June 2023.

Code of Conduct

- 1.5 I confirm that I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023 and that I have complied with it when preparing this hearing report. Other than when I state that I am relying on the advice of another person, this report is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.
- 1.6 I am the author of this s87F Report. The data, information, facts, and assumptions I have considered in forming my opinions are set out in this report. Where I have set out opinions in this report, I have given reasons for those opinions.

2.0 Executive Summary

2.1 The key conclusions of my report are as follows:

- a) The application lodged on 21 December 2022, along with the additional technical information provided post-lodgement, provide a relatively comprehensive overview of the potential and actual effects and proposed mitigations associated with the construction, operation and maintenance of a 175-megawatt peak solar farm located at 415 Moroa Road, Greytown.
- b) The overall activity status for the proposal when assessed against the relevant provisions of the South Wairarapa District Plan is a discretionary activity.
- c) Overall, subject to the recommended conditions of consent, I consider that the effects of the proposal on the environment in terms of landscape, noise, transmission lines, traffic and construction can be appropriately avoided, mitigated, and managed. However, some outstanding matters remain in relation to:
 - Actual and potential effects associated with the construction, operation and decommissioning of the proposed switchyard which is a registered HAIL activity on the HAIL;
 - A formal assessment relating to the actual and potential effects on the LUC Class 2 soils proposed to be redeveloped for the use of a switchyard;
 - Whether any water takes are required for the proposed water tanks; and
 - Limited engagement with tangata whenua.
- d) With regards to s104(1)(b), due to the outstanding information gaps, the proposal is found to be contrary to the some of the provisions within relevant statutory documents, namely the National Policy Statement on Freshwater Management 2020, the Greater Wellington Regional Policy Statement and the Greater Wellington Natural Resources Plan 2023.

- e) With regards to an assessment under s104(1)(c) of the RMA, no other matters were considered relevant or reasonably necessary to determine the applications.
- f) With regards to Part 2 of the RMA in light of the uncertainties regarding consultation with tangata whenua the proposal has been assessed as being inconsistent with Part 2 section 6(e), 7(a) and 8 RMA, the RPS, the Greater Wellington Natural Resources Plan 2023 and the District Plan.

3.0 Site Description and Surrounding Environment

Subject Site

3.1 The site is located at 415 Moroa Road, 312 Bidwills Cutting Road, 1942 State Highway 2, Greytown, and 18 Pharazyns Road, Featherston. 312 Bidwills Cutting Road is located across four separate lots along Moroa Road and Bidwills Cutting Road amalgamated as a single property. However, the proposed solar farm will only be located on land accessed off Moroa Road as shown on the application drawings and copied in Figure 1 below. The proposed solar farm will be located on the southern portion of 1942 State Highway 2. The proposed solar farm will cover an area of 170 hectares of the 235 hectare site.

3.2 The site of the proposed solar farm is legally described as:

Address	Legal Description	Area
312 Bidwills Cutting Road – Morora Road sites	Part Lot 10 DP 3106	54.9029 ha
	Part Lot 10 DP 3106 Block I Huangarua S D	47.1446 ha
	Lot 1 DP 76478 (part of)	48.8299 ha
	Section 27 Moroa Settlement	24.7085 ha
	Part Section 122 Moroa District	5.4679 ha
1942 State Highway 2	Lots 6 and 7 DP 8803	24.5690
		21.4123 ha
18 Pharazyns Road, Featherston	Lot 1 DP 52574	44.5750 ha



Figure 1: Site location with approximate boundary shown in red (refer to the soil assessment report provided by Hanmore Land Management Limited).

- 3.3 The site is currently used for primary production purposes, principally pastoral grazing, as is the surrounding area. There are no Hazardous Activities and Industries List (HAIL) activities associated with the site, however, Transpower's Masterton – Upper Hutt A (MST-UHT A) 110kV transmission line and associated support structures traverse the northern parcel with an east-west orientation. Water races are present throughout the site, which currently provide drinking water for livestock. There are no other waterbodies or wetlands located on the site.
- 3.4 Some parcels with frontage to Moroa Road can be accessed by vehicle access points, these are not formed or sealed recognising that Moroa Road is unsealed with vegetated margins (grass and herbaceous weeds). The site is relatively flat with existing mature shelterbelts growing in an irregular pattern within the site, with the majority of the site grassed. Existing built structures on the site consist of a few agricultural sheds. From an aerial

photograph, three buildings are present on the northern part of the site and are of a variety of sizes. There are no existing dwellings on the site.

- 3.5 The AEE states that there are no known natural hazards that affect the site. It is noted that Greater Wellington has mapped the Papawai Faultline through a section of the proposed site and the property is mapped as being in a Medium Rural Wildfire Risk zone.
- 3.6 The site is zone Rural (Primary Production) under the Wairarapa Combined District Plan (WCDDP). There are no other District Plan notations, overlays, or management areas relevant to the site.
- 3.7 The surrounding sites located along Moroa Road adjacent to the substation located on Bidwills Cutting Road, and Battersea Road are primary production in nature, with some residential houses in the area.
- 3.8 State Highway 2 is located to the north and west of the site and is approximately 550m from the site at its closest point.

Surrounding Area

- 3.9 The surrounding environment of the proposed site is used for Rural Primary Production purposes. The land is generally flat and is characterised by patchwork shelterbelts, both within and marking the perimeter properties. The area is dominated by exotic species, particularly pasture.
- 3.10 Surrounding properties are used for Rural (Primary Production) purposes, with residential houses present throughout. There are also examples of rural lifestyle sized properties scattered throughout the surrounding Rural (Primary Production) zone.
- 3.11 The Tauherenikau River is located approximately 2.5km west of the subject site and runs into Lake Wairarapa to the south. Ruamahanga River is approximately 3km to the east of the site.
- 3.12 There are several scheduled notable trees in the surrounding area along with several scheduled heritage sites located within the rural zoned area. The closest features are located at 42 Moroa Road, Featherston approximately 1km west of the subject site.

4.0 Section 95A and Section 87E Decisions

4.1 The application was received by Council on 21 December 2022 with the decision to publicly notify the application made on 28 April 2023. The reasons for public notification followed the four steps set out in Section 95A of the RMA as summarised below:

Step 1 (S95A(3)):

4.2 Step 1 was not considered applicable, as the applicant did not request public notification. A request for further information was made and information and amended plans were provided to Council. No further information was therefore considered necessary to make a notification assessment. The application does not include any proposal jointly to exchange recreation reserve land.

Step 2 (S95A(5)):

4.3 The public notification of the application is not precluded by Step 2, as there is no rule or National Environmental Standard (NES) for the activity that precludes public notification, therefore Step 3 applies.

Step 3 (S95A(8)):

4.4 Step 3 requires consideration of whether the activity will or is likely to have adverse or potential effects on the environment that are more than minor. Sections 95D(b) and (c) provide that, when determining the extent of the adverse effects of an activity or the effects on a person respectively, a council 'may disregard an adverse effect if a rule or NES permits an activity with that effect'.

4.5 There is no rule or national standard that permits such an activity (i.e., a solar farm). Therefore, no permitted baseline has been applied to the solar farm itself.

4.6 The assessment determined that in the short-term the introduction of built electricity infrastructure into a currently open pastoral landscape will have an adverse effect that is more than minor. In addition, the effects of construction over the short-term, would be more than minor due to the volume of construction traffic.

4.7 Overall, it was concluded the adverse or potential effects on the environment will be or are likely to be no more than minor.

4.8 The assessment found that the key aspects of the proposal where the effects would be more than minor are the short-term construction effects, particularly through traffic, noise and vibration, and the visual effects, particularly the change from the existing open pastoral landscape and its rural character and amenity values.

Step 4 (S95A(9)):

4.9 This step requires the consideration of whether special circumstances exist that warrant the application being publicly notified. It was considered that there were special circumstances in this instance for the following reason.

4.10 The Operative Combined District Plan was originally prepared over 17 years ago, with hearings into submissions occurring in 2007. It was made operative in 2011 once the final appeals were resolved. At the time of preparing and determining the Operative District Plan, solar farms were not an anticipated activity, but were a distant possibility of an unknown scale and nature.

4.11 The WCDP includes several trigger thresholds in the Rural Zone to capture “out-of-scale, out-of character” proposals as full discretionary activities. While individually the structures involved with a solar farm are relatively small (for example, compared with wind turbines), collectively, the scale of the proposal, involving 321,160 panels, installed on over 10,000 tables, over the site, together with 33 inverter structures, would be established on otherwise open pastoral land.

4.12 In addition, this application is the first received for a solar farm in the Wairarapa. The nature and scale of this proposal is relatively large and introduces a new type of land use in the Wairarapa and its rural environment.

5.0 Section 92 Requests for Further Information and Responses Given

5.1 Two requests for further information were sought. One prior to notification on 2 February 2023 and one following notification on 27 June 2023 to clarify matters raised by submitters. The further information requested related to:

- (a) landscaping and visual assessments – including glint and glare;
- (b) ecology;
- (c) electricity transmission lines;
- (d) traffic;
- (e) highly productive land;
- (f) noise;
- (g) contamination from solar panels;
- (h) heat island effects; and
- (i) the statutory assessment.

5.2 Responses to these matters were received on 1 March 2023 and 11 August 2023.

5.3 Copies of the request and responses prior to notification are provided in Attachment 4. Copies of the request and responses post-notification are provided in Attachment 5.

5.4 Additional information was also provided in relation to:

- (a) An agreement to change the noise conditions recommended by MDA remove reference to reference to ' *dwellings existing at the time of consent* '. This change has been incorporated into the conditions provided in Appendix 8.
- (b) Amendments to the proposal following correspondence between the applicant and Fire and Emergency New Zealand (FENZ), including an agreement from the applicant to adopt consent conditions proposed by FENZ and an updated plan of the proposal. The conditions included a requirement for fittings attached to the water tanks, the design standard of water race crossings along the internal access roads and the requirement to prepare an Emergency Response Plan (ERP) in consultation with FENZ. These conditions have been incorporated into the conditions provided in Appendix 8.
- (c) Confirmation that the subject site contains an area of LUC Class 2 soils. No assessment of effects on the Class 2 soils has been provided.

Copies of the additional information provided is located in Attachment 6.

All the information provided has been incorporated into the overview of the proposal and have informed the effects assessment and statutory assessment where appropriate.

6.0 The Proposal

- 6.1 The proposal, as it is understood at the time of writing, has been derived from the application documents, including further information provided through the S92 process pre and post notification.
- 6.2 The applicant proposes to construct a solar farm across the three parcels of land that make up the subject site on Moroa Road, Greytown. The solar farm will consist of the following:
- (a) 4,720 solar arrays/ tables (made up of 321,160 solar panels) and associated structures, covering 170 hectares¹.
 - (b) 33 inverters located across the site.
 - (c) Medium voltage switchyard, adjacent to existing substation.
 - (d) Solar arrays will be mounted on a pile driven tracking system in an east-west orientation. The tables will be spaced with a minimum 6.4m gap.
 - (e) The maximum height of structures (at maximum tilt) will be 4.5m above ground.
 - (f) Flat height of structure will be 2.2m.
 - (g) Height when tilted down will be 1.55m.
 - (h) Ground clearance height approximately 300mm.
 - (i) A 40-foot container will be located by the switchyard and refurbished to operate as a staff office and data (SCADA) room that is required for the operation of the solar farm.

¹ Refer to section 3.0 of the landscape assessment prepared by Simon Cocker dated 8 December 2022 for site areas and solar farm extent

- (j) Water tanks for irrigation and firefighting supply. These are located adjacent to the internal road network and inverters with hard stand to provide for fire appliances.
- 6.3 The proposed solar panels will be located approximately 12 m from the road boundary.
- 6.4 The proposed activity, including construction works, will occur outside of the Electricity Transmission Corridor. Access to the transmission lines and support structures for Transpower will be maintained at all times. The applicant has agreed to comply with the recommended conditions put forward by Transpower and submitted as part of this application, refer Attachment 1.

Landscape Planting

- 6.5 The boundaries of the solar farm will be planted with vegetative shelterbelts that will act as visual screens from the surrounding area.
- 6.6 The shelterbelts will be planted between the existing five wire fence located on the site boundaries and a new proposed security fence constructed of wire mesh with galvanised steel posts. The fence will be 2.1m in height and visually permeable.
- 6.7 The three areas of existing shelterbelts will be retained and reduced to 3m in height. New and additional vegetative screening will be planted behind the existing shelterbelts to provide supplementary screening of the site.
- 6.8 The majority of screen planting proposed as a shelterbelt will consist of *Cryptomeria japonica* – Japanese cedar. These trees will be maintained to a minimum height of 4 metres.
- 6.9 The height of the trees at the time of planting will vary between 2.5m/3m and 1.5m. Taller plants will be used where potentially affected receptors are identified or where the level of potential effects is assessed as 'Low'.
- 6.10 A short length of boundary located beneath the Transmission lines (including 12m either side of the centreline of the transmission line) adjacent to 489 Moroa Road will be planted with *Phormium tenax*, which will grow to a

maximum height of 2m. The boundary at the western end of the transmission corridor crosses an irrigation canal and will not be planted.

Construction

- 6.11 The construction of the solar farm is estimated to take between six to nine months. The solar panels will be pre-configured off-site and delivered in 60 shipping containers. The erection of the infrastructure will require minimal earthworks of approximately 500m³ in order to create the internal vehicle tracks, building platforms for the inverters and switchyard along with the drilling for pile foundations of solar array tables. It is proposed that consent conditions require a Construction Management Plan and a Construction Noise Management Plan to be submitted to Council for certification prior to works commencing.

