



Hurunui District Council

Attention: Nicola Kirby  
[nicola.kirby@hurunui.govt.nz](mailto:nicola.kirby@hurunui.govt.nz)

29 May 2024

WWLA0980

Dear Nicola

**Resource Consent Application 380 Waipara Flat Road, Waipara (Resource Consent No. 240028) – Response to Further Information Request**

This letter provides a response to your letter dated 18 April 2024 which requested further information pursuant to section 92 of the Resource Management Act 1991 (RMA). The requests are presented in *blue* italics, followed by our responses.

**General requests**

- *Page 14 of the AEE refers to Appendix C for full drawings of the proposed solar panels and inverters. The Appendix C provided with the application documents only includes an Environment Canterbury Form 8A with written approval from the property owner.*

*Please provide the solar panel and inverter drawings referred to in the AEE.*

Please see **Appendix A**.

- *Page 43 of the AEE refers to consultation with adjoining landowners and neighbours, referring to Appendix L for further information. Appendix L provides information on the consultation undertaken with Ngāi Tūāhuriri Rūnanga only. It does not provide any information on the consultation undertaken with the adjoining landowners and neighbours.*

*Please provide information outlining the consultation undertaken with adjoining landowners and neighbours.*

Please see the consultation log in **Appendix B**.

- *Page 40 of AEE refers to the incorrect iwi management plans.*

*Please provide an assessment of the proposal against the relevant iwi management plan – Mahaanui Iwi Management Plan.*

The Mahaanui Iwi Management Plan 2013 sets forward the aspirations for Ngāi Tūāhuriri Rūnanga, Te Hapū o Ngāti Wheke (Rāpaki), Te Rūnanga o Koukourārata, Ōnuku Rūnanga Wairewa Rūnanga and Te Taumutu Rūnanga. It constitutes their expression of kaitiakitanga and rangatiratanga in fulfilment of their guardianship responsibilities over the lands and waters within the takiwā from the Hurunui River to the Hakatere River and inland to Kā Tiritiri o Te Moana.

The purpose of the plan is to provide a tool for tāngata whenua to:

- Express kaitiakitanga, by effectively and proactively applying Ngāi Tahu values and policies to natural resource and environmental management; and
- Protect taonga and the relationship of tāngata whenua to these, by ensuring that the management of land and water resources achieves meaningful cultural and environmental outcomes.

The Mahaanui IMP sets forward several objectives / aspirations for their takiwā; those relevant to this proposal are acknowledged in **Table 1** below. Overall, the proposal is considered to be consistent with the provisions of the Mahaanui IMP.

Table 1. Mahaanui IMP objectives and aspirations.

Relevant objectives / aspirations	Comment
The Mahaanui IMP 2013 is embraced and implemented as a manawhenua planning document for the six Papatipu Rūnanga across Ngā Pākihi Whakatekateka o Waitaha and Te Pātaka o Rākaihautū.	The proposal will provide opportunities for kaitiakitanga over the lifecycle of the project. There will be no discharge of contaminants or stormwater to any adjacent waterbody. The proposal is overall consistent with the aspirations expressed in the document.
Papatipu Rūnanga are able to fulfill their role and responsibility as kaitiaki within management and decision making processes.	
Effective recognition of kaitiakitanga in natural resource management and governance processes.	
Ngāi Tahu is able to lead the way and set an example on the landscape with regard to best practice and sustainable cultural, environmental, economic, and social outcomes.	
Water and land are managed as interrelated resources embracing the practice of Ki Uta Ki Tai, which recognises the connection between land, groundwater, surface water and coastal waters.	There will be no impact on waterways as a result of the proposed works. Mana whenua will be provided with opportunities for engagement throughout the entire lifecycle of the project.
Establishing native vegetated riparian buffer zones along all waterways and drains, and requiring the use of appropriate fencing, buffers and set back areas to protect wetlands, waipuna and riparian areas from intensive land use.	
Avoiding any new discharges of contaminants to water.	
The ancestral and contemporary relationship between Ngāi Tahu and the land is recognised and provided for in land use planning and decision making.	The proposal will provide opportunities for mana whenua to be actively involved throughout the project lifecycle. In addition, the proposal will be undertaken in accordance with best practice erosion and sediment controls in place and will have a less than minor adverse effect on the environment (see Section 5 of the AEE).
Land use planning and management in the takiwā reflects the principle of Ki Uta Ki Tai.	
Subdivision and development activities implement low impact, innovative and sustainable solutions to water, stormwater, waste and energy issues.	

