29 September 2023

Our reference: RC235464

Attention: Claire Kelly

Sent via email: claire.kelly@boffamiskell.co.nz

Dear KeaX Limited C/- Boffa Miskell,

s92 - Request for Further Information

I have reviewed your resource consent application **RC235464** to construct and operate a new solar array. More information is needed so that I can better understand your proposal and its potential effects.

Further information

In accordance with section 92(1) of the Resource Management Act 1991, I request the following information:

General

1. It is understood that the consent is sought for an indefinite period for the activity. Please confirm this is correct.
2. Please confirm if KeaX Ltd are an Electricity Operator as defined by the Electricity Act 1992.
3. The AEE states that it is proposed to construct the solar array in its entirety and that no staging is proposed. The final paragraph in Section 4.2 states “in addition to staging”, and the compliance table in section 5.2 of the AEE states that earthworks are proposed across the “three stages”. Please clarify the staging stated in the application and confirm if the construction will be staged in any manner.
4. The plans in Appendices 4 & 13 do not illustrate the location of the relocatable site office or the intended parking area. The statutory assessment (amended) states that this building will be located more than 100m from the site boundary. Please amend one of the site plans to confirm the location of the relocatable site office.
5. The statutory assessment (amended) states that the proposal is a permitted activity under Rule NH-R2. The relocatable site office building is considered to be a principal building. Please provide a Flood Assessment Certificate (FAC) to confirm compliance with Rule NH-R2. Note - the location of the relocatable site office will be required to determine the minimum floor level for the FAC. For information regarding this process please use the following link: https://www.selwyn.govt.nz/property-And-building/resource-consent/flooding-assessment-certificates

6. The Operative District Plan (Rural Volume) definition of relocatable building: “includes any building that is removed from one site and relocated to another [property], in whole or in parts. It does not include any new building which is designed for, or intended to be used on, a site but which is erected off the site, in whole or in parts, and transported to the site”. Please confirm if the site office building is a ‘new building’ or one that has been previously used.

Transportation

7. The statutory assessment (amended) states that it is proposed to upgrade an existing vehicle access point from Branch Drain Road to meet the standards for heavy vehicles in Appendix E10.2. Please confirm if the vehicle crossing will be formed in accordance with Diagram E10.D (commercial & heavy vehicle access standard for all roads). Please also confirm that the vehicle crossing would be upgraded prior to the commencement of construction on the site.

8. The existing vehicle crossing to be used for the proposed activity from Branch Drain Road has an existing culvert. Please confirm if this existing culvert will be upgraded with precast concrete headwalls with RCRRJ Z piping and be constructed in accordance with the Council’s Engineering Code of Practice.

Landscape

9. The Landscape Management Plan (LMP) states that irrigation shall be implemented along the full length of the site boundary, where mitigation planting is required. Please confirm if this irrigation and supporting infrastructure will be installed prior to planting the visual mitigation plan species.
10. The AEE states that an additional exotic shelterbelt will be planted 10m from the boundary with 324 Branch Drain Road. The statutory assessment (amended) states the existing residential unit is, at its closest point, approximately 13 metres from the site boundary and therefore, the 10m proposed shelterbelt separation stated in the AEE will achieve a separation distance of 23m (not the 30m per the rule requirement). Please confirm the separation distance from the property boundary of 324 Branch Drain Road for the additional exotic shelterbelt.
11. Appendix 13 states that the solar panels will be “setback approximately 25m near the north-east boundary with Buckleys Road and to 55m from the north-west boundary with Buckleys Road (pg 15)”. Please confirm the minimum panel setback from the Buckleys Road boundary.
12. Appendix 13 was peer reviewed on behalf of the Council. Please confirm the following matters raised in relation to the Landscape Mitigation Plan:

    i. How access will be provided for maintenance of the boundary vegetation in proximity to the security and boundary fences and the existing vegetation including for mechanical tree trimmers;

ii. How the existing vegetation will be managed in the long term;

iii. How the 10m setback along Branch Drain Road (as shown in section A, Figure 6) will be maintained.

Glint & Glare

13. The applicant's Glint & Glare analysis in Appendix 13 was reviewed and assessed on behalf of the Council. The review identified that the applicant's assessment did not consider worst case eye height associated with larger vehicles such as tractors and other large vehicles such as trucks, buses and haulage vehicles, etc, that would frequently use these roads. There would be a greater safety impact associated with glare impacts on larger vehicles. The eye heights for these vehicles are considered around 2.5m.

