BEFORE A COMMISSIONER APPOINTED BY SELWYN DISTRICT COUNCIL

IN THE MATTER OF	the Resource Management Act 1991
AND	
IN THE MATTER OF	application by KeaX Limited for resource consent to establish a solar array at 150 Buckleys Road, 115 Buckleys Road and 821 Hanmer Road, Brookside.

STATEMENT OF EVIDENCE OF CLAIRE KELLY

ON BEHALF OF THE APPLICANT

(PLANNING)

Dated: 09 February 2023

KeaX Limited
Applicant
Campbell McMath
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1 INTRODUCTION

1.1 My name is Claire Kelly. I am a Senior Principal and Planner at Boffa Miskell Ltd, a national firm of consulting planners, ecologists, urban designers and landscape architects.

1.2 I hold the qualification of MSc in Environmental Management from the University of Nottingham.

1.3 I have been a Planner for 17 years. My experience includes providing consultancy services to a wide range of clients around New Zealand, including local authorities, central government, land developers, and the renewable energy sector. I have prepared and processed resource consent applications and undertaken statutory planning and policy preparation.

1.4 Boffa Miskell was engaged by KeaX Limited (the Applicant) in August 2021 to prepare a planning feasibility report, which was followed by resource consent application to establish a solar farm (the Proposal)at 150 Buckleys Road,115 Buckleys Road and 821 Hanmer Road, Brookside (the Site). These were prepared, and the project was managed, by a colleague. I provided some planning guidance, so when the colleague subsequently left Boffa Miskell, I became responsible for addressing the s92 requests for further information and preparing evidence.

1.5 I have visited the site on one occasion and am familiar with the surrounding area.

1.6 In preparing this evidence, I have read and considered the following documents:

(a) The application, the AEE and supporting technical reports including the s92 requests and the applicant's responses;

(b) The submissions on the application;

(c) The section 42A report prepared by Mr Jesse Aimer for the Selwyn District Council; and

(d) Each of the statements of evidence on behalf of the applicant.

1.7 Whilst this is a Council hearing, I acknowledge that I have read and agree to comply with the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court Practice Note 2014. My qualifications as an expert are set out above. Other than where I state that I am relying on the advice of another person, I confirm that the issues addressed in this statement of evidence are 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.

2 SCOPE OF EVIDENCE

2.1 My evidence:

(a) Provides a brief description of the Site, summary of the Proposal (as notified), and any changes since notification of the application; and

(b) Provides a brief overview of the resource consents required to establish the Proposal;

(c) Summarises the positive and adverse effects that may arise from the Proposal;

(d) Assesses the Proposal against the relevant statutory matters and planning documents;

(e) Addresses key matters raised in the section 42A report which has been prepared by Mr Jesse Aimer; and

(f) Addresses submissions on the applications that raise specific planning issues; and

(g) Addresses the Council's draft proposed conditions of consent as they currently stand. This includes a discussion of how those conditions manage the effects of the Proposal.

3 SUMMARY OF THE PROPOSAL

Site Description

3.1 A detailed description of the Site, the Proposal, the consents required to authorise the Proposal and the activity status of the application, is

contained in the AEE. In the interests of brevity, I do not repeat that analysis here. However I have set out below my precis of the key aspects of the resource consent applications.

3.2 The application was amended after lodgement and prior to notification to address some of the matters raised by SDC and its technical experts. These changes are tracked in the notified version of the application.

3.3 The Site at 150 Buckleys Road, 115 Buckleys Road and 821 Hanmer Road, Brookside is currently used for dairy farming, and is characterised by irrigation infrastructure, existing dwellings, farm buildings, shelterbelts within and along the boundaries of the Site.

3.4 The wider area surrounding the Site is also used for dairy farming and other agricultural activities, with some semi-rural lifestyle blocks. A substation (designated: Brookside Substation) owned by Orion New Zealand Limited (Orion) is located at the junction of Buckleys Road and Branch Drain Road, adjacent to the north-western corner of the Site.