Traffic and Vehicle Access

- 6.12 Three proposed vehicle entrances are proposed to be constructed and two existing accessways upgraded to the required specifications. Three of the new vehicle crossings connect to the larger parcel (north of Moroa Road) and one crossing to each of the parcels to the south of Moroa Road. Distances between the accessways vary between 10 to 20 metres with appropriate sightlines maintained.
- 6.13 The accessways will be used for the construction and operation of the solar farm. Construction traffic involves an average three truck deliveries per day during the working week. Construction workers will arrive on site in smaller vehicles i.e. a ute or van. Operational traffic will be limited and consist of staff arriving in small vans to the site.
- 6.14 It is proposed to construct eight internal crossings over the water races that traverse the site which will be constructed in accordance with Rule 2.3.20 of the Moroa Water Race Bylaw 2007. The internal crossings will be links via an internal ring road around the entire solar farm (behind shelterbelt screening).

Stormwater

- 6.15 The solar arrays will cover approximately 170 hectares of the subject site. The solar panels are impermeable with a 6.4m wide gap between each solar

table. The ground beneath the solar tables will remain vegetated and permeable. Thus, the rain will run off the panels and infiltrate straight to the ground.

- 6.16 The solar panels have a manufacturer's warranty for a duration of 35 years. The applicant states they are designed to withstand the elements for this period of time. The sealed panel is made of inert material and there is no risk of contaminant runoff to the ground.

Maintenance

- 6.17 The solar farm requires some maintenance which will involve the creation of 2 full time equivalent roles locally. Monitoring of the system would be carried out remotely, however general maintenance of the tracking tables, solar panels and inverter connections will require some intervention during the operational life of the plant. The physical panels will be regularly checked and repaired (as required). Annual cleaning of the panels (with water only) will also be carried out.
- 6.18 To maintain grass beneath the panels, sheep grazing or cropping will take place.

Decommissioning

- 6.19 The site will be reinstated to a grassed farm condition at the end of the solar farm operation. All structures and equipment will be removed with the ground replanted with vegetation and grass species as appropriate.
- 6.20 The solar panels and all other equipment will be removed from the project site and unless being reused or repurposed for another project, will be recycled off site. The applicant has accepted a condition for the preparation of a 'Decommissioning Plan'.

Consent Duration

- 6.21 The applicant has requested a consent duration of 35-years which will align with the warranty of the solar panel and the decommissioning plan for the solar farm.

7.0 Council's Review of the Application under Section 87F RMA

7.1 The review of this application has been assisted by expert input from the specialists engaged by Council, in its regulatory capacity, to provide an independent peer review of relevant aspects of the application and accompanying technical reports. Each of the experts listed below has provided a separate report / memorandum detailing the outcome of their peer review and / or recommended conditions:

- (a) Mr Jon Styles, Director and Principal, Styles Group Acoustics and Vibration Consultants.
- (b) Ms Emma McRae, Landscape Architect, Principal, Boffa Miskell Limited.
- (c) Roading Conditions prepared by South Wairarapa District Council Roading Engineer Anup Dahal, dated 29 September 2023
- (d) Water Services Resource Consent Conditions – Assessment of Application – Lindsay Blakie dated 25 August 2022

8.0 Assessment of the Wairarapa Combined District Plan (WC DP)

8.1 The Wairarapa Combined District Plan (District Plan) was declared 'Operative' in March 2011. There are no outstanding Plan Changes relevant to this proposal. As the Operative Plan was prepared over ten years ago, it is currently undergoing a review.

8.2 The relevant zones, overlays, and district plan features are outlined in section 3 above.

8.3 The District Plan rule framework is constructed in a manner which requires the consideration of District Wide land use rules prior to consideration of zone provisions. Attachment 8 contains an assessment of the proposal against the District Plan.

- 8.4 In Section 21 District Wide Land Use Rules and Standards, rules apply on a district-wide basis for specifically listed activities. Rule 21.1.24 relates to Network Utilities and Energy Generation Activities, and states as a permitted activity “construction, maintenance and upgrading of network utilities and energy generating facilities which meets the following standards”. The permitted standards for energy generation facilities under this rule only relate to “existing energy generation facilities”. Therefore, Rule 21.1.24 does not apply to ‘new’ energy generation facilities.
- 8.5 The other applicable rules in Section 21 are listed in the table above relating to light, noise and transport matters. Based on the information supplied in the application, it is anticipated the proposal will comply with the requirements in these rules. However, in terms of a solar farm itself as a land use activity, this type of activity is not listed as a controlled or restricted discretionary activity in Section 21. Therefore Rule 21.6(a) applies as a solar farm is “otherwise not specified as a controlled, or restricted discretionary activity” under this rule. Therefore, the proposal is a discretionary activity under Rule 21.6(a).
- 8.6 In Section 4 Rural Zone Rules and Standards, Rule 4.5.1(a) and (b) state a permitted activity as below:
- “(a) any activity listed as a District Wide Permitted Activity in the rules in Section 21.1, and which complies with the relevant standards in those rules and Section 4.5.2, and which is not otherwise specified as a controlled, restricted discretionary, discretionary or non-complying activity under Section 4.5 and 21”.
 - “(b) any activity not listed as a District Wide Permitted Activity in the rules in Section 21.1, and which complies with the relevant standards in Section 4.5.2, and which is not otherwise specified as a controlled, restricted discretionary, discretionary or non-complying activity under Section 4.5 and 21”.
- 8.7 The construction of a solar farm is not an activity listed as a District Wide Permitted Activity in the rules in Section 21.1. It is also not specified as a controlled, discretionary or non-complying activity under Sections 4.5 or 21. However, it is included as a Restricted Discretionary activity under Rule

4.5.5(c), as a solar farm is not required for primary production or residential purposes and requires construction over 25m² in gross floor area and the external storage of goods, products and vehicles. The proposed staff office and data room exceeds 25m² (30m²). Therefore, the proposal is a restricted discretionary activity under Rule 4.5.5(c).

8.8 Overall, the proposal must be considered as a Discretionary activity under the above provisions of the Wairarapa Combined District Plan.

9.0 Reasons for the Application

9.1 Land use consent is required under District-Wide Land Use Rule 21.6(a) as a Discretionary Activity and Rural (Primary Production) Zone Restricted Discretionary Activity Rule 4.5.5 (c) and 4.5.5 (e) (i) of the WCDP as follows:

21.6 Discretionary Activities

(a) Any activity that does not comply with the standards for permitted activities or is otherwise not specified as a controlled, or restricted discretionary activity.

4.5.5 Restricted Discretionary Activities

The following are Restricted Discretionary Activities:

(c) Any activity that is not required for primary production and residential purposes that requires either:

(a) the construction or use of a building over 25m² in gross floor area; or

(b) the external storage of goods, products or vehicles (including contractors yards); and is not otherwise listed as controlled, restricted discretionary, discretionary or non-complying activity.

Discretion is restricted to the following matters:

(i) Siting of any building;

(ii) Design and location of the access;

(iii) Location, size and effects of any signage;

- (iv) *Amenity and visual effects;*
- (v) *Landscaping and screening;*
- (vi) *Noise generated by the activity;*
- (vii) *Changes in the type and amount of traffic;*
- (viii) *Effects of retail activities in the Rural Zone on the viability and vitality of the existing town centres of Masterton, Carterton Greytown, Martinborough and Featherston;*
- (ix) *Servicing and infrastructure requirements.*

9.2 Overall, the proposal is to be assessed as a Discretionary Activity. This activity status is different from the overall activity status assessment provided in the application which concludes it is a restricted discretionary activity under Rule 4.5.5 only.

10.0 Notification, Submissions and Written Approvals

10.1 The application was publicly notified on 8 May 2023 following the S95A decision of the South Wairarapa District Council.

Submissions

10.2 When the submission period ended, a total of 46 submissions were received and no late submissions were received late after the close of the submission period. A recommendation on the late submissions is addressed below.

10.3 Of the submissions received:

<i>Support in whole</i>	<i>Support in Part</i>	<i>Oppose in whole</i>	<i>Oppose in Part</i>
3	4	39	0

10.4 A summary of the issues raised in submissions together with the relief sought by the submitters is set out in the table below.

10.5 This table is only a summary of the key issues raised in submissions. For the specific details, refer to the full set of submissions in attachment 1.

10.6 This summary of submissions identifies the following:

- (a) the issues raised in submissions in terms of the key issues below
- (b) details any relief sought by the submitter

10.7 Summary of Submissions:

Issues Raised	No. of submissions
1. Amenity/character	28
2. Rural productivity	16
3. Recreation/Tourism	9
4. Location/scale of proposal	28
5. Stormwater	7
6. Construction effects	11
7. Operational effects	21
8. Environmental Impacts	29
9. District Plan	19
10. Economic	21
11. Planting/vegetation	14
12. Policy/Environmental Standards	5
13. Education	1
14. Fire/natural hazards	15
15. Mapping	4
16. Health	9
17. National Grid Yard (NGY)	1

Relief sought summarised	No. of submissions
a. Grant consent	2
b. Grant consent with conditions	5
c. Decline consent	39

10.8 A table summarising the submissions received and whether those persons wish to be heard can be found in Attachment 1 to this report.

Late Submissions

10.9 At the start of the hearing, the decision maker must decide whether to extend the closing date for submissions. For this decision, the considerations under s37 and 37A of the RMA in making this decision are:

- (a) the interests of any person who, in the council's opinion, may be directly affected by the waiver;
- (b) the interests of the community in achieving adequate assessment of the effects of the proposal; and
- (c) the council's duty under s21 of the RMA to avoid unreasonable delay.

10.10 At the time of preparing this report no late submissions had been received.

Written Approvals

10.11 The applicant has not obtained written approval from any persons.

Further Information

10.12 As agreed with the applicant, further information was requested under section 92(1) of the RMA on 27 June 2023 following the receipt of submissions in order for any matters raised in submissions to also be included in the matters where further information is needed in order to assess the effects of the application. Section 5 above outlines the information sought and the responses received.

11.0 Statutory Considerations

Resource Management Act 1991

- 11.1 Section 87G(6) of the RMA states that “if considering a matter that is an application for a resource consent, the Court must apply sections 104 to 112 and 138A as if it were a consent authority”.
- 11.2 In considering any application for resource consent and any submissions received, the council must have regard to the following requirements under s104(1) of the RMA – which are subject to Part 2 (the purpose and principles):
- (a) any actual and potential effects on the environment of allowing the activity (section 104(1)(a));
 - (b) any measure proposed to or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity (section 104(1)(ab));
 - (c) any relevant provisions of national policy statements, New Zealand coastal policy statement; a regional policy statement or proposed regional policy statement; a plan or proposed plan, a national environmental standard (NES), or any other regulations (section 104(1)(b)); and
 - (d) any other matter the council considers relevant and reasonably necessary to determine the application (section 104(1)(c)).
- 11.3 When considering any actual or potential effects, the council may disregard any adverse effects that arise from permitted activities in a NES or a plan (the permitted baseline). The council has discretion whether to apply this permitted baseline.
- 11.4 For a discretionary activity the council may grant or refuse consent (under s104B). If it grants the application, it may impose conditions under s108.
- 11.5 Sections 105 and 107 address certain matters (in addition to the matters in s104(1)), relating to discharge permits and coastal permits where the proposal would otherwise contravene s15 (or ss15A or 15B).

- 11.6 Sections 108 and 108AA provide for consent to be granted subject to conditions and sets out the kind of conditions that may be imposed.
- 11.7 An assessment of the proposal in terms of section 104(1) of the RMA is provided in Section 10 below. Following the section 104(1) assessment, an assessment is made in terms of section 104B, section 104D and Part 2 of the RMA.

12.0 Actual and Potential Effects on the Environment

- 12.1 Sections 104(1)(a) and 104(1)(ab) of the RMA requires the council to have regard to:
- (a) any actual and potential effects on the environment of allowing the activity/ies (including both the positive and the adverse effects); and
 - (b) any measure proposed to or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity.

Positive Effects

- 12.2 The application outlines a number of positive effects that will be provided for by the proposal, including:
- (a) Contributing support to the reduction of New Zealand's greenhouse gas emissions.
 - (b) Provides security and resilience to the electricity generation network, by reducing pressure and reliance on the National Grid and regional distribution network.
 - (c) Provides renewable electricity to meet the demands of the South Wairarapa district.
- 12.3 No further assessment or information is provided in support of these matters. There will also be some employment associated with installation, operation and ongoing maintenance for the life of the proposal.

Adverse Effects

- 12.4 In considering the adverse effects of the proposal, the council:
- (a) may disregard those effects where the plan permits an activity with that effect; and
 - (b) must disregard those effects on a person who has provided written approval, and trade competition or the effects of trade competition.

Effects that must be disregarded

- 12.5 No written approval from any persons have been provided.
- 12.6 The permitted baseline refers to permitted activities on the subject site. The permitted baseline may be taken into account and the decisionmaker has the discretion to disregard those effects where an activity is not fanciful. In this case the permitted baseline includes:
- (a) Structures (other than dwellings) up to 15m in height.
 - (b) Intensive farming (not within 500 m of an existing dwelling).
 - (c) Wastewater discharge from a municipal wastewater treatment system.
- 12.7 This is the permitted baseline - and these adverse effects may be disregarded, however given the scale and complexity of the proposal overall, and as a discretionary activity, the permitted baseline does not provide a useful comparison for the purpose of discounting effects and has not been considered further except where explicitly identified in relation to particular aspects of the proposal.