- *Page 15 of the AEE states construction activities will take place over a 12 month period with the construction and primary electrical works being carried out over the first few months of construction. It would be useful to have a timeline which includes the carrying out of the landscape plantings and screening, fencing, internal road development, installation and operation of the solar panels and inverters to fully understand the construction phase of the proposal.*

*Please provide a construction timeline of the proposed development including the sequencing of the activities.*

Please refer to the Gantt Chart attached in **Appendix C**.

### **National Policy Statement on Highly Productive Land (NPS-HPL)**

- *Page 33 of the AEE considers clause 3.9(2)(j)(i) of the NPS-HPL applicable to the proposal. Late last year the Ministry for the Environment consulted on two potential changes to the NPS-HPL. One of these was the lack of clear consent pathway for the construction of new specified infrastructure on highly productive land, such as solar farms, where it was not a requiring authority. My understanding is this indicates there is not currently a clear consenting pathway under the NPS-HPL for solar farms on highly productive land.*

The purpose of MfE's review on the NPS-HPL to provide a clearer consenting pathway, in order to make it easier to consent specified infrastructure on land identified as being highly productive. That does not mean there is not a consenting pathway currently under the NPS-HPL for solar farms, which are defined as being *specified infrastructure* (as renewable electricity generation which is a regionally significant infrastructure). Therefore, in the absence of a more appropriate consenting pathway under the NPS-HPL for solar farms, clause 3.9(2)(j)(i) applies to the proposal.

- *Additionally, if a pathway through clause 3.9(2) can be identified, no assessment under 3.9(3) has been provided on how the proposed solar farm will minimize or mitigate any actual or potential cumulative loss of the availability and productive capacity of highly productive land in the district.*

*Further information is required to justify how the proposal passes the tests in the NPS-HPL.*

The application included a Soil Assessment, which was prepared by Hanmore Land Management. Based on this assessment, the following is noted with respect to effects on HPL:

- The proposed solar structures would only impact approximately 0.18% of the total site area, indicating a minimal physical footprint on the HPL.
- The use of H piles instead of solid piles to support the solar panels would minimize soil impacts, preserving soil structure across the site. Additionally, the project's impact on soil structure is expected to be negligible compared to traditional farming or horticultural practices, which often involve heavier stock such as cattle, large (and heavy) machinery and greater soil disturbance.
- With good stock and pasture management practices, the proposed project would enhance soil structure, water retention, aeration, and nutrient content by minimizing compaction and increasing organic matter incorporation into the soil profile, thereby improving the long-term productivity potential of the HPL.
- During both the operational phase and decommissioning of the project, efforts will be made to minimize soil disturbance, ensuring the preservation of the HPL's productivity potential throughout the project's lifespan.
- The project intends to maintain primary production on the HPL through sheep grazing for meat production, diversifying land use and supporting agricultural activities alongside the main focus of energy generation.

Given these factors, the overall impact of the proposed solar farm on the HPL is assessed to be less than minor. More broadly, it is noted that there is a functional and operational need for the proposal to be located in a rural zone and on farmland. On that basis, the proposal passes the tests under the NPS-HPL.

### ***Glint and glare assessment (Appendix K)***

- *Please confirm what rest angles are intended to be used to address glint and glare from the solar panels.*

For this proposal, glare was analysed with backtracking limited to 3 degrees (i.e., during backtracking the modules will stop at 3 degrees rather than continuing to 0 degrees) and this eliminated all yellow glare. The remaining green glare is not hazardous and does not require further mitigation. For further information, please refer to the Glint and Glare Assessment provided with the application.