The Proposal

3.5 The Proposal (as notified) seeks consent to construct and operate a 258ha solar array on the Site which will have a generating capacity of 160 MW on completion. The solar array will comprise a total of 5,844 tables of panels (frames) with twenty-six inverters. Each table of panels will be set to a maximum height of 3.02m from ground level to the top of the solar panels, whilst the lowest point will be 700mm above ground level. While not proposed to be installed as a part of the initial site works, KeaX may install batteries on the Site in the future to actively manage rapid drops in power and fluctuations.

3.6 It is also proposed to:

- undertake site preparation works i.e. the removal of all existing internal fencing, shelterbelt plantings within the Site and structures such as irrigators and, fence around the Wāhi Taonga Management Site – C59;
- undertake both exotic and indigenous planting as shown on the Site Plan;

- retain the established 'heritage' trees on the Hanmer Road boundary;
- establish internal access roads between the panels;
- graze sheep under the panels;
- establish a self-contained site office to be serviced by an above ground water tank, with a capacity of up to 5,000L, a surface effluent tank (2,700L capacity) that will be emptied as required and a solar panel and storage battery.
- fence all external boundaries with a 2.1m high post and wire fence and the fence posts that will not exceed 3m in height;
- carry out construction works during weekdays only from 8am to 6pm.
- undertake approximately 62.5m³/ha (16,125m³) of earthworks to install the piles (to a depth of 1.8m) and cable trenches, which will be backfilled once the cables are in place.
- implement an Erosion and Sediment Control Plan (ESCP) that will incorporate a Dust Management Plan (DMP).

3.7 I generally agree with Mr Aimer's description of the Proposal[1], however, Paragraph 22, matter 5 states: The batteries are not within the scope of this application'. This is not correct, as whilst not proposed to be installed as part of the initial works, they form part of this Proposal as their locations are identified on the Site Plan, and they have formed part of the relevant technical assessments including the acoustic assessment. This is confirmed by Mr Reeve (acoustic expert at acoustic engineering services (AES)) at Paragraph 2.9 of his evidence.

Change to the Proposal post notification

3.8 A minor amendment is proposed to the description of the fencing at Paragraph 24 of the s42a report, as it is now proposed to be a chain link fence with have barbed wire instead of deer fencing with three strands of wire on top. This is essentially what has been shown on

[1] Paragraphs 18 to 31 of the s42a report.

the visual simulations in the Visual Simulations Graphic Supplement dated 01 September 2022. It will also, in time, be screened by planting, therefore it is considered that this does not result in any change to the effects assessment.

4 RESOURCE CONSENTS REQUIRED

Canterbury Regional Council

4.1 An application was lodged with Canterbury Regional Council (CRC) on 9th March 2022 to establish the solar array at 150 Buckleys Road (CRC223908 and CRC223909). The application sought consent for a Discretionary Activity to:

(a) undertake earthworks that will intercept groundwater and within 50m of surface waterbodies (the water races that are located within the road reserves of Buckleys Road, Branch Drain Road, and Hanmer / Caldwells Road;

(b) discharge operational phase stormwater to ground.

4.2 ECan provided a copy of the application to Mahaanui Kurataio Ltd (MKT) and they responded with some recommendations including:

- With regard to the wāhi taonga site, this is understood to be a midden. It is not clear whether the deposit remains in situ. Regardless, the offer of establishing indigenous planting on site is not desired by the rūnanga, as this would require ground disturbance that would not be consistent with the protection of wāhi taonga values. The existing fencing and the proposed 50m setback from earthworks are deemed to be sufficient to protect this site (this is an SDC matter).

- It is not recommended that indigenous planting is undertaken on the wāhi taonga site, but the rūnanga support enhancing biodiversity elsewhere on site through planting indigenous species of local whakapapa.

4.3 The application was put on-hold pending any significant changes required to address Selwyn District Council concerns, but was granted consent on 15th November 2022 (**Attachment 1**).

Selwyn District Council

4.4 An application was lodged with Selwyn District Council (SDC) on 9th March 2022 to establish the solar array at 150 Buckleys Road (RC225180). The application originally sought consent for a Discretionary Activity to:

(a) generate electricity that will not be used on the Site; and

(b) undertake earthworks to an approximate volume of 16,125m³ across the three stages and;.