Receiving Environment

- 12.8 The receiving environment beyond the subject site includes permitted activities under the relevant plans, lawfully established activities (via existing use rights or resource consent), and any unimplemented resource consents that are likely to be implemented. The effects of any unimplemented consents on the subject site that are likely to be implemented (and which are not being replaced by the current proposal) also form part of this reasonably

foreseeable receiving environment. This is the environment within which the adverse effects of this application is to be assessed.

12.9 As set out in section 3.0 above the surrounding area is characterised by primary production activities with open pastoral areas, shelterbelts, agricultural buildings and some dwellings. The Rural (Primary Production) Zone provides for one dwelling Certificate of Title under 4 hectares, two dwellings per Certificate of Title between 4 – 100 hectares, and three dwellings per Certificate of Title over 100 hectares in size and there is a range of site sizes established around the proposal site with limited levels of further dwellings able to be established.

12.10 I understand from Council records that the following approved but unimplemented resource consent are located within the surrounding area relevant to the proposal.

- (a) 230112 – 179 Bidwills Cutting Road – 3 Lot subdivision
- (b) 230048 – 217 Bidwills Cutting Road – 2 Lot subdivision
- (c) 230027 – 273 Bidwills Cutting Road - Relocate dwelling to site
- (d) 230013 – 381 Bidwills Cutting Road – 3 Lot subdivision
- (e) 220166 – 169 Moroa Road – 4 Lot subdivision
- (f) 220129 – 18 Pharazyns Road – 12 Lot subdivision
- (g) 220080 – Lot 2 DP 29752 - 4 lot Subdivision
- (h) 220033 –28 Battersea Road - Relocate dwelling to site.

12.11 Figure 2 below depicts the approximate location of these consents.

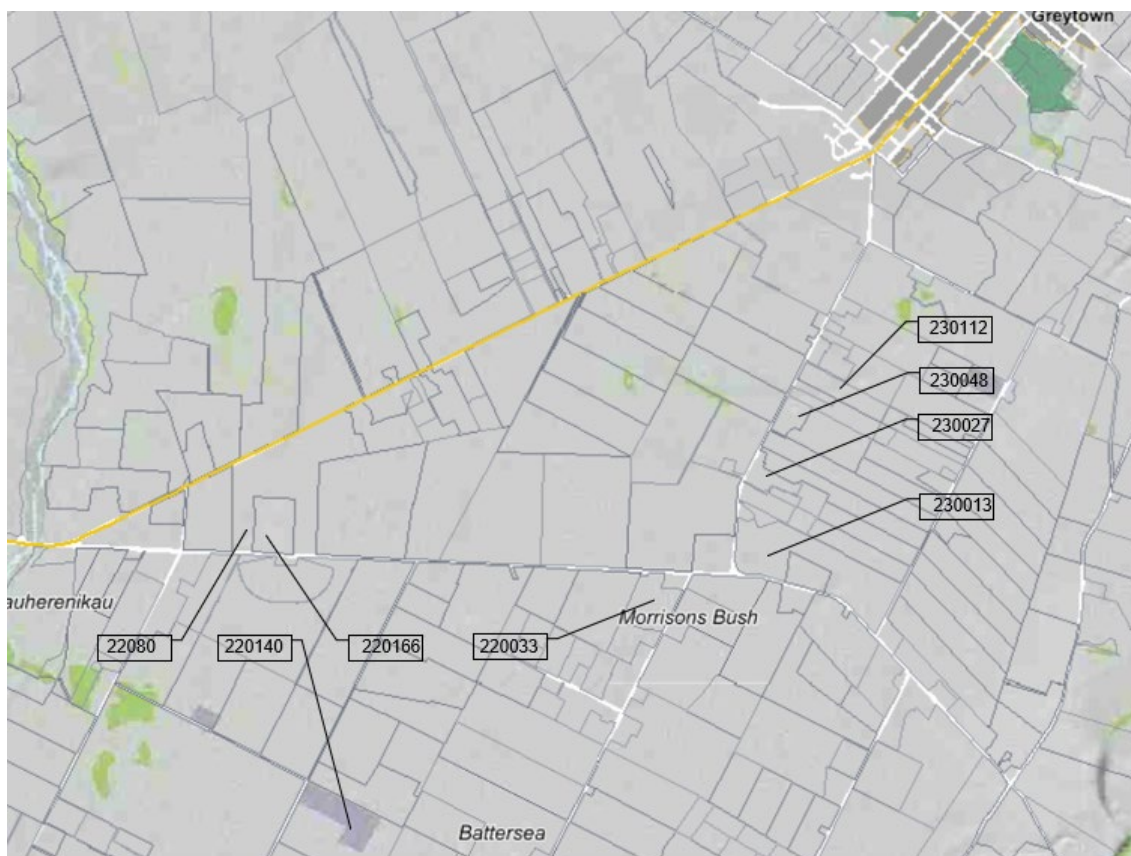


Figure 2: Approximate location of approved consents over the Prover property database map.

Adverse Effects

12.12 While having regard to the effects that must be disregarded and in the context of the receiving environment, the following assessment is done after I have:

- (a) Analysed the application (including any proposed mitigation measures).
- (b) Visited the site and surrounds.
- (c) Reviewed the council's records.
- (d) Reviewed the submissions received.
- (e) Received advice from appropriate experts.

12.13 The following adverse effects have been identified:

Rural character and visual amenity

- 12.14 The proposal seeks to establish a solar farm on a 235 hectare site land currently used for pastoral purposes within the Central Plains character areas as defined in the Wairarapa Landscape Study². Within the Central Plains, and in the context of the surrounds of the site, land use comprises a range of uses, including dairy, sheep and beef farming, with scattered areas of market gardens and orchards. Land parcels have been subdivided in a regular linear pattern of varying sizes. In some instances, boundaries are defined by shelterbelts or these relate to paddocks and this has the appearance of a patchwork landscape. There is also evidence of recent rural residential subdivision on the eastern side of Bidwills Cutting Road heading toward Grey Town, Battersea Road and Settlement Road and to the west of the site as accessed from Tauherenikau Road / State Highway 2. Where rural residential subdivision has occurred, there is generally more variation in parcel shape and a reduction in area. Given the scale of the proposal and its highly visible nature it has the potential to change the established character of the area and introduce adverse landscape effects.
- 12.15 The application at section 5.4 of the AEE summarises the landscape assessment prepared by Simon Cocker that has been provided to describe and assess the landscape effects of the proposal. The council has engaged a registered landscape architect, Emma McRae to review the landscape assessment and the proposal. Ms McRae visited the site on 6 March 2023, has been involved with the requests for further information and has reviewed the responses provided by the applicant. **Attachment 2** includes Ms McRae's memorandum on the proposal.
- 12.16 Mr Cocker has assessed the proposal, noting that:
- (a) *Overall, the abiotic attributes of the site and its context have subject to only limited modification and retain the characteristic flatness and spaciousness, albeit contained, punctuated and structured by shelterbelt plantings.*

² 'Wairarapa Landscape Study 2010, Landscape Character Description, August 2010' prepared by Boffa Miskell Limited for the Greater Wellington Regional Council refer <https://www.gw.govt.nz/assets/Documents/2022/03/Wairarapa-Character-Study-August-2010.pdf>

- (b) *The proposal will only necessitate the clearance of predominantly exotic shelterbelt vegetation within the Site, and the anticipated change to the biotic attributes resulting from the proposal...will be very small.*
- (c) *It is considered that the change resulting from the proposal on the land use and built attributes of the Site will be very small.*

12.17 Mr Cocker concludes that the resulting landscape effect of the proposal will be low and potential adverse visual amenity effect will be low for all receptors once the mitigation planting has become established which will be within a period of 5 years. Mr Cocker also notes that:

'the proposed activity will have the potential to result in a similar outcome, or appearance as an activity that could occur under permitted agricultural practises such as the construction of shelter structures. Such structures are often white in colour and could potentially result in a greater level of visual intrusion.'

12.18 Overall Ms McRae agreed with the conclusions put forward by Mr Cocker, however, additional changes to the biotic attributes of the site were identified along with adverse effects on nearby properties to the south of the site, particularly along Settlement Road and Pharazyn's Road.

12.19 The additional changes to the biotic attributes of the site identified by Ms McRae are:

- (a) Removal of shelterbelts from within the site, and the establishment of hedging to the entire site perimeter.
- (b) Change to the landscape pattern described as 'eroding the existing smaller scale patchwork landscape pattern characteristic of the area.'
- (c) Change from open rural pastoral landscape to a built landscape of solar panels where the built intensity is greater than an orchard shelter structure otherwise expected in the surrounding rural area.

12.20 These effects on the existing landscape pattern of the area with the introduction of built electricity infrastructure are assessed by Ms McRae as being moderately adverse.

- 12.21 In terms of landscape effects on the following persons these have been identified and assessed as:
- (a) Road users along Moroa Road, Bidwills Cutting Road and State Highway 2.
 - (b) Private properties surrounding the subject site, including those along Morora Road, Battersea Road, Settlement Road and Pharazyn's Road.
- 12.22 Adverse effects have been assessed at the time of construction, in the short-term as the proposed shelterbelt planting is becoming established and in the long term once the shelterbelt is established and at the minimum maintained height of 4m as proposed by the applicant.
- 12.23 The effects agreed between Mr Cocker and Ms McCrae on road users along Moroa Road, Bidwills Cutting Road and Pharazyn's Road are found to be 'low-moderate' initially reducing to 'low' within five years as the proposed shelterbelt is established and reaches the proposed minimum screening height. The adverse effects on State Highway 2 are assessed as 'low' due to *"the speed of traffic, distance from the site and the angle of view towards the site in relation to the road."*
- 12.24 Submitters have raised concerns about the effects of glint and glare from the solar panels on the road users along State Highway 2, particularly as the vegetation screening is established. A Glint and Glare assessment was prepared by ITP Renewables dated 8 August 2023, this assessment found that there will be areas affected by green glare for brief durations of 1 – 6 minutes at particular times of day at particular times of the year. Concluding that the vegetative screen provides effective mitigation and residual glare is 'very low impact' with no mitigation required. Ms McCrae agrees with these findings and the reasons in the assessment, being that the model used assumed no screening of the solar farm and that the views towards the solar farm from State Highway 2 would be oblique (not in the line of sight of drivers) and fleeting in nature due to the speed of vehicles.
- 12.25 Ms McCrae agreed with Mr Cocker that the effects on surrounding properties to the north of Moroa Road are considered to be 'low to moderate' during construction reducing to 'low or very low' in the short and long term as the

shelterbelt establishes to its minimum maintained height of 4m. The land to the south of Moroa Road is more open in nature with less existing vegetative screening present. Thus, the properties along Settlement Road are assessed as having 'low to moderate' adverse effects during construction due to close proximity to the proposal on the sites south of Moroa Road and the lack of immediate screening. Adverse effects reduce to 'low' in the long term as the shelterbelts establish.

- 12.26 The four closest properties at 286 and 489 Moroa Road and 56 and 96 Settlement Road are assessed as being the most affected during construction with effects reducing to 'low' once planting is established to its minimum maintained height.
- 12.27 Ms McRae notes that as the greatest level of effects are felt during the construction phase, the level of adverse effects to the nearest properties could be further mitigated by phasing the installation of the solar panels and starting at the northern end of the subject site. Thus, allowing additional time for the shelterbelt growth in the southern areas providing a greater level of screening in these areas at the time of commissioning the solar farm.
- 12.28 Ms McRae has also reviewed the effects of the lower height of shrub planting within the Transpower designation corridor. These were found to be unchanged at both the east and west ends of the corridor. The visual effects on 489 Bidwills Cutting Road will be screened by existing vegetation with the panels located behind the substation when viewed from the road. Views from the west and State Highway 2 are also restricted by distance and proposed screening either side of the Transpower corridor.
- 12.29 The effects on views across the site towards the surrounding hills and views of the subject site from higher ground were also assessed by Ms McRae. No such adverse effects were found due to the six-kilometre separation distance between the site and the nearest higher landforms, the angle of view and the existence of other shelterbelts and agricultural features (buildings) within the landscape that obscure the views to and from the site.
- 12.30 Ms McRae summarises the extent of adverse effects within the surrounding landscape as:

- (a) being well contained within the local landscape due to shelterbelt planting and the nature of the existing landscape surrounding the subject site.
- (b) Initial 'moderate' adverse landscape effects would be experienced within 250m of the site.
- (c) Adverse landscape effects experienced beyond 250m of the subject site would be 'low' as the site is absorbed into the surrounding landscape and filtered by the proposed planting.

- 12.31 The change in landscape character that will occur is described as changing from an open pastoral environment with irregular lengths of shelterbelts to a built environment dominated by electricity generation structures, screened by a new and continuous shelterbelt.
- 12.32 The planting of a shelterbelt is a permitted activity and once established at the proposed minimum maintained screening height of 4m will mitigate the visual effects of the new built form in the long-term minimising any potential adverse effects to the immediate surrounding environment, including the closest neighbouring properties along Moroa Road and Settlement Road.
- 12.33 Overall, the adverse effects on the immediate surrounding landscape and neighbouring properties are assessed as being minor during construction and in the short-term as the shelterbelt is establishing. These effects will reduce to less than minor in the long-term once the shelterbelt reaches its proposed minimum maintained screening height of 4m.
- 12.34 Conditions of consent are recommended to ensure that the shelterbelt planting occurs as proposed and trees are established and maintained throughout the lifetime of the solar farm.
- 12.35 As noted by Mr Cocker and not challenged by Ms McRae, the proposal is not inconsistent with rural production activities that are permitted on the site and the establishment of extensive shelter belt planting and the use of the land for a single and uniform use for an activity is not unanticipated by the District Plan. The proposal will be screened by the proposed shelterbelts, once established, limiting recognition of the use from beyond the site perimeter.