- *Page 15 of the report outlines the ‘model components’. When describing the model vegetation used, it is unclear what height vegetation was used where. Do the heights used in the model properly correspond with the proposed planting maintenance height?*

*Please provide sufficient detail to confirm.*

From the Glint and Glare report, the tree heights are set as described in the report as 3 m (as revegetation zones and boundary screening vegetation) or 5 m (as boundary screening).

The tree planting details are from the drawing Landscape Mitigation Plan (refer to **Appendix D**). The heights are not detailed, but are 3m for internal revegetation on the slopes, and 5m along the road sides.

- *Will the panels be in place and in operation prior to the vegetation screening having reached the proposed maintenance height for screening? If so, what are the glint and glare effects prior to these plantings reaching the proposed maintenance height for screening?*

The Glint and Glare Report assume the trees are at their final heights. To avoid glint and glare, the system can be set to avoid the low angles that create the effects. FNSF will create a glare mitigation plan that will run for at least the first five years of operation. This plan will be designed from the providing report, looking at the times that are indicated as green glare. The plan will be to limit the tilt at early and late daylight hours, to avoid all glare. Operating the system in this manner is not unusual and can be done to remove the glint and glare risk and will have minimal effect on the generation.

### ***Landscape and visual assessment (Appendix D)***

- *Please provide a scalable landscape plan (i.e. the detail can be zoomed in on and remain clear).*

Please see **Appendix D**.

- *Page 26 of the AEE references an ‘ALE planting plan’. I have not identified this within the application documents. Please provide a copy.*

The Assessment of Landscape Effects included a Landscape Mitigation Plan as Figure 2a. This plan has been reproduced in the attachments and larger scale versions of this plan are also attached (**Appendix D**).

- *If not included in the ‘ALE planting plan’ please confirm the planting heights and final maintenance heights of the proposed screening plantings, how the long it is anticipated for the plantings to reach the maintenance heights and how the screenings will be maintained.*

The final maintenance heights were specified in the Assessment of Landscape Effects, but this information is now (also) shown on the attached plan in **Appendix D** and in the schedules below. Note – the maintained height of the road boundary planting has been increased to 5 m.

**River terrace – restoration mix** (Final minimum maintenance height: 4 – 5m)

Species	Common name	Grade	% Mix	Spacing
<i>Carmichaelia australis</i>	mekska	1L	5	1.4m
<i>Cordyline australis</i>	ti kōuka/cabbage tree	1L	10	1.4m
<i>Discaria tomatou</i>	matagouri/tūmatakuru	1L	10	1.4m
<i>Kunzea ericoides</i>	kēnuke	0.5L	40	1.4m
<i>Muehlenbeckia astani</i>	mingmingi	0.5L	10	1.4m
<i>Olearia adenocarpa</i>	plains Olearia	1L	10	1.4m
<i>Ozothamnus leptophylla</i>	cottonwood/tsuhinu	1L	5	1.4m
<i>Pittosporum tenuifolium</i>	kohuhu	1L	5	1.4m
<i>Sophora microphylla</i>	kowhai	2L	5	5m

**Native revegetation screen mix** (Final minimum maintenance height: 4 – 5m)

Species	Common name	Grade	% Mix	Spacing
<i>Pittosporum tenuifolium</i>	kohuhu	1L	20	1.4m
<i>Cordyline australis</i>	ti kōuka	1L	10	1.4m
<i>Hoheria angustifolia</i>	hoheria	1L	10	1.4m
<i>Phormium tenax</i>	haraheke	1L	10	1.4m
<i>Coprosma robusta</i>	keramu	1L	20	1.4m
<i>Hebe salicifolia</i>	koromiko	1L	15	1.4m
<i>Muehlenbeckia astanii</i>	mingmingi	1L	15	1.4m

**Boundary screen planting** (Final minimum maintenance height: 5m)

Species	Common name	Grade	Spacing
<i>Cryptomeria japonica</i>	Japanese cedar	Pb2	1.2m (double staggered row)

It is anticipated that the river terraces and native revegetation mixes will take some 5-6 years to achieve the specified heights. The boundary screen planting will take some 4-5 years to achieve the specified height. It is noted that, as the planting is growing to achieve these heights, the level of temporary effect will diminish gradually.