(c) relocate buildings onto the Site that will remain permanently.

4.5 There followed an extended period (March to October 2022) of discussions with, and s92 requests for further information from, SDC.

4.6 The notified version of the application also included the following non-compliances with rules in the Operative Selwyn District Plan (OSDP) identified through the s92 process:

- Planting along Hamner Road will shade the road between 1000 and 1400 hours (inclusive).
- Piling works within 50m of the north elevation of the dwelling at 324 Branch Drain Road will result in the District Plan noise limits being exceeded.

4.7 Mr Aimer, in his s42a report, has also identified two additional non-compliances with the rules in the Operative SDP, which are discussed below.

4.8 He determines that Rule 2.1.1.5(b) will be breached as shading will occur over Lot 1 DP 37121 and Lot 1 DP 21302 between 1000 and 1400 hours on the shortest day of any calendar year. The properties identified adjoin the southern boundary of the Site. This is identified as a **Restricted Discretionary Activity**.

4.9 This was raised in the notification decision and therefore the property owners were identified as affected parties (they were also identified as adversely affected in terms of visual amenity effects). However, the applicant did not have the opportunity to respond at that time, so I do so now.

4.10 I note that no shading diagrams have been produced by SDC to confirm whether there is actually shading over these properties. However, on balance, I accept that there may be some shading and this additional non-compliance is addressed in Paragraph 7.2 on my evidence.

4.11 Mr Aimer also determines that Rule 3.13 Table C3.2 will not be met as proposed fences (buildings) greater than 2m in height will be located within 5m of a property boundary. He notes that the Plan does not classify the status of the activity, therefore in accordance with section 87B(1)(b) of the RMA, this requires assessment as a **Discretionary Activity**.

4.12 I disagree with Mr Aimer that Rule 3.13 is relevant. I note that the definition of 'building' in the Operative Selwyn District Plan states that '*a utility building falls under the definition of a building if it does not constitute one of the structures listed under 'Building'*. The structures listed include any fence or wall up to 2m in height. I agree that the height of the proposed fence exceeds 2m, thereby by definition it is a building, but by reference to the 'Note', it is a Utility Building. Therefore, in my opinion, Rule 3.13 does not apply to the fences that form part of this Proposal.

4.13 The relevant rule is Rule 5.2.1.2 which requires 'utility buildings' to be set back a minimum distance of 1m from any property boundary. I confirm that fences will be setback at least 3m from property/internal boundaries due to being located behind the proposed landscaping, which will be 3m in width. Fences will therefore be permitted under Rule 5.2.1.2.

4.14 I agree with Mr Aimer that the noise limits contained in Rule 9.16.1 do not apply to the Proposal as the construction activity is deemed to be a 'temporary activity', which is defined in the Operative SDP as including*: "Buildings, structures and activities ancillary to a construction project for up to 12 months or the duration of the construction project, whichever is the lesser*".

4.15 The application was assessed and limited notified on the basis of construction being limited to 3 x 4 month periods of works and therefore a temporary activity. However, I clarify that the Applicant is limited to 12 months of construction in total and whilst for

simplicity this was split into 3 lots of 4 months, the reality is that the construction of Stage 1 may only take 3 months, and the construction of Stages 2 and 3 may take 9 months in total. In my opinion, as long as the construction of all stages does not exceed a duration of 12 months, it will meet the definition of temporary activity. Also within the construction period for each stage, there will be gaps between construction phases due to the availability of staff and equipment. However, I note that it is in the interests of the Applicant to keep construction time to a minimum to enable the solar farm to become operational as soon as possible.

4.16 I agree with Mr Aimer's conclusions on the Proposed Selwyn District Plan and National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, and provide no further comment on these documents.

4.17 SDC provided a copy of the application to Mahaanui Kurataio Ltd (MKT) and they responded that they had considered the proposal holistically rather than only in relation to the CRC consents sought, and that there were no outstanding concerns requiring further engagement with manawhenua. Therefore, potential adverse effects on cultural values are not discussed in my evidence.