    With regard to road routes where there is predicted glare at an eye height of 2.5m, please advise what interim mitigation measures will be used before the proposed plantings reach the minimum height that they will be maintained at. This could include the planting of more established trees at 3m or greater, or appropriate vegetation in the small local areas where predicted glare levels for road traffic may have greater impact.

Highly Productive Land

14. The AEE states that all existing internal fencing will be removed from the site for construction. Please confirm if new fencing is included in the proposal to enable stock grazing once the array is established.

15. Minimising the loss of productive capacity will require appropriate infrastructure and management practices to farm under the solar panels. Without a grazing or cropping management plan to determine the practices required to farm efficiently alongside this solar farm, the area available to be intensively farmed and/or the production per hectare could be compromised.
    Please provide a grazing and cropping management plan including consideration of (but not limited to) the following matters:

Solar array design

a. The size of the gaps at the end of the rows of panels is estimated to be approximately 5m using the plans provided in Appendix 13. If these gaps are required for the turning of vehicles between the rows, they may not be wide enough for a tractor with agricultural implements such as mowers, balers, drills and sprayers. Please confirm if the gaps at the end of the panel rows would be required for turning vehicles and if so, please provide tracking showing that turning can be achieved for a vehicle towing agricultural implements.
b. Appendix 16 (Appendix B) shows images of single axis tracking panels that have a metal shaft going between the rows of panels, possibly to drive the rotation of the panels. If included in the

proposal, shafts could make agricultural activities such as cropping, re-grassing, mowing, etc., more difficult and potentially impede livestock. This could impact productive capacity. Please demonstrate that there are no impediments to livestock or machinery/vehicles within each row.

c. Equipment may need to be designed specifically for the width between the rows of panels, being 6.5m, less the width of the piles and any other obstructions. Please confirm what is intended to be used for your proposed activities.
d. The height of the solar panel above the ground when fully vertical is also important for livestock and agricultural activities:
    i. 500mm is potentially too low for sheep to move under comfortably.
    ii. Some agricultural activities (e.g. spraying, mowing) may need to be done when the panels are vertical, and will need to fit under the panel.

    Please advise how you intend to address these matters.

Regrassing/cropping/feed conservation

The management plan should consider how the property is going to be re-grassed or cropped and how surplus feed is conserved. This may require specialist equipment. Please provide provide these details taking into account the following matters:

e. Periodic establishment of new grass will be required to maintain pastoral productivity.
f. Mowing and harvesting/baling of surplus pasture during high growth periods will most likely be required, involving mowing, raking, baling or harvesting, and transporting of the silage/baleage away. If this cannot be done efficiently the surplus feed will be topped or mulched, resulting in a loss in production.
g. Potential growing of crops will require equipment and management techniques to establish, grow and harvest the crops.

Fertiliser application

h. Maintaining good pastoral and crop production requires ongoing applications of fertiliser and lime. A management plan should consider how this is going to be applied. Specialised equipment may be required to apply this under the solar panels. Please address this matter in the management plan.

Irrigation

i. The current irrigation system on the property is unlikely to be suitable once the solar array is installed. An irrigation system will need to be designed for the specific needs of farming under the solar panels so that it is efficient and has complete ground coverage. Assuming the solar farm will have underground cables, it is unlikely that this can be installed retrospectively. An irrigation design will need to consider the delivery of the water and application technology required for pasture and/or specific crops grown.

Subdivision (of pasture)

j. Subdivision and rotational grazing are required to optimise pasture utilisation and promote pasture growth. The fencing plan needs to provide for the extra wires/netting required for sheep as well as providing access to the solar panels, lanes for stock movement and the ability to undertake cropping and feed conservation activities. The subdivision is likely to be a combination of permanent paddocks plus temporary electric fences. It would be desirable to plan the fencing in conjunction with the solar installation so that underground cables are not damaged. Sheep handling facilities will also be required. Please address these matters in the management plan.

You must respond in writing to this request before Friday, 20 October 2023 and do one of the following:

(a) Provide the information; or
(b) Tell us that you agree to provide the information, but propose a reasonable alternative date; or
(c) Tell us that you refuse to provide the information

Please note that if you do not respond in some way before Friday, 20 October 2023, or you refuse to provide the information requested, we are required to publicly notify your application. This will result in increased costs to you and take longer to process. It is important that you respond to this request, otherwise your application can be declined for lack of information.

Yours faithfully

Richard Bigsby