- *Please confirm whether the height of the deer fence is 1.8 m or 2 m and whether the 3 strands of barbed wire are included in that height or in addition. Will barbed wire deer fence be on the outside of the screening planting or on the inside? The barbed wire deer fence does not appear to be shown in the visual simulations of the proposal.*

The height of the deer fence is 1.8 m plus 3 strands of barbed wire on top making the total height up to 2.1 m (please see Landscape Mitigation Plan attached as **Appendix D**, and Section 3.4 of the AEE). From the figure provided in **Appendix D**, one can assume the deer fence will be within the revegetation planting on the eastern boundary, outside the screen planting on the northern and western edges, and inside the screen planting on the southern boundary.

**Engagement with other entities**

- *Has any conversation been had with Transpower regarding capacity of the substation to accept the power generated by the solar farm? Please provide any outcomes of discussion.*

The project has been on the Transpower connection queue since June 2023, with the generation connection application fees paid at that time. The project is working towards the resourcing stage. The most recent meeting with Transpower (May 2024) has been looking at the three possible connection options and the most suitable method. This work was initiated with a Concept Assessment, which considered the line capacity, transformer capacities, local loads and growth. We consider that this project is well developed in the connection design and the studies around connection and grid injection. The solar farm has been engineered to the information provided by Transpower and the results of the consultant’s studies.

- *Boundary screening plantings are proposed under the MainPower and Transpower lines. Please confirm whether the proposed maintained height of the screening plantings are able to be accommodated under these lines.*

The Applicant has engaged with MainPower regarding this proposal as a result has amended the Site Layout Plan (refer to **Appendix E**) to ensure no planting or solar panels are within 10 m of the distribution line.

The planting plans will be adjusted to meet the clearances required for passing under power lines. This will require that the trees under transmissions lines are maintained to a height that meets the required clearances. The option of replacing these trees with lower growing species is also available, but currently this is not our preferred option.

- *Has any correspondence been had with FENZ regarding fire safety and firefighting provision? Please provide any outcomes of discussion.*

FNSF has not consulted with FENZ directly on this site, however it has worked with FENZ on numerous other solar farm proposal across New Zealand. Based on the Applicant's experience and insight working with FENZ, the following design considerations have been taken into account to address fire risk management and safety:

- Suitable access onto and around the site, including turning radius, slope and approach angles to bridges, passing bays and parking at any on site facilities such as water tanks or building;
- Water storage on site for firefighting purposes;
- Site familiarisation and visits, updates during construction and ongoing visits;
- Understanding and selection of planting species to reduce fire risk;
- Working with the farmer to ensure no grass is allowed to grow tall (the site will be grazed by sheep to keep the grass short, as we will not be able to mow/crop the site);
- Updates on any materials onsite that may present a risk of fire or during a fire; and
- Provision of an Emergency Response Plan to be prepared and reviewed by FENZ.

FNSF is aware of the requirement to work with FENZ and has welcomed their input into our design process at our various sites. FNSF would proffer conditions of consent to address the design matters above – please see the proposed consent conditions in **Appendix F**.

- *Has any correspondence been had with NZTA given the site adjoins State Highway 7? Please provide any outcomes of discussion.*

The Applicant has not had any correspondence with NZTA regarding this proposal. NZTA was not considered to be an affected party, due to the following reasons:

- No new accessways are proposed;
- The proposal includes extensive screening of the solar arrays from State Highway 7;
- The proposal will result in minimal increases in construction and operational traffic volumes; and
- Glint and glare effects are less than minor.

## Conclusion

We trust that there is now sufficient information available for you to continue processing the application. Please do not hesitate to contact Laila Alkamil on 027 266 8405 if you require further clarification of any aspects of this letter.

Yours sincerely,



**Laila Alkamil**

Planner | 027 266 8405

[Laila.Alkamil@wwla.kiwi](mailto:Laila.Alkamil@wwla.kiwi) | [www.wwla.kiwi](http://www.wwla.kiwi)