4.18 An amended application was limited notified on 31st October 2022 to the owners/occupiers of 180 Graham Road, 324, 265 and 313 Branch Drain Road. Five submissions were received: a pro forma submission from 180 Graham Road and, 324 and 265 Branch Drain Road and two individual submissions from 324 and 313 Branch Drain Road. As such, a hearing is required and a section 42A report has been prepared, which recommends approval pursuant to section 104 of the RMA if:

a. *in light of the National Policy Statement for Highly Productive Land (NPS-HPL), it can be established that the project has an operational need to locate at the site, and the NPS-HPL otherwise does not form a barrier to the grant of resource consent.*

4.19 I have addressed the NPS-HPL in Paragraph 8.2 of my evidence relying on the evidence of Mr McMath and will be supported by legal submissions to be provided at the hearing by Ms Annabel Hawkins (Senior Associate at Chapman Tripp).

4.20 I also advise that further amendments are proposed to address matters raised by submitters, and in the section 42a report. These are discussed throughout my evidence but the main changes are:

- Retaining the existing planting along the road boundary with Branch Drain Road until such time as all the proposed planting within the Site reaches 2m in height.
- Progressively removing internal shelterbelts to mitigate potential temporary visual effects during construction, rather than undertaking this work as part of Stage 1.
- Planting along Buckley's Road and along Branch Drain Road will be 2m in height prior to commencing construction of each stage.
- Establishing an exotic shelterbelt adjacent to the southern boundary of Stage 1, where it adjoins 324 Branch Drain Road.

Permitted Baseline

4.21 The Commissioner will be aware that section 104(2) of the RMA affords a consent authority discretion to disregard a potential adverse effect of allowing an activity if the relevant plan permits an activity with that effect.

4.22 Mr Aimer has considered the permitted baseline at Paragraph 71 of his report and concludes that the following activities are relevant:

- Any buildings can be constructed to a height of 8m, with any utility building permitted to a height of 12m.
- Any fence over 2m high bordering a road is permitted (provided there is a 10m setback to the road boundary).
- Any construction noise for a period of up to the lesser of 12 months or the completion of the project and operational noise which complies with the day-time noise limit of 60 dBA L_{10} and a night-time noise limit of 45 dBA L_{10}, assessed at the notional boundary of any dwelling.
- The removal of shelterbelt vegetation at the Site.

4.23 I agree but consider that the following activities are also relevant:

(a) Digging post holes; Planting trees or removing dead or diseased trees; and earthworks required to duct cables except in Wāhi Taonga Management Area C39(a).

(b) Earthworks if they are:
- set back at least 20m from the edge of any waterbody (river, lake, stream, pond or wetland)– some exceptions apply.
- limited to a maximum volume of 5000m^3 per project, and a vertical cut face where no more than 5% of the total vertical cut is over 2m.

(c) The planting of any trees for shelterbelts if they:

- do not shade any part of the carriageway of any road between 1000 and 1400 hours (inclusive) on the shortest day of any calendar year; and/or any property under different ownership between 1000 and 1400 hours (inclusive) on the shortest day of any calendar year;

- on maturity, do not encroach within the line of sight for any railway crossing or road intersection.

- only disturb soil that has previously been disturbed by tree plantings in the area listed as Wāhi Taonga Management Area C39(a).

(d) The generation of energy for use on the same site, or to enable continued supply during emergencies, maintenance or repairs.

(e) Utility buildings that are:

- no more than 12 metres in height; and

- set back a minimum distance of 10 metres from a strategic road, 5 metres from any other road, and 1m from any property boundary; and

- compliant with the relevant recession plane angles.

The rules in the Rural Volume of the District Plan are applicable to activities generally, including utilities. However, the rules under Rule 3 Buildings do not apply to utilities, except the following;

- Rule 3.15.1 Relocated Buildings.
- Rule 3.9.1.1 Access and Parking.
- Rule 3.13.1.2 Line of sight – railway crossings.

(f) Buildings associated with rural activities that meet the 5% site coverage standard, 12m height limit, 5m setback from internal boundaries and 10m from a road boundary. However, tunnel houses, hay barns, stock yards or any other building which does not have a built in floor are excluded from complying with the site coverage rule.