12.36 It is noted that submitters have identified that the proposal is more appropriately considered an industrial activity. The District Plan defines industry as follows:

Industry – means premises used for manufacturing, fabricating or processing, substances or material into new products, and includes the servicing and repair of goods, vehicles and machinery whether by machine or hand, and the parking or storage of all materials, products and machinery; with

- *Primary Industry meaning industry listed in Appendix 4 Schedule of Primary Industries (Potentially Offensive, Noxious or Hazardous Industries); and*
- *Secondary Industry meaning any other industry.*

12.37 Given the proposal does not manufacture, fabricate or process any substance or material into a new product it is not considered to meet this definition. The proposal does meet the definition of *infrastructure* in the RMA and *renewable electricity generation activities* in the National Policy Statement for Renewable Electricity Generation 2011 (NPS-REG), and also *specified infrastructure* in the National Policy Statement for Highly Productive Land 2022 (NPS-HPL).

Effects on Transmission Lines

12.38 The application at section 5.3 of the AEE summarises the potential effects of the proposal on the transmission lines that traverse the northern parcel of the proposal. The AEE sets out that given the placement of the solar panels and other structures being 20m from the centreline of the transmission lines that adverse effects will be less than minor.

12.39 The submission from Transpower identified that the proposal has the potential to adversely impact on the operation, maintenance, upgrading and development transmission lines and associated support structures. Transpower through their submission seeks that specific conditions are imposed on any resource consents to address these concerns. In the response to further information request 2 the applicant has accepted the conditions recommended by Transpower. Within those conditions there is a

condition that limits the height of vegetation located within 12 metres either side of the centreline of the transmission line to a height of 2m. The landscape plans were accordingly updated to include an area of flax (*Phormium tenax*) within this area.

- 12.40 Mr Cocker has assessed the effect of this change to landscape mitigation strategy confirming that this change would not result in any change to the potential adverse effect for the adjacent dwelling at 489 Bidwills Cutting Road, or users of Bidwills Cutting Road. Ms McRae has recommended other species could be included to attain a height of 2m to provide variety and enhance planting success. This is considered appropriate and included as recommended condition of consent.

Traffic

- 12.41 In terms of traffic safety and efficiency, during the construction period, the proposal will result in additional traffic on Moroa Road. The AEE describes the frequency of trips from construction traffic being up to three truck deliveries per day, with all plant and equipment goods unloading within the site.
- 12.42 The solar farm equipment is proposed to be delivered in 60 shipping containers with construction anticipated to take place over a six-to-nine-month period. Construction staff will park on a temporary compound area onsite, and all turning and manoeuvring of vehicles will be limited to the site. The application has not included a traffic assessment and the proposed construction traffic could be absorbed into the surrounding network without any noticeable effect. The submission from Waka Kotahi identifies that State Highway 2 carries approximately 6,464 vehicles per day, of which 8-percent are heavy vehicles, whilst based on a review on the online data source named MobileRoad³, Moroa Road estimates an average daily trip on 40 movements per day of which 8-percent are heavy vehicles and Bidwills Cutting Road estimates an average daily trip on 1835 movements per day of which 11-percent are heavy vehicles. Over the short-term, the effects of construction traffic would be minor, given the short duration and recognising

³ MobileRoad can be accessed at <https://mobileroad.org/> and has been relied in the absence of any information provided by the applicant on vehicle trips in the surrounding network

that it is not unreasonable to anticipate heavy vehicle movements in a rural production environment associated with the movement of stock, material or produce that can be seasonal and intense from time-to-time.

- 12.43 In order to limit the total number of heavy vehicle trips conditions are recommended on the frequency of trips and the requirement to deliver only within the site, this is consistent with the matters specified in the proposal. This will ensure that potential adverse effects can be restricted to an acceptable level.
- 12.44 Once construction is completed, site maintenance will be limited and staff arriving will do so in vans rather than heavy vehicles, and therefore will be less than minor and within what is reasonably anticipated on the local road network. It is noted that there are not any restrictions on trip generation or traffic movement associated with rural production activities in the zone and the number of movements associated with the overall number of lots would be relatively low.
- 12.45 The proposal includes five new vehicle entrances to the solar farm will be provided on Moroa Road. The applicant proposes to construct these in accordance with the specifications in Appendix 5 of the District Plan for vehicle access to the site during both construction and operation will be through existing vehicle access points. Conditions have been recommended by Anup Dahal noting that these have been amended to remove reference to the section 224 process which would only be relevant should subdivision be proposed.

Noise

- 12.46 The application summarised the potential construction and operational noise effects of the proposal at sections 5.5.1 and 5.6.1 of the AEE, with noise being generated during construction by a small piling rig and power tools used to assemble the solar arrays. Once operational the substation units will emit a low hum. A number of submitters raised noise effects during both the construction and operational phases of the project.
- 12.47 The application and Assessment of Noise Effects prepared by Marshall Day Acoustics (MDA) has been reviewed on behalf of the South Wairarapa

Council by Mr Jon Styles of Styles Group Acoustics and Vibration Consultants. Overall, Mr Styles agrees with the findings of the noise assessment in that the operation of the solar farm and the anticipated noise emissions from the mechanical plant will fall well below the maximum permitted noise emission standards set out in the District Plan.

- 12.48 Matters where Mr Styles did not agree with the assessment included the following:
- (a) The noise standards applicable during the construction period which is expected to last between six to nine months, as stated in the application's Assessment of Environmental Effects.
 - (b) The need to assess and manage noise emissions at the notional boundaries of existing vacant properties where a future dwelling's building platform could be located.

These matters are discussed further in the paragraphs below.

- 12.49 In summary, Mr Styles' review and assessment confirmed the proposal (construction and operation) will comply with the permitted noise emissions standards for the zone. Recommended conditions of consent were put forward by MDA to both ensure compliance and provide additional mitigation measures where noise emissions from both the construction and operation of the solar farm would be the most noticeable. These conditions included the requirement to meet the noise limits at the notional boundary of dwellings existing at the time of consent and the preparation of a construction noise management plan (CNMP) to be submitted and approved prior to works commencing. This plan would include the identification of areas where additional noise attenuation measures or the use of alternative piling methods would be required to achieve the permitted noise limits. Mr Styles agreed with the requirement for such conditions subject to changes to wording that have been accepted by the applicant. The recommended conditions of consent are attached as Attachment 7.

Construction Noise

- 12.50 The main sources of construction noise have been identified as: up to three truck deliveries per day of materials, infrastructure, and machinery;

earthworks including truck movements, loaders and excavators; and A 'Vermeer PD10 Pile Driver' (or similar) to impact drive the support piles into the ground.

- 12.51 The MDA assessment assumes the construction period to be less than 20 weeks. While the total duration of piling is acknowledged to be longer than 20 weeks, because the activity will move around the site, the assessment assumes that piling in any one location will occur for much shorter than 20 weeks, thus the 'typical duration' construction noise limits of 75 dB L_{Aeq} and 90 dB L_{AFmax} would apply. Mr Styles disagrees with this approach to the assessment and instead suggests the long-term construction noise limits in NZS6803:1999 should apply. These noise limits are lower than the noise limits applying to 'typical duration' projects.
- 12.52 The MDA assessment identifies the piling activity to be emit the highest noise levels with dwelling within 100m of the piling activity to be the most affected. The majority of existing nearby dwellings are more than 100m from the proposed piling and thus compliance with the District Plan construction noise standards will be achieved at most dwellings. MDA identified four dwellings that will be within 100m of the closest piling activity. These dwellings are at: 260 Moroa Road, 489 Moroa Road, 56 Settlement Road and the dwelling on the site at 312 Bidwills Cutting Road.
- 12.53 A construction noise management plan (CNMP) has been recommended by MDA to manage emissions from piling close to the potentially affected dwellings within 100m of a piling site. This management plan should include mitigation measures to avoid exceeding the permitted standards as well as minimising the duration of exposure. Mitigation measures should include the use of alternative piling methods. Mr Styles supports this approach to noise management along with the proposed condition of consent with the exception that any reference to 'typical duration' limits be deleted, for the reasons discussed above. Refer condition 37 in Attachment 7.

Operational Noise

- 12.54 The MDA assessment states that the highest predicted noise levels of the solar farm plant, including inverters, transformers and tracking motors, will

fall well below the maximum permitted daytime and night-time noise levels at existing surrounding dwellings and their notional boundaries.

- 12.55 The highest predicted noise level being 39dB LA₁₀ and the maximum permitted standards are 55 dB LA₁₀ during the day or 45 dB LA₁₀ during the night-time. the District Plan's prescribed timeframe for night-time commences at 7:00pm and extends until 7:00am. The lower night-time noise limits provide the rural receivers with a higher level of noise amenity during the evening and night-time periods.
- 12.56 Mr Styles generally agrees with the assessment undertaken by MDA regarding the operational noise emissions from the proposed solar farm. It is however noted that the applicant has not specified the exact make or model of plant to be installed and that it is known to measurable variability in noise emissions from different mechanical plant.
- 12.57 Mr Styles also notes that "*Noise levels at a notional boundary at a constant level of 55 dB LA₁₀ during the day or 45 dB LA₁₀ during the night time would be likely to be experienced as annoying and intrusive and would likely be the dominant noise above all other noise sources.*" To that end Mr Styles recommends a condition of consent that requires "*mechanical plant should be selected, designed and located to minimise noise emissions to the adjacent receivers to the greatest extent possible.*" And thus, comply with the permitted noise emission standards. Refer proposed condition 44 in Attachment 7.
- 12.58 While Mr Styles agrees with the MDA's assessment of predicted noise emissions, he has advised that the notional boundaries of existing dwellings are not the only potentially affected parties within the receiving environment. The receiving environment should also include existing vacant land that could contain a building platform for a dwelling as a permitted activity. In this instance, the surrounding rural environment includes several vacant sites that could contain a dwelling as a permitted activity.
- 12.59 The District Plan (2011) Rural Zone standards for permitted activities sets the following permitted number of dwellings (including minor dwellings) per title (referred to as CT or as Record of Title) in standard 4.5.2(e) Number of Dwellings being 1 dwelling per CT under four hectares, 2 dwellings per CT

between 4 and 100 hectares; and, 3 dwellings per CT greater than 100 hectares.

- 12.60 There are several properties with a single Record of Title within the immediate surrounding area that are currently void of residential dwellings but are of a size to accommodate future permitted development. Mr Styles notes that the MDA assessment does not describe or assess the potential noise effects across these vacant sites. Nor does the MDA assessment and appended documents contain a map showing noise contours that would enable the level and extent of noise emissions across potentially vacant sites to be better understood.
- 12.61 To address this omission and the potential adverse effects on these vacant properties Mr Styles has recommended that the condition proposed by MDA to require the noise level from the operation of the solar farm to meet the permitted noise levels not limit compliance to the notional boundary of only currently existing dwellings but also achieve compliance at the notional boundaries of all dwellings on any site including any dwelling constructed in the future. The applicant has agreed to the proposed wording of such a condition, refer condition 44, Attachment 7.
- 12.62 Overall, the expected noise emissions from the construction and operation of the proposed solar farm have been assessed as falling well within the permitted activity standards of the operative Wairarapa Combined District Plan. Additional mitigation measures have been identified that will work to minimise the level of actual noise emissions so as to minimise any noticeable increase in noise experienced by surrounding residents beyond the existing background levels. These mitigation measures have been accepted as recommended conditions of consent by the applicant.

Rural Productivity

- 12.63 The proposal will modify and establish structures – solar arrays – over land currently used and zoned for rural production purposes. Submitters have identified that this has the potential to detract from productive rural uses on the site and the surrounding area. The AEE states that the site is primarily Land Use Capability (LUC) Class 4 soils. Further correspondence from the applicant also confirmed there is a small area of Class 2 soils located at the

eastern part of the site where connections are made through to the existing sub-station. It is proposed to re-develop this portion of the site (containing Class 2 soils) to provide for the switchyard. A switchyard is a HAIL activity identified on the HAIL list. On the wider site, the proposal, through the spacing of the arrays also allows for grazing by sheep or seasonal crop farming. The AEE notes that the site will be able to be reinstated back to grazing on completion of the solar farm activity.

- 12.64 The AEE does not include an assessment of whether the land for the switchyard will be able to be reinstated back to grazing.
- 12.65 A soil assessment has been provided by Hanmore Land Management Limited which notes the site is outside of the Highly Productive land (HPL) category and as it is very stony there are severe limitations to arable use but is suitable for grazing, root and green fodder cropping and forestry. The soil assessment includes an analysis of the area that will be impacted through the placement of shipping containers on a 604m² part of the site for construction activities.
- 12.66 In light of the above the proposal will reduce the primary production⁴ potential that is currently available on the site. The definition of primary production in the District Plan does not include solar farm activities. The proposal would not however foreclose on future rural production activities and will be used for productive purposes.

Cultural Effects

- 12.67 The application at section 2.2 of the AEE notes that there are no registered archaeological features on the site and applicant has provided information on consultation with iwi Rangitāne o Wairarapa and Kahungunu ki Wairarapa. The application was publicly notified and at the time of writing no submissions had been received from any iwi or hapu.
- 12.68 The applicant has offered a condition of consent in the event that there is an accidental discovery of an archaeological site. It is considered appropriate to

⁴ The Wairarapa Combined District Plan defines Primary Production as 'the use of land and accessory buildings (e.g. greenhouses) for the raising, growing and breeding of animals or vegetative matter and crops, including horticulture, plantation forestry, agriculture, viticulture, floriculture, racing stables, and outdoor (extensive) pig farming, as well as winemaking, flower packing, and other primary processing activities, but excludes top soil stripping, intensive farming activities, and mineral extraction and processing.'

extend this to sensitive materials including koiwi / human remains, an archaeology site, a māori cultural artefact, or a protected New Zealand object⁵.