(g) Noise limits assessed at the notional boundary of any dwelling, rest home, hospital, or classroom in any educational facility except where located within a Living zone are as follows:

Hours	**Noise Limit**
7.30am – 8.00pm	60 dBA L_{10} 85 dBA L_{max}
8.01pm – 7.29am	45 dBA L_{10} 70 dBA L_{max}

4.24 Under the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 (NES-PF), afforestation is a permitted activity in a Rural Zone provided wilding tree risk is managed, and setbacks from adjoining property, dwellings and waterbodies are adhered to.

5 EFFECTS ON THE ENVIRONMENT (SECTION 104(1)(a) RMA)

5.1 An assessment of environmental effects under section 104(1)(a) of the RMA is contained in section 6.0 of the AEE.

5.2 For efficiency, I focus on areas where there is disagreement between experts and/or Mr Aimer or a change of approach is proposed. For those matters, I do not repeat the effects assessment, but summarise the conclusions reached in the expert evidence on the environmental effects and which respond to the remaining issues raised in the s42A reports, and submissions.

5.3 I consider that Mr Aimer and myself are in general agreement on the environmental effects and management of the following matters, and I do not provide further comment on these in my evidence:

- Contaminated land.
- Shading of the road.
- Earthworks and dust.
- Cultural.
- Traffic safety and vehicle movements.
- Traffic amenity.
- Water quality.
- Ecological effects.
- Natural hazards.
- Reverse sensitivity.
- Positive Effects.

Noise

5.4 Mr Reeve's (acoustic engineering services) evidence generally agrees with and accepts the findings and recommendations of the peer review undertaken by Marshall Day. Marshall Day did express concern that no ambient monitoring had been undertaken at the time of the review, and that made it difficult to confirm the assertions about audibility, and that the location of the noise sources and calculation methodology had not been provided. I understand that these matters have been addressed and are discussed at Paragraphs 2.4 and 5.2 to 5.5 of Mr Reeve's evidence.

5.5 In essence, it is agreed that construction noise will be managed under the New Zealand Standard NZS 6803: 1999 Acoustics – Construction Noise. However, construction noise received at 324 Branch Drain Road may exceed the noise limits in NZS 6803 and therefore a Construction Noise and Vibration Management Plan will be prepared and provided to SDC for certification.

5.6 Operational noise will be appropriately managed by applying a day-time noise limit of 50 dB LAeq and night-time noise limit of 40 dB LAeq, both measured at the notional boundary of the nearest dwelling. I understand that these limits are lower than those in the Operative and Proposed District Plans.

5.7 Recognising Mr Reeve's evidence, and in response to the SDC s42A report, changes to the draft conditions are proposed to address the requirement for construction noise monitoring and a stand-alone operational NMP as Mr Reeve considers that they are not necessary for this Proposal, and these conditions seem to have come from the S42a author and not from the acoustic reviewer.

5.8 Therefore, in my opinion, both construction and operational noise will be appropriately managed to minimise adverse effects on the environment including surrounding residential dwellings.

Landscape and Visual

5.9 Ms Anthony's (Landscape Planner) evidence identifies that there is general agreement between the Mr Aimer and herself on the nature and extent of adverse effects on the physical landscape and rural character, and medium to long term visual effects. The remaining area of disagreement is temporary adverse effects especially on 324 Branch Drain Road and the northern boundary with neighbouring properties along Buckleys Road, during construction and the initial operation of the solar farm.

5.10 I understand that Ms Anthony supports the recommendation of Mr Aimer that all landscape planting adjacent to Buckleys Road and Branch Drain Road be 2m in height at the commencement of construction of each stage of the solar farm. She also supports the planting of an additional exotic shelterbelt adjacent to the southern boundary of the Site with 324 Branch Drain Road. The particulars of which are set out in section 9 of Ms Anthony's evidence.

5.11 However, I understand that Ms Anthony remains of the view that visual effects resulting from views of the Proposal from the Kewish's eastern boundary will be less than minor, for the reasons set out at Paragraph 9.13 of her evidence and that no additional mitigation is required.