Ecological Effects

12.69 The site does not contain Significant Natural Areas as identified by the District Plan nor does it contain any area subject to Schedule F - Ecosystems and habitats with significant indigenous biodiversity values of the Greater Wellington Natural Resources Plan (2023). The site and surrounding land has been highly modified through rural production uses. As set out in the Rural character and visual amenity effects section above there will be clearance of shelterbelts, noting these are generally exotic species and whilst this will result in a change there is no information provided to quantify potential effects on the sites ecological values which are likely to be low given the modified state and the lack of any controls to protect any existing features on the site.

Earthworks and Dust

12.70 The application at section 5.5.2 of the AEE, outlines measures proposed to manage dust noting the minimal area of earthworks proposed, being no more than 3000m² and 500m³ associated with the temporary construction yard, foundation blocks for substations, piling for the array support structures, and upgrading the existing site tracks.

12.71 General earthworks conditions are recommended to ensure that the construction activities are undertaken in a manner that does not cause undue disturbance to residential neighbours and the environment.

Stormwater Management

12.72 The proposal will establish solar arrays which will intercept and redirect rainfall which will flow off the panels and run to the ground where it is proposed that there will be vegetated cover. No specific treatment of stormwater or its management is proposed and the surface water flows will be able to infiltrate to ground.

⁵ Refer to meaning of 'protected New Zealand object' in the Protected Objects Act 1975

- 12.73 There is no restriction on impervious surfaces in the underlying zone and given that the water will be able to infiltrate on site avoiding concentrated flows that could impact on quantity or quality it is considered that the effects are less than minor.

Effects on Water Races

- 12.74 Water races are located within the site and the application at section 2.1 of the AEE, notes that these are for the purpose of providing drinking water to stock. The proposal includes eight vehicle crossings within the site that will provide for internal access for construction and ongoing maintenance. The proposal details the design noting that this compliance with the requirements in the District Plan. Lindsay Blakie on behalf of Wellington Water has recommend a number of conditions to ensure that the proposal does not impact on the quality and flow of water in the races. The conditions recommended have been included in Attachment 7 noting that these have been amended to remove reference to the section 224 process which would only be relevant should subdivision be proposed

Natural Hazards – Fire and Flooding

- 12.75 A number of submitters identify fire as a risk that could arise as part of a natural hazard such as an earthquake. It is understood as part of commissioning the facility a Health and Safety Management Plan and a Fire Emergency Plan will be required to be provided under the Health and Safety at Work Act 2015 and Fire and Emergency New Zealand Act 2017 respectively. The applicant has been consulting with FENZ and an updated site plan and conditions agreed between FENZ, and Applicant were provided on 28 June 2023. These conditions include a requirement to provide detailed design drawings showing water tanks with fittings in accordance with the New Zealand Fire Service Fire Fighting Water Supplies Code of practice, hardstand for fire appliances, internal access roads, and confirmation that vehicle crosses can withstand a laden weight of up to 25 tonnes with an axle load of 8 tonnes. The tanks and hardstand areas are located adjacent to the inverter stations. In addition, conditions have also been agreed between FENZ and the applicant for an emergency recovery plan and protocols for

this final plan to be stored on-site and briefings to occur with FENZ and emergency crews prior to the solar farm becoming operational.

- 12.76 It is also understood from other solar farm activities that these facilities are required to comply with several electrical standards, codes of practice and regulations made under the Electricity Act 1992 and Electricity Industry Act 2010. Resource consents cannot achieve compliance with other legislation and the consent holder will need to comply with the requirements, which provide a relatively comprehensive approach to the management of this risk associated with the proposal.
- 12.77 The site is not identified as being subject to flood hazards on the Greater Wellington Region planning maps (refer Flood hazard extents for the Greater Wellington Region⁶). Whilst localised events could occur the open nature of the solar arrays structures would not obstruct or concentrate flows and the open nature of the ground would facilitate the infiltration of flood flows to ground.
- 12.78 The agreed conditions appropriately address the concerns expressed in relation to fire hazards and are included at recommended condition 23 to 26 in Attachment 7.

End of Life

- 12.79 The application at section 3.7 of the AEE, notes that the panels have a warranted life of 35-years and all materials including the panels will be recycled once they reach this period. Submitters had identified concerns that the panels would break down over time with contaminants discharged to ground and water. Regarding decommissioning of the panels, submitters had raised concerns that contaminants could also be released. In response to requests for information a condition will be accepted for the preparation of a 'Decommissioning Plan' and a condition offered for a 35-years duration period for resource consent.
- 12.80 The response to the request for further information also outlines the decommissioning process which is tied to a lease with the property owner and a decommissioning bond. Decommissioning will leave the site reinstated

⁶ Refer to the Greater Wellington Region Detailed Flood Hazard Map at <https://mapping.gw.govt.nz/gw/floods/>

with all facilities, structures and equipment associated with the solar farm removed for reuse, repurposing or recycling. Access tracks will be removed, and pasture restored.

- 12.81 The response to the request for further information includes a response on the potential for contamination as a result of run off and potential breakdown of the solar panels over time. This was in response to submissions that were concerned that the panels themselves would release contaminants to land and water. The applicant's response confirms that the panels are designed to weather the elements and '*there is no expected leachate over the consent duration*'.
- 12.82 The AEE does not provide any information on process for decommissioning the switchyard which is a HAIL activity identified on the HAIL list.
- 12.83 Conditions are recommended to ensure the solar farm is decommissioned at the end of use and that this use is restricted to 35-years.

Other Effects

- 12.84 Submitters have identified that if approved the proposal will have adverse economic effects, namely a reduction in property values. It is well established that a potential reduction in property value is not relevant as a stand-alone effect, but rather serves as a proxy for the adverse effects of a proposal on amenity values. In light of this principal and the relevant case law I do not consider that any potential impact of the proposal on the value or desirability of neighbouring properties is a relevant resource management effect that needs to be taken into account.
- 12.85 Submitters have identified that solar farms can increase localised heating and heat island effects. The applicant has provided a response to this on 11 August 2023, indicating that no evidence has been found to indicate that a Heat Island Effect would be produced by the proposal given the panels are raised off the ground and are over pasture.
- 12.86 Submitters have identified that if approved the proposal will detract from the tourist destination of the broader area. As assessed by Mr Cocker and Ms McRae adverse landscape effects experienced beyond 500m of the subject site would be 'low' as the site is absorbed into the surrounding landscape

and filtered by the proposed planting, and it is considered that the proposal will have a less than minor effect given the relatively small area affected by the proposal in the context of the broader Wairarapa area and its physical separation from main thoroughfares and settlements.

12.87 Submitters have identified the potential for electromagnetic radiation to be generated by the proposal. As set out in the s95 assessment it is anticipated that proposal can comply with recommendations of the New Zealand Ministry of Health which refers to the use of guidelines published by the International Committee on Non-Ionising Radiation Protection (ICNIRP) Guidelines. The ICNIRP Guidelines set limits for exposure to electric and magnetic fields. These limits are also set out in New Zealand Standard for Radiofrequency Fields Part 1: Maximum Exposure Levels 3 kHz to 300GHz (NZS2772.1:1999). It is noted that no information has provided by the applicant to affirm compliance with these guidelines.

12.88 Submitters have raised the potential for the proposal to be an obstacle and hazard for light aircraft use. The section 92 response notes that this site is not registered on Civil Aviation Authority New Zealand's list of Aerodrome Coordinates. However, this site is not an aerodrome and it is my understanding that light aircraft use on rural land is not precluded by the District Plan. The District Plan does provide for buildings, other than dwellings, up to 15m in height with a yard set back of 5m and shelterbelts, already commonplace, are not restricted in any way meaning significant obstructions are already enabled at or near the boundaries where aircraft activities currently occur. Refer above also to the analysis on glint and glare effects.

Consideration of Alternatives

12.89 The application at section 3.8 of the AEE, notes that as the proposal does not have significant adverse effects and does not need to provide an assessment of alternatives. The AEE does however record that the application site does have the benefits of necessary aspect, solar hours, topography and proximity to electricity demand and infrastructure to be appropriate for the proposal.

Summary – Assessment of Environmental Effects

12.90 Overall, subject to the recommended conditions of consent, I consider that the effects of the proposal on the environment in terms of landscape, noise, transmission lines, traffic and construction can be appropriately avoided, mitigated and managed.

13.0 Relevant Statutory Documents – Section 104(1)(b)

13.1 The relevant statutory documents and other matters are considered below. These include:

- (a) National Environmental Standards – s104(1)(b)(i):
 - (i) Resource Management Act (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011
 - (ii) Resource Management (National Environmental Standards for Freshwater) Regulations 2020
 - (iii) National Environmental Standards for Electricity Transmission Activities 2009.
- (b) National Policy Statements – s104(1)(b)(iii):
 - (i) National Policy Statement for Renewable Electricity Generation 2011 (NPS-REG)
 - (ii) National Policy Statement for Highly Productive Land 2022
 - (iii) National Policy Statement for Freshwater Management 2020
 - (iv) National Policy Statement on Electricity Transmission 2008.
- (c) A regional policy statement or proposed regional policy statement – s104(1)(b)(v):
 - (i) Greater Wellington Regional Policy Statement.
- (d) A plan or proposed plan – s104(1)(b)(v):
 - (i) Greater Wellington Natural Resources Plan 2023 (GWNRP)

(ii) Wairarapa Combined District Plan 2011.

- 13.2 A full set of the relevant objectives and policies is provided as **Attachment 3**.
- 13.3 The application at section 6 of the AEE includes an assessment against objectives and policies considered relevant to the proposal. It is noted that there are additional objectives and policies considered relevant to the proposal identified in Attachment 3 of this report and in the sections to follow.
- 13.4 The AEE also refers to provisions in the Greater Wellington Regional Policy Statement 1995. That document has been superseded by the Greater Wellington Regional Policy Statement 2013 and is referenced in this report.

National Environmental Standards – s104(1)(b)(i):

Resource Management Act (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011

- 13.5 The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCO) is a set of planning controls and contains a set of contaminant values that ensures that land affected by contaminants in soil is appropriately managed. The application at section 6.3.1 of the AEE identifies that no HAIL activities are known to have been undertaken on the site and the NESCO does not apply. Based on the information known at the time of writing this report I agree with that assessment.

Resource Management (National Environmental Standards for Freshwater) Regulations 2020

- 13.6 The National Environment Standard for Freshwater (NES-F) sets out requirements for carrying out certain activities that have the potential for risk to freshwater and freshwater ecosystems. This includes effects on wetlands and streams and includes standards for fish passage and certain restrictions on agricultural and farming practices in relation to freshwater.
- 13.7 The application at section 6.3.2 of the AEE identifies that there are no wetlands on the site but will require new crossings over the water races that traverse the site. These works can be undertaken but will require approvals under from Rule 2.3.20 of the Moroa Water Race Bylaw 2007 to be

processed by others. The AEE notes this dispensation will be sought at section 4.5.

- 13.8 The AEE states that the NES-F is not relevant to the proposal and based on the information known at the time of writing this report I agree with that assessment.

National Environmental Standards for Electricity Transmission Activities 2009

- 13.9 The National Environmental Standards for Electricity Transmission Activities 2009 (NESETA) sets out the framework of permissions and consent requirements that relate to the operation, maintenance and upgrading of existing transmission lines. As the proposal does not include the trenching and connection of the solar farm to the National Grid, the NESETA is not relevant to the proposal.

National Policy Statements – s104(1)(b)(iii)

National Policy Statement for Renewable Electricity Generation 2011

- 13.10 The application at section 6.4.1 of the AEE identifies that the NPS-REG is relevant to the proposal. The single objective of the NPS-REG recognises the national significance of renewable electricity generation activities and the Government's national target for renewable electricity generation. The series of policies that follow set out considerations that decision makers must 'recognise and provide for', 'have particular regard to', 'have regard to', and 'manage activities' when considering applications for renewable electricity generation activities. The policies also direct regional policy statements and district plans to include objectives and policies and methods that provide for the development, operation, maintenance, and upgrading of new and existing renewable electricity generation activities.
- 13.11 The proposal will both increase the capacity of electricity generation within New Zealand while contributing to the increase in renewable electricity generation national target while avoiding greenhouse gas emissions through production. The electricity generated will feed into the National Grid. There are currently no solar farms in the South Wairarapa District. This solar farm will generate electricity for use close to source.

- 13.12 Policy C1 requires decision makers to have particular regard to the need to locate renewable generation activities where the resource is available, locate where it is logistical or technically practical, locate where existing structures and infrastructure, such as roads, distribution network and the national grid, among others. The subject site is in close proximity to State Highway 2 and the National Grid transmission lines traverse the site itself with the Greytown substation located adjacent to the site's eastern boundary. Consent conditions are recommended to assist in minimising any potential noise effects from the operation of the solar farm such that any potential adverse noise effects will be within the permitted activity standard requirements. Shelter belt planting is proposed around the subject sites to minimise visual effects from the change of land use.
- 13.13 Policy C2 requires decision makers to consider the environmental effects of a proposal that cannot be avoided, remedied or mitigated. Potential residual adverse rural character and visual amenity will be low, being initially moderate following initial construction, and reducing to low after 5 years when the proposed shelter belt planting is established. With regards to potential residual noise effects, these will be adequately mitigated through the implementation of the recommended consent conditions. There will be minimal residual adverse effects as a result of construction traffic given effects will be temporary and all parking and manoeuvring will be undertaken on site. It is noted that the proposed switchyard is a registered HAIL activity. The applicant has not provided any information around the management of the HAIL activity or any potential associated contaminants.
- 13.14 Policy D requires decision makers to manage activities to avoid reverse sensitivity effects on consented and on existing renewable electricity generation activities. There are no such activities in the immediate vicinity of the subject site. The proposed activity will be self-contained within the subject site and includes the planting of a shelterbelt to screen the solar farm from the surrounding rural properties. Existing rural activities will not adversely affect the operation of the proposed solar farm.
- 13.15 The Greater Wellington Regional Policy Statement, the Natural Resources Plan, and the Wairarapa Combined District Plan all include objectives and

policies in fulfilment of Policies E2, E3, E4, F, G, H1 and H2. These objectives and policies are discussed below.

National Policy Statement for Highly Productive Land 2022

13.16 The application at section 6.4.2 of the AEE identifies that the NPS-HPL is relevant to the proposal.

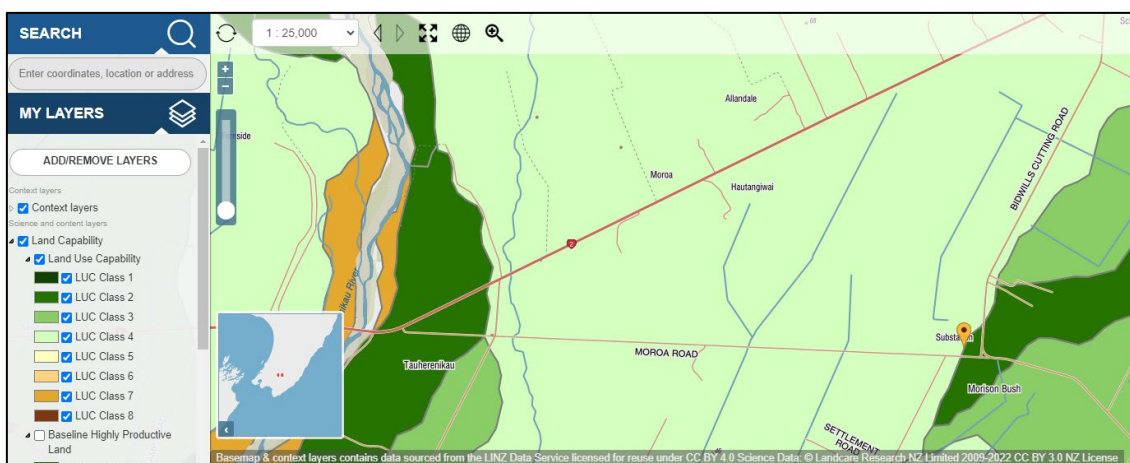


Figure 3 Map showing Land Capability at the subject site on Moroa Road. Taken from Manaaki Whenua Landcare Research website <https://ourenvironment.scinfo.org.nz/maps-and-tools/>.

13.17 The subject site where the proposed solar arrays will be installed is generally mapped as LUC Class 4 land, as shown in the extract from the land use capability map in Figure 3 above, (refer Manaaki Whenua Landcare Research website <https://ourenvironment.scinfo.org.nz/maps-and-tools/>). It is understood that a small portion of the eastern part of the site and the location of the existing substation and the proposed new switchyard on Bidwills Cutting Road is mapped as LUC Class 2.

13.18 The soil assessment provided by Hanmore Land Management Limited does not make comment with regard to any LUC Class 2 soils being within the site area however this was confirmed in writing by the applicant's planner on 21 August 2023.

13.19 The LUC Class 2 and 4 land is described by Manaaki Whenua Landcare Research as follows:

- (a) LUC Class 2 which is described as “Arable. Very good multiple-use land, slight limitations, suitable for cropping, viticulture, berry fruit, pastoralism, tree crops and forestry.”
 - (b) LUC Class 4 land is described as “Arable. Significant limitations for arable use or cultivation, very limited crop types, suitable for occasional cropping, pastoralism, tree crops and forestry. Some Class 4 is also suitable for viticulture and berry fruit.”
- 13.20 The National Policy Statement for Highly Productive Land 2022 (NPS-HPL) Part 3, 3.4 requires every regional council to map the following areas as highly productive land:
- “(a) is in a general rural zone or rural production zone; and*
 - (b) is predominantly LUC 1, 2, or 3 land; and*
 - (c) forms a large and geographically cohesive area.”*
- 13.21 The Wellington Regional Council has yet to complete this mapping process.
- 13.22 NPS-HPL Part 3, 3.5.7 states that until the regional council’s maps become operative *“each territorial authority and consent authority must apply this National Policy Statement as if references to highly productive land were references to land that, at the commencement date:*
- (a) is*
 - (iii) zoned general rural or rural production; and*
 - (iv) LUC 1, 2, or 3 land; but*
 - (b) not:*
 - (i) identified for future urban development; or*
 - (ii) subject to a Council initiated, or an adopted, notified plan change to rezone it from general rural or rural production to urban or rural lifestyle.”*
- 13.23 The site is zoned Rural Primary Production therefore, the only part of the subject site that is subject to the NPS-HPL is that portion identified as LUC Class 2.

- 13.24 The objective of the NPS-HPL is to protect highly productive land for use in land based primary production, both now and for future generations. Policies 1 to 9 all support the achievement of this objective, including Policy 8 which seeks that *“Highly productive land is protected from inappropriate use and development.”*
- 13.25 Clause 3.9 sets out that territorial authorities must avoid inappropriate use or development of highly productive land that is not land based primary production. Sub-clause 3.9(2)(j)(i) provides for activities that include the maintenance, operation, upgrade or expansion of specified infrastructure, and there is a functional or operational need for the use or development to be on the highly productive land.
- 13.26 The NPS-HPL interprets specified infrastructure to mean 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.*
- 13.27 A lifeline utility has the meaning in section 4 of the Civil Defence Emergency Management Act 2002: Part B(2) *“An entity that generates electricity for distribution through a network or distributes electricity through a network.”* Thus, the proposed solar farm is considered to be ‘specified infrastructure’.
- 13.28 The area of Class 2 land on the subject site is small in size and directly adjacent to the existing substation. The land is not large enough to be used for primary production and already contains residential development (to the south) and the substation (to the west), it is likely that the productive capacity of the subject LUC 2 land is already significantly compromised such that may

not be of high productive potential. In addition, it is functionally and operationally required for the proposed new Switchyard to be located directly adjacent to the existing substation. This allows the electricity generated to be immediately distributed to the National Grid.

- 13.29 In summary, the bulk of the proposed solar farm site does not contain highly productive land and is not subject to the NPS-HPL. The area of the site that is classed as highly productive land is a relatively small area and is located directly adjacent to the existing substation whose proximity to the solar farm is advantageous as it provides the mechanism to connect the electricity generated to the national grid. For these reasons it is considered that the proposed solar farm and all associated infrastructure is an appropriate use and development of the site in accordance with Clause 3.9(2)(j) of the NPS-HPL and is therefore consistent with the objective and Policy 8 of the NPS-HPL 2022.

National Policy Statement for Freshwater Management 2020

- 13.30 The subject site contains a number of water races and drainage canals. The RMA definition of a river does not include any artificial watercourse, including an irrigation canal or water supply race or farm drainage canal. A waterbody is defined as: *fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the coastal marine area.*
- 13.31 The objective 2.1(1) of the National Policy Statement for Freshwater Management 2020 (NPS-FM) is to ensure that natural and physical resources are managed in a way that prioritises the following:
- (a) *first, the health and well-being of water bodies and freshwater ecosystems*
 - (b) *second, the health needs of people (such as drinking water)*
 - (c) *third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.*
- 13.32 As the water races and canals on the subject site do not fall within the definition of a river or stream under the RMA, they are not subject to the policies of the NPS-FM that relate specifically to rivers or waterbodies, such

as Policies 7 and 8 that seek to avoid the loss of river extent and values and protect the significant values of outstanding water bodies. In any case the existing water races and drainage canals across the site will be retained.

- 13.33 As stated above stormwater runoff from the solar arrays and other infrastructure will drain to the ground for soakage and the applicant has stated that the panels have a design life that exceeds the 35-year duration of the proposal and have been designed to weather without the leachate of contaminants over the consent duration.
- 13.34 It is unclear from the AEE as to whether water takes are required for the proposed water tanks and if so, whether there is sufficient allocation available. No information has been provided regarding any potential contamination effects as a result of the proposed switchyard.
- 13.35 In summary, at the time of writing, I am uncertain as to whether the proposal is consistent with objective 2.1(1) of the NPS-FM to ensure that natural and physical resources are managed in a way that prioritises the health and well-being of water, does not affect the health needs of people (such as drinking water) and will provide for people and communities to provide for their social, economic, and cultural well-being through the establishment of a solar farm. .

National Policy Statement on Electricity Transmission 2008

- 13.36 The objective of the National Policy Statement on Electricity Transmission (NPS-ET) is *to recognise the national significance of the electricity transmission network by facilitating the operation, maintenance and upgrade of the existing transmission network and the establishment of new transmission resources to meet the needs of present and future generations, while:*
- (a) managing the adverse environmental effects of the network; and*
 - (b) managing the adverse effects of other activities on the network.*
- 13.37 This proposal does not involve the development of an electricity transmission network, however the site will connect to the existing substation allowing for the transmission of electricity generated on the solar farm to access the existing transmission network.

- 13.38 The Masterton - Upper Hutt A transmission line traverses the site to the north of Moroa Road with the existing substation located to the east on Bidwills Cutting Road. The proposed solar farm has been set out on site so as to avoid the transmission corridor and provide for continued access to the lines and support structures.
- 13.39 The applicant has consulted directly with Transpower New Zealand and has agreed to comply with a set of conditions of consent that would ensure the solar farm's development complies with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001) or any subsequent revision of the code. Specifically, the solar arrays and all other support buildings or structures will be located more than 12m from the centreline of the transmission lines, and any vegetative planting beneath the transmission lines will not exceed 2m in height at full maturity.
- 13.40 For these reasons the proposed solar farm development at Moroa Road is considered to be consistent with the NPS-ET 2008.

A regional policy statement or proposed regional policy statement – s104(1)(b)(v):

Greater Wellington Regional Policy Statement

- 13.41 The Greater Wellington Regional Policy Statement (**RPS**) covers a range of issues including discharges to air, land and water along with energy efficiency, conservation and generation. Disposal of waste, management of stormwater, managing risks of natural hazards, retaining highly productive agricultural land and enhancing the involvement of tāngata whenua in resource management decision making, among other matters.

Renewable Energy

- 13.42 Objective 9 requires that the region's energy needs are met in ways that include the diversification of type and scale of renewable energy development, maximises the use of renewable energy resources that reduce dependency on fossil fuels and reduce greenhouse gas emissions. Policy 39 recognises the benefits of renewable energy and requires that when considering an application for resource consent particular regard shall be given to the following:

- (a) *the social, economic, cultural and environmental benefits of energy generated from renewable energy resources and/or regionally significant infrastructure; and*
- (b) *protecting regionally significant infrastructure from incompatible subdivision, use and development occurring under, over, or adjacent to the infrastructure; and*
- (c) *the need for renewable electricity generation facilities to locate where the renewable energy resources exist; and*
- (d) *significant wind and marine renewable energy resources within the region.*

13.43 The proposed solar farm would be the first in the South Wairarapa area and will connect directly into the National Grid via an existing substation located adjacent to the subject site. The solar farm will contribute to reducing New Zealand's dependency on fossil fuels, by directing additional electricity to the national grid through the production of energy via renewable sources.

13.44 The location of the proposed solar farm is ideal for a renewable electricity generation facility for several reasons including:

- (a) The subject site is directly adjacent to Transpower New Zealand's Greytown substation.
- (b) The Masterton - Upper Hutt A transmission line traverses the southern boundary.
- (c) South Wairarapa has flat topography and high sunshine hours.
- (d) The surrounding area is open farmland and thus not subject to shading from surrounding topographical features.

13.45 For these reasons it is considered that the proposed solar farm will be consistent with Objective 9 and Policy 39 of the RPS regarding renewable energy development.

13.46 Objective 11 seeks to ensure that waste quantity is reduced, and the proposal includes decommissioning of the solar farm and rehabilitation of the site and recycling of infrastructure following the end of life of the solar panels. The applicant has agreed to a consent condition for the preparation of a

Decommissioning Plan and a condition for a 35-year consent duration period. In summary, all facilities, structure and equipment will be removed, reused, repurposed or recycled.

Earthworks and soil conservation

- 13.47 Objective 1 and 2 seek to manage air quality discharges to ensure that amenity values and human health are not adversely affected. A Construction Management Plan is recommended as a consent condition which will ensure management of any odour or dust as a result of the construction of the proposed solar farm, including from truck movements during construction.
- 13.48 Objective 30 seeks to maintain soils that have desirable characteristics that enable them to retain ecosystem function and a range of uses. Policy 41 requires the control of earthworks and vegetation disturbance in order to minimise erosion and sediment runoff to the water network. Policy 59 also seeks to retain highly productive agricultural land of LUC Class 1 and 2.
- 13.49 The proposed solar farm development meets these requirements as the installation of the solar arrays, inverters and access tracks will require a relatively small volume of earthworks with the land under the solar arrays retained as grassed pasture. It is intended that the landowner will continue to graze sheep beneath the arrays or undertake some cropping. While the existing vegetation located internally within the subject site would be removed to install the solar arrays, the applicant proposes to plant a continuous shelterbelt screening around the external boundaries of the subject site. Shelterbelt style planting is present in the area and is not inconsistent with wider areas rural character and pastoral landscapes.
- 13.50 As previously discussed, the majority of the subject site does not contain highly productive agricultural land of LUC Class 1 and 2. The area of LUC Class 2 land on the subject site is small in size and directly adjacent to the existing substation. The land is unlikely to be large enough to be used for viable primary production. In addition, it is functionally and operationally required for the proposed new Switchyard to be located directly adjacent to the existing substation. This allows the electricity generated to be immediately directed to the national grid.