5.12 Consequently, a number of changes are required to the draft conditions to address the matters set out above.

5.13 Overall, I consider that adverse visual amenity effects on all surrounding properties will be less than minor.

Glint and Glare Effects

5.14 The glint and glare effects of the Proposal are described in the evidence of Mr Williams. I understand that he is generally in agreement with Mr Van der Velden's (peer reviewer) regarding potential adverse effects and the recommendations of Mr Aimer.

5.15 As such, and because of the proposed condition requiring all planting to be 2m in height adjacent to Buckleys Road and Branch Drain Road at the time of establishing the solar panels, I understand that there are no outstanding issues with regard to temporary or permanent glint and glare effects.

5.16 Overall, I consider that adverse glint and glare effects on all surrounding properties and roads will be less than minor.

Effects Conclusion

5.17 It is my opinion that overall, the adverse effects of this proposal on the environment will be acceptable. This is based on the proposed amendments to the Proposal and the mitigation measures to be implemented.

6 STATUTORY AND PLANNING ASSESSMENT (SECTION 104(1)(b) RMA)

6.1 The relevant planning documents are identified in the AEE, and in the section 42A report of Mr Aimer. They are:

- National Policy Statement for Renewable Electricity Generation (NPS-REG);
- National Policy Statement for Highly Productive Land (NPS-HPL);
- Canterbury Regional Policy Statement (CRPS);

- Operative Selwyn District Plan (OSDP);
- Proposed Selwyn District Plan (PSDP);
- Mahaanui Iwi Management Plan (MIMP).

6.2 In the following section, I very briefly identify areas of agreement with Mr Aimer. Where there is disagreement between us, I set out the outcomes sought by the documents listed above and identify and discuss any concerns raised by Mr Aimer.

6.3 Mr Aimer and I are in agreement that:

- proposal is consistent with the NPS-REG.
- the proposal is consistent with the CRPS objectives and policies listed above.
- there is nothing in the MIMP that would prevent this application from being granted.
- subject to the NPS-HPL matters set out above being addressed, the proposal is in accordance with the purpose and principles of the Resource Management Act 1991.
- the Proposal is not contrary to the following objectives and policies in the Operative SDP: Natural resources – Land and Soil (Objectives B1.1.1, B1.1.2 and B1.1.3 and Policy B1.1.6), Vegetation and Ecosystems (Objectives B1.2.1, B1.2.4 and Policy B1.2.6), Water (Objectives B1.3.1, B1.3.6 and Policy B1.3.2), Physical resources (Transport – Objectives B2.1.1 and Policies B2.1.2, B1.1.4, B2.1.9, B2.1.10 and B2.1.13), Cultural and Heritage Matters (Objective B3.3.1 and Policies B3.3.2 and B3.3.4), Noise and Vibration (Policy B3.4.13), and Dust (Policies B3.4.16 and B3.4.18).
- the Proposal is not contrary to the following objectives and policies in the Proposed SDP: Strategic Directions (SD-IR-O1 – Community Needs, SD-IR-O2 – Effects of Important Infrastructure, SD-IR-O3 – Natural Hazards), Energy and infrastructure (Objectives EI-O1, EI-O2 EI-O3 EI-O4, EI-O5 and Policies EI-P1, EI-P2, EI-P4, EI-P9,) Transport (TRAN-O2,

TRAN-P4 and TRAN-P11), Natural Hazards (NH-O1, NH-O2 and Policies NH-P3 and NH-P12), Ecosystems and Indigenous Biodiversity (Objectives EIB-O1, EIB-O2 and Policies (EIB-P4, EIB-P5 and EIB-P11), Earthworks (EW-O1 and Policies EW-P1, EW-P3 and EW-P4) and Noise (Objectives NOISE-O1, NOISE-O2 and Policy NOISE-P1).

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

6.4 The NPS-HPL is intended to ensure the availability of New Zealand's most favourable soils for food and fibre production, now and for future generations. It was gazetted in September 2022 and had effect from 17th October 2022.