13.51 Further information provided by the applicant on 11 August 2023 (refer Attachment 5) also outlines findings from international research on the positive effects on temperature, soil moisture, pasture productivity and water efficiency as a result of agrivoltaic systems⁷. In summary, the findings demonstrate that areas shaded by panels had lower ground temperatures and higher soil moisture. Of particular relevance to the proposed Greytown site, sheep grazing in agrivoltaic systems in Oregon showed a 90% increase in late-season pasture productivity and 328% increased water efficiency compared to pastures without solar panels.

Stormwater

13.52 Objective 12 seeks to ensure the quantity and quality of fresh water in the region meets the range of use and values, maintains its life supporting capacity and meets the reasonably foreseeable needs of future generations.

13.53 Policy 42 seeks to minimise contamination in stormwater from development and reduce the adverse effects of stormwater run-off from the development. The proposal achieves these outcomes by maintaining the grass pasture beneath and between the solar arrays that are designed to tilt to follow the angle of the sun across the day. Stormwater will run directly off the panels to infiltrate to ground.

13.54 The applicant has confirmed that the panels are designed to weather the elements for this period of time and there is no expected leachate of contaminants over the consent duration. However, no information has been provided by the applicant on the management of any potential effects or the construction, operation or decommissioning of the proposed switchyard which is identified as a HAIL activity on the HAIL list. This has the potential to create contaminated land and would be inconsistent with these related objectives and policies in the RPS. Unless the management of this switchyard can be established, operated and decommissioned in a manner to ensure that contamination is managed and can be remediated I consider freshwater is potentially not being managed in an integrated way that

⁷ Systems where solar energy collection is undertaken on the same land as agricultural activities. This differs from PV systems where panels are placed directly on bare ground.

considers the effects of the use and development of land on a whole-of-catchment basis, and will have adverse effects on the receiving environment.

Natural hazards

- 13.55 Objective 20 and Policy 51 seek to avoid activities that increase the risk and consequences of natural hazard events noting that part of the site includes the Papawai Faultline and is also subject to the Rural Wildfire Risk zone (identified as a medium risk). Conditions have been recommended to ensure that adequate firefighting facilities are in place and an Emergency Response Plan is established for the site. This will ensure that risk is reduced to an acceptable level and the proposal will not exacerbate natural hazards in the area or on the site.

Tāngata whenua

- 13.56 Objective 24 seeks to ensure that the principles of Te Tiriti o Waitangi are taken into account in a systematic way when resource management decisions are made. Policy 66 seeks to enhance involvement of tangata whenua in resource management decision-making. The applicant has provided details of correspondence sent to Ngāti Kahungunu ki Wairarapa and Rangitāne o Wairarapa.
- 13.57 At the time of writing no correspondence or submissions have been received from Ngāti Kahungunu ki Wairarapa and Rangitāne o Wairarapa.

Managing development in rural areas

- 13.58 Policy 56 provides a framework to manage rural development, implementing Objective 22 which seeks to establish a compact well designed and sustainable regional form. The proposal will not lead to a loss of productive capability⁸ of the site or surrounding area as it will produce solar energy and will not diminish the productive capacity of the surrounding land. Whilst there will be a change in the appearance of the site from currently pastoral to a solar farm, views of this will be obscured through shelter belts and other planting.

⁸ As defined by the National Policy Statement for Highly Productive Land 2022. <https://environment.govt.nz/assets/publications/National-policy-statement-highly-productive-land-sept-22-dated.pdf>

13.59 The South Wairarapa Spatial Plan⁹ was adopted in December 2021 and provides a strategic growth management plan for the district. The proposal is consistent with the Spatial Plan and does not restrict or foreclose on planned growth in nearby Greytown and is consistent with the strategic drivers in the spatial plan to support the transition to a low carbon economy and does not detract from the plans for growth that protects rural land and character.

A plan or proposed plan – s104(1)(b)(v):

Greater Wellington Natural Resources Plan 2023

- 13.60 The Greater Wellington Natural Resources Plan 2023 ('**NRP**') sets out the objectives, policies and methods for people and organisations that use the Region's air, land, water and coastal resources.
- 13.61 The site is located away from the coastal area and the solar farm will not create any emissions to air.
- 13.62 The site does not contain any natural freshwater features such as wetlands, rivers (as defined by Part 2 of the RMA) or streams. There are water races and a canal that drains water across the site. These features will be retained as part of the solar farm with crossings built to accommodate the vehicle tracks required to service the solar arrays. It is noted that River Class 6 watercourses traverse the site as shown on the NRP planning maps. These largely follow the same course as the water races. I note that Rule R125 of the NRP provides for river crossing structures as a permitted activity. The applicant has advised that no regional consents are required for the proposal and that works in the water races will be managed by the Moroa Water Race Bylaw 2007.
- 13.63 Objectives 033 to 041 refer the health of soil and its life supporting capacity and minimising any adverse effects on soil. Objective 036 seeks to minimise any runoff of contaminants to water from discharges to land. Objective 04 and 41 seeks to protect the environment from adverse effects of discharges of hazardous substances and the creation of contaminated land is avoided. No information has been provided by the applicant on the management of any potential effects or the construction and operation of the proposed

⁹ Refer <https://swdc.govt.nz/wp-content/uploads/1.-South-Wairarapa-Spatial-Plan.pdf>

switchyard which is identified as a HAIL activity on the HAIL list. This has the potential create contaminated land and would be inconsistent with these objectives and the related policies, including Policy P66 minimising discharges to water or land from contaminants, Policy P67 managing human drinking water supplies, P68 relates to the management of discharge contaminants to land, Policy P99 Discharges from contaminated land, and Policy P100: Discharges of hazardous substances.

- 13.64 Rainfall will drain from the solar arrays and discharge on to the ground. Panels are completely sealed with manufacturer warranty of 35 years and no contaminants discharged to ground from the panels noting the matters expressed above in relation to the switchyard.
- 13.65 Objective 012 deals with relationships of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga are recognised and provided for. Objective 013 provides for mana whenua to actively participate in planning and decision making. As noted above at the time of writing no correspondence or submissions have been received from Ngāti Kahungunu ki Wairarapa and Rangitāne o Wairarapa.
- 13.66 Policies P11 and P13 make specific reference to the consideration of the benefits of renewable electricity generation facilities recognising the proposal will contribute to the National Grid and provide electricity produced by renewable sources.
- 13.67 Policy P25 seeks to ensure that activities located in high hazard areas include hazard mitigation methods. Part of the site includes the Papawai Faultline and is also subject to the Rural Wildfire Risk zone (Medium risk). Conditions have been recommended to ensure that adequate firefighting facilities are in place and an Emergency Response Plan is in established for the site. This will ensure that risk is reduced to an acceptable level. As outlined above there are operational requirements for the proposal to be located on the site.
- 13.68 Policy P43 relates to the potential effects on the spawning and migration of indigenous fish species. The proposed site is within a Whitebait Migration Zone. Only minimal earthworks are proposed and the land under the panels is proposed to be retained in grass which will assist in minimising erosion

and sediment run-off. The applicant has advised that there will be no contaminated run-off from the solar panels. As mentioned, no works are proposed in rivers as defined under the RMA, no regional consents are required for any works proposed in the rivers identified as River Class 6 and works in the water races are managed by the Moroa Water Race Bylaw 2007.

Wairarapa Combined District Plan 2011

Rural Zone

- 13.69 Objectives Rur 1, 2 and 3 relate to the management of the rural zones and the protection of rural character and amenity, the provision for primary production and other activities and the interaction between adjoining zones and activities. Objective SLD1 also requires that land development maintains and enhances the character, amenity, natural and visual qualities of the Wairarapa and protects the efficient and effective operation of land uses and physical resources.
- 13.70 Policy Rur1(d) seeks to ensure activities are consistent with the rural character, are of an appropriate scale, density and level of environmental effects. The solar farm involves arrays that are less than 5m in height and will be screened from external view by a continuous vegetative shelter belt with minimal adverse environmental effects on the physical environment.
- 13.71 Policy Rur1(e) recognises and manages the use and development of the natural character of the area. The solar farm will be consistent across the site and screened with a shelterbelt that reflects the rural landscape. The height of the vegetation will screen the solar arrays to minimise the visual and physical dominance on the surrounding environments.
- 13.72 Objective Rural 2 enables primary production and other land uses to function efficiently and effectively within the rural zones. Policies 2(d) and 2(f) require that they are appropriately sited and managed to avoid or mitigate the effects including through the control of the interface between activities.
- 13.73 The proposed solar farm is not a primary production activity, but it is an activity that will provide for productive outputs, being the capture of solar energy and the conversion of this into outputs for transmission in the

National Grid. It will not result in reverse sensitivity effects with adjacent rural sites used for primary production or foreclose on these. The activity is wholly contained on the site, will be visually screened and will not produce any physical environmental effects beyond the site, such as noise, odour or contamination of soil or water. Further the height and design of the array tables above ground level will have minimal disturbance of the ground and will allow sheep to graze the pasture beneath.

- 13.74 The effects of glint and glare from the solar panels has been assessed by the applicant's specialist ITP Renewables and reviewed by Landscape Architect Ms McRae of Boffa Miskell Limited. Glare was assessed as occurring over a three-minute period in the early mornings. The assessment found that the effects on road users along State Highway 2 would be negligible due to the separation distance and the oblique angle of views from the road to the site. In addition, these effects would be mitigated by the growth of the proposed shelterbelt.
- 13.75 Policy 18.3.2 SLD (a) provides for land development that is appropriate for the character of the zone while recognising that change may alter the character and qualities of the surrounding rural environment. As discussed above the proposed solar farm is considered appropriate within the rural zoned site. The built form of the solar arrays will also change the character of the surrounding rural environment to a degree although the vegetative shelterbelt will screen the development from view once at its mature height.
- 13.76 Objective Lan 1 and corresponding policies Lan1 (a) to (f) refer to the identification and protection of the Wairarapa's outstanding landscapes and natural features from the adverse effects of an appropriate use and development. Policy Lan1 (g) refers to the management of landscape values of the site and locality generally, as opposed to the any surrounding outstanding landscapes and natural features.
- 13.77 The site does not contain any mapped Significant Natural Areas or Outstanding Landscapes and the landscape assessments prepared by Mr Simon Cocker and Ms McRae concluded that adverse effects arising from the proposed solar farm will be experienced to a higher degree within the immediate surrounding area approximately 500m from the subject site. The

effects on areas beyond 500m will be absorbed within the existing landscape.

- 13.78 The assessment of environmental effects above, concluded that the adverse effects on the immediate surrounding rural landscape would be minor during construction and in the short-term as the shelterbelt is establishing with effects reducing to less than minor in the long-term once the shelterbelt reaches its proposed minimum maintained screening height of 4m. Thus, the proposed development acknowledges and mitigates the adverse effects on the surrounding rural landscape values so that they are minimised throughout the proposed 35 year lifetime of the solar farm.

Tangata Whenua

- 13.79 Objective TW1 *“To recognise and provide for the cultural values and relationship of Tangata Whenua in managing the natural and physical resources and the effects of activities, while taking into account the principles of the Treaty of Waitangi.”* Policies (a) and (b) recognise Tangata Whenua values and provide for the maintenance and enhancement of their traditional relationship with the natural environment, having particular regard to the exercise of kaitiakitanga by Tangata Whenua in the management of activities and resources. Policy (c) protects waahi tapu, sites of cultural importance and other taonga.
- 13.80 Tangata whenua were contacted by the applicant prior to lodgement of the consent. At the time of writing no correspondence or submissions have been received from Ngāti Kahungunu ki Wairarapa and Rangitāne o Wairarapa. The site is not known to contain waahi tapu, or any sites of cultural importance and other taonga.

Network Utilities and Energy

- 13.81 Objective NUE1 *enables the efficient development, maintenance and operation of network utilities while avoiding, remedying or mitigation adverse effects on the environment,* and NUE2 *seeks to move the Wairarapa towards a sustainable energy future by encouraging energy efficiency and the generation of energy from renewable sources.*

- 13.82 The proposed solar farm development has been demonstrated to minimise and mitigate any potential or actual effects on the environment. The solar farm will be the first of its kind in the south Wairarapa and will provide additional energy generation from a renewable source to be feed to the national grid, consistent with the objectives of NEU1 and NEU2.
- 13.83 The policies (a) to (g) accompanying objective NEU1 aim to control any adverse effects on the efficient operation of network utilities, in this case the existing substation and transmission line corridor that traverses the subject site. The proposed solar farm has been located so as to make use of the practical efficiencies of feeding directly into the national electricity transmission grid via the existing substation. The solar farm has been designed to avoid conflict with the existing infrastructure traversing the site and will be constructed in accordance with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).
- 13.84 Objective NUE2 and corresponding policies (a) to (g) recognise the local, regional and national benefits derived from renewable energy generation and seek to manage appropriate development of potential renewable energy resources, in this case solar access and sunlight hours.
- 13.85 Policy (d) provides for renewable energy generation while managing adverse effects of, in particular, large scale and/or prominent facilities. The proposed solar far will cover an area of approximately 170 hectares which is a large area of land within an open rural landscape. The location and topography of the site is such that the proposed solar farm will not be a prominent feature in the surrounding landscape with long-term visual effects mitigated by the planting of a screening shelter belt around the entire perimeter of the site.
- 13.86 Other potential adverse effects that may arise during construction and operation of the solar farm have been minimised and/or mitigated through design, layout and management of works through conditions of consent.
- 13.87 Objective NUE2 and Policy (f) both encourages energy generation from renewable sources and recognises the technical and operational requirements of energy generation and distribution that need to be taken into account when setting environmental standards and assessing applications for resource consent. In this instance, the harnessing of solar energy for

electricity generation will require the use of a large area of land in an open area that is not overshadowed by buildings or hills, thus the location of the subject site within an area of flat land within the rural zone. The location of the existing substation and transmission corridor also lends this site to technical and operational efficiencies.

- 13.88 Overall, the construction and operation of the proposed solar farm within the South Wairarapa is provided by the WCDP and Network Utility and Energy objectives that encourage the generation of energy from renewable sources. The location of the subject site and the design of the solar farm itself is consistent with the objectives and policies set out in NUE 1 and NUE2.

Transportation

- 13.89 Objective TT1 and accompanying policies (a) to (g) seek to manage the road network in manner that maintains the safe and efficient operation and development of the road network from the adverse effects of land use while maintaining the network's ability to service the current and future needs of the Wairarapa.
- 13.90 Moroa Road is an unsealed local accessed from higher order roads including Bidwills Cutting Road to the east and State Highway 2 to the west. The majority of additional traffic generation will occur during the construction of the solar farm, however, the level of additional traffic expected is low with up to three heavy vehicle deliveries per day and the remainder being workers arriving in vans and utility vehicles. The volume of traffic would drop off once the farm was operational as the site will be monitored remotely, with general maintenance undertaken by up to two staff as required throughout the 35-year lifetime of the solar farm. The implementation of a construction management plan will manage the safe movement of construction traffic to and from the site.
- 13.91 Policy (c) requires all access points on to roads to be constructed to the set standards, avoiding, remedying or mitigating any adverse effects on the roads' safe and efficient functioning. The solar farm will utilise five vehicle accessways across the site, all will be formed to meet the required construction standards and provide appropriate depth of sightlines along Moroa Road. The low volume of additional traffic and compliant vehicle

crossings will work to minimise disruption to the normal operation of Moroa Road. Policy (f) refers to a co-ordinated approach to addressing capacity and safety issues within the road network including with Waka Kotahi, New Zealand Transport Agency (Waka Kotahi) in relation to State Highway 2, in this instance. Policy (l) seeks to ensure that land development avoids, remedies or mitigates any adverse effects on the safe and efficient operation of the roading network. The solar farm is approximately 500m away from State Highway 2 at its nearest point. The potential adverse effects of glint and glare affecting drivers along State Highway 2 was raised by submitters including Waka Kotahi.

- 13.92 As discussed in the section above entitled Rural character and visual amenity, the issue of glint and glare has been assessed by ITP Renewables on behalf of the applicant, where it was found that glint and glare effects along State Highway 2 would be an issue for a period of three minutes in the early morning hours, assuming no screening of the solar farm site. The proposed perimeter planting will mitigate any potential effects once established. Thus, any potential safety concerns would be alleviated across the life of the solar farm.
- 13.93 Waka Kotahi's submission expressed concern that the proposed low height (0.6m) of trees at the time of planting along the north and north-eastern perimeters of the farm within 1942 State Highway 2 would not provide immediate mitigation of the adverse safety effects. They asked for plants to be 2m high at planting. The applicant has accepted this request, thus addressing the short term safety concerns.
- 13.94 The low volume of additional traffic and the proposed design and layout of the solar farm, its vehicle accessways and perimeter screen planting will work to maintain the safe and efficient operation of the surrounding road network, thus, being consistent with the objectives and policies set out in Chapter 17 Transportation of the District Plan.

14.0 Any Other Matter – Section 104(1)(c)

- 14.1 Section 104(1)(c) requires that any other matter the consent authority considers relevant and reasonably necessary to determine an application be considered. In this case the following matters are considered relevant.

Draft Wairarapa Combined District Plan (notified October 2022)

- 14.2 At the time of writing, feedback on the Draft Wairarapa Combined District Plan had been received by Council and is in the process of preparing the Proposed Wairarapa Combined District Plan for notification. It is understood that notification is scheduled for later in 2023 and potentially prior to this application being considered by the Environment Court. Depending on progress it is briefly considered as follows, noting that the following relates to draft plan and may have been modified further following feedback from the community.

- 14.3 The site was identified as a rural zone – ‘General Rural zone’ in the draft and under the draft standard ENG-R5.1. the proposal would be a discretionary activity as a ‘Large-scale renewable electricity generation activities’ defined as:

Large-scale renewable electricity generation activity

Means electricity generation activities utilising renewable energy sources for the purpose of exporting electricity directly into the distribution network or National Grid. It includes all ancillary components and activities such as substations, climate/environmental monitoring equipment, earthworks, roading, maintenance buildings, temporary concrete batching plants, internal transmission and fibre networks, vegetation clearance, and site rehabilitation works.

- 14.4 The Draft Wairarapa Combined District Plan contains a new section of Strategic Direction and includes objectives relating to Climate Change and Resilience CCR-01 and CCR-02 are of particular relevance to this application for a solar farm and are copied below:

CCR-01 Climate change resilience: The Wairarapa develops and functions in a way that mitigates the effects of climate change.

CCR-02 Adapting to climate change: The Wairarapa adapts to the effects of climate change and recognises the opportunities and risks associated with those effects.

- 14.5 Other objectives and policies in the draft would be relevant to the proposal if the Draft Plan had statutory weight at the time decisions were made. However, given the uncertainty at the time of writing no further evaluation is considered appropriate at this time.
- 14.6 There are no other matters considered relevant to this application.

15.0 Submissions

- 15.1 All of the submissions received by the council in the processing of this application have been reviewed and considered in the overall assessment of effects in this report. The council's specialists have also reviewed the relevant submissions as required and incorporated comments into their assessments accordingly. Many of these submissions raised similar issues and have been dealt with generically in the body of this report. Those that have raised specific resource management matters and points of clarification have been specifically addressed in the assessment of actual and potential effects contained in section 14 of this report.

16.0 Suggested Conditions

- 16.1 Pursuant to section 87F(4)(b) of the RMA, a set of suggested conditions has been prepared and is contained in Attachment 7.
- 16.2 These conditions have been developed based on the information available at the time of preparing this report and the conditions as proposed by the applicant and are recommended in the event that the decision maker determines to grant consent. It is anticipated these proposed conditions will be subject to further refinement, either prior to or during the hearing by the Environment Court.

17.0 Monitoring – Section 35

- 17.1 Local authorities are also required to monitor the exercise of resource consents under s35 of the RMA. In this regard, the abovementioned conditions include a number of monitoring requirements, and which will require review by the Council's monitoring team.

18.0 Lapsing of Resource Consents

- 18.1 Under s125, if a resource consent is not given effect to within five years of the date of the commencement (or any other time as specified) it lapses automatically, unless the council has granted an extension. In this case, five years would be considered an appropriate period for the consent holder to implement the consents due to the nature and scale of the proposal.
- 18.2 The applicant has requested a consent duration of 35 years from the date of issue which would coincide with the manufacturer's lifetime warranty for the solar panels. Upon the date of expiration, the solar farm would be decommissioned and dismantled with all physical structures and mechanical plant removed from the site for recycling or disposal. The disturbed ground would be reinstated for agricultural use.

19.0 Consideration of Part 2 (Purpose and Principles)

Purpose

- 19.1 Section 5 identifies the purpose of the RMA as the sustainable management of natural and physical resources. This means managing the use of natural and physical resources in a way that enables people and communities to provide for their social, cultural and economic well-being while sustaining those resources for future generations, protecting the life supporting capacity of ecosystems, and avoiding, remedying or mitigating adverse effects on the environment.

Principles

- 19.2 Section 6 sets out a number of matters of national importance which need to be recognised and provided for. These include the protection of outstanding natural features and landscapes, the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna, and the protection of historic heritage.
- 19.3 Section 7 identifies a number of “other matters” to be given particular regard by the council in considering an application for resource consent. These include the efficient use of natural and physical resources, and the maintenance and enhancement of amenity values.
- 19.4 Section 8 requires the council to take into account the principles of the Treaty of Waitangi.

Assessment

- 19.5 Any consideration of an application under s104(1) of the RMA is subject to Part 2. The Court of Appeal in *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316 has held that, in considering a resource consent application, the statutory language in section 104 plainly contemplates direct consideration of Part 2 matters, when it is appropriate to do so. Further, the Court considered that where a plan has been competently prepared under the RMA it may be that in many cases there will be no need for the Council to refer to Part 2. However, if there is doubt that a plan has been “competently prepared” under the RMA, then it will be appropriate and necessary to have regard to Part 2. That is the implication of the words “subject to Part 2” in s104(1) of the RMA.
- 19.6 The Wairarapa Combined District Plan (WCDP) was made operative on 25 May 2011 shortly after the National Policy Statement for Renewable Electricity Generation 2011 (NPS REG) came into effect on the 13th of May 2011. The objectives of the NPS REG 2011 are, however, reflected in the objectives and policies of the WCDP NUE2 – Energy Generation and Efficiency.
- 19.7 As discussed above in Section 15.0, paragraphs 15.72 to 15.79, overall, the construction and operation of the proposed solar farm within the South

Wairarapa is provided by the WCDP and Network Utility and Energy objectives that encourage the generation of energy from renewable sources. The location of the subject site and the design of the solar farm itself is consistent with the objectives and policies set out in NUE1 and NUE2.

- 19.8 The introduction of the National Policy Statement for Highly Productive Land (NPS HPL) in 2022 introduced the requirement for regional councils to map areas of highly productive land. The objective of the NPS HPL is to protect this land for use in land based primary production with territorial authorities required to avoid inappropriate use or development of highly productive land and when activities are not considered inappropriate. The Wellington Regional Council has yet to undertake this mapping exercise.
- 19.9 Manaaki Whenua Landcare Research has produced maps of the country classifying land use capability. As discussed in section 15.0 above, the majority of the site is classified as Land Use Capability (LUC) Class 4 which is not considered to be highly productive land. A small area of the site adjacent to the existing substation is LUC Class 2 which falls within the definition of highly productive land. As discussed above, it is considered that the proposed solar farm and all associated infrastructure is an appropriate use and development of the land and is consistent with the objective and policies of the NPS-HPL 2022.
- 19.10 As noted, the proposal includes a new switchyard which is identified as a HAIL activity on the HAIL list. This has the potential create contaminated land and would be inconsistent with the objectives and policies in the RPS and the Greater Wellington Natural Resources Plan 2023. Unless the management of this switchyard can be established and operated in a manner to ensure that contamination is managed and can be remediated, I consider that potential contamination of soil and freshwater is not being managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis and has the potential to have adverse effects on the receiving environment.
- 19.11 In addition, there has been limited engagement with Ngāti Kahungunu ki Wairarapa and Rangitāne o Wairarapa and this leaves uncertainty as to whether the requirements under Part 2 section 6(e), 7(a) and 8 RMA, the

RPS, the Greater Wellington Natural Resources Plan 2023 and the District Plan have been satisfied, recognising that no submission or feedback has been received at the time of writing.

- 19.12 In the context of this discretionary activity application and the provisions of Part 2 of the RMA the operative WCDP provides for the construction and operation of a solar farm such as that proposed, and the proposal is consistent with the NPS REG and NPS HPL. However at the time of writing this s87F report there are specific uncertainties in relation to: tangata whenua under Part 2 section 6(e), 7(a) and 8 RMA, the RPS, the Greater Wellington Natural Resources Plan 2023 and the District Plan; and, the proposal is potentially inconsistent with objectives and policies in the RPS and the Greater Wellington Natural Resources Plan 2023 regarding potential contamination from the proposed switchyard.

20.0 Planner's Conclusion

- 20.1 At the time of writing and subject to new or contrary evidence being presented at the hearing, the application has been analysed under sections 104, 104B 105, 107, and Part 2.
- 20.2 To assist the decision makers if it is determined on the evidence to grant consent subject to conditions, draft recommended conditions have been included at attachment 7 pursuant to sections 108 and 108AA.
- 20.3 The above analysis identifies the following:
- (a) Under section 104(1)(a) and (ab) of the RMA, the actual and potential effects from the proposal on the environment in terms of landscape, noise transmission lines, traffic and construction can be appropriately avoided, mitigated and managed and the activity whilst not provided for is not unanticipated by the zone, being a discretionary activity.
 - (b) Under section 104(1)(b) of the RMA, the proposal is found to be contrary to the some of the provisions within relevant statutory documents, namely the NPS-FM given the uncertainty with available water allocation needed for firefighting and solar panel washing and with regard to potential contamination from the proposed switchyard

these are also relevant considerations under the RPS, the Greater Wellington Natural Resources Plan 2023.

- (c) Under section 104(1)(c) of the RMA, no other matters were considered relevant or reasonably necessary to determine the applications.
- (d) Against Part 2, and in light of the uncertainties regarding consultation with tangata whenua the proposal has been assessed as being potentially inconsistent with Part 2 section 6(e), 7(a) and 8 RMA, the RPS, the Greater Wellington Natural Resources Plan 2023 and the District Plan.

Attachment 1: Summary of submissions and submissions

Attachment 2: Peer reviews and recommended conditions

Attachment 3: Objectives and Policies

Attachment 4: s92 Request and Responses Pre-Notification

Attachment 5: s92 Request and Responses Post-Notification

Attachment 6: Additional Information

Attachment 7: Draft Conditions