6.5 Highly productive land (HPL) means land that has been mapped in accordance with criteria set out in the NPS. However, until a regional policy statement containing maps of highly productive land in the region is operative, each relevant territorial authority must apply the NPS-HPL as if references to highly productive land were references to land that, at the commencement date:

(a) is

(i) zoned general rural or rural production; and

(ii) LUC 1, 2, or 3 land; but

(b) is 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.

6.6 I agree with Mr Aimer that the Site is HPL as it is LUC 2 and 3, it is not identified for future urban development; or 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. Therefore, the provisions of the NPS-HPL apply to the Proposal.

6.7 At Paragraph 14 of his report, Mr Aimer identifies a procedural matter related to the NPS-HPL. He states that '*further comment/ evidence from the applicant is required from both a technical and natural justice*

perspective before a conclusion can be reached on whether the NPS-HPL operates as a barrier to the grant of consent. He then sets out a series of questions/matters to be addressed.

6.8 Mr Aimer also addresses this matter in his report at Paragraphs 125 and 136 in relation to loss of productive soils (a matter raised by the submitters), at Paragraph 198 with regard to the consideration of alternative locations, at Paragraph 248 with regard to the General Zone objectives and policies in the Operative SDP and in depth as part of his consideration of the NPS-HPL at Paragraphs 261 to 287.

6.9 Due to the timing of the NPS-HPL coming into force, Mr Aimer is correct in stating that it has not been addressed to date by the Applicant. It is now addressed fully in both my evidence and Mr McMath's evidence. I now address the NPS-HPL generally as well as the matters raised by Mr Aimer below.

NPS-HPL and the Proposal

6.10 As identified by Mr Aimer, the objectives and policies of the NPS-HPL of relevance to the Proposal are the Objective and Policies 1, 4, 8 and 9 (as set out at paragraph 269 of his report). I would also add reference to Policy 2, which states, '*The identification and management of highly productive land is undertaken in an integrated way that considers the interactions with freshwater management and urban development.'*

6.11 Clause 3.9(1) of the NPS-HPL provides that '*[t]erritorial authorities must avoid the inappropriate use or development of highly productive land that is not land-based primary production*.'

6.12 As set out in the application, the existing dairy farm operations at the Site will be phased out as construction moves across the Site. However, grazing of small animals, such as sheep, under and around the solar panels across the Site will continue while the solar farm is in operation.

6.13 As Mr Aimer has outlined, clause 1.3 of the NPS-HPL defines 'land-based primary production' as '*means production, from agricultural, pastoral, horticultural, or forestry activities, that is reliant on the soil resource of the land*'.

6.14 The combination of the new solar farm and the continuation of grazing activity means that the Site will continue to be used for land-based primary production, albeit a change from the current productive use. In my view, this means that the Proposal is not "caught" by clause 3.9(1) of the NPS-HPL, because it not seeking to solely enable a use or development of HPL that is not land-based primary production. Land-based primary production will continue on the Site.

6.15 Further, clause 3.9(1) refers to "inappropriate" use or development of HPL. Drawing guidance from the NPS-HPL objective and relevant policies, it is clear that the NPS-HPL is intended to ensure the availability of New Zealand's most favourable soils. As explained in Mr McMath's evidence, the Proposal may improve the Site from a water quality/nutrient management perspective. In addition, the Proposal will require minimal earthworks (some trenching and piling) that will not disturb large areas of soil, which could affects its structure and quality vis-à-vis its productivity. As such, the Proposal is not an "inappropriate" use or development of HPL.

6.16 If the Commissioner considers that clause 3.9(1) does apply to the Proposal, clause 3.9(2) provides a list of "exemptions". As set out in clause 3.9(2), a use or development of highly productive land is inappropriate except where at least one of the following applies to the use or development, and the measures in subclause (3) are applied:

(a) it provides for supporting activities on the land.

(b) it addresses a high risk to public health and safety.

(c) it is, or is for a purpose associated with, a matter of national importance under section 6 of the Act.

(d) it is on specified Māori land.

(e) it is for the purpose of protecting, maintaining, restoring, or enhancing indigenous biodiversity.

(f) it provides for the retirement of land from land-based primary production for the purpose of improving water quality.

(g) it is a small-scale or temporary land-use activity that has no impact on the productive capacity of the land.

(h) it is for an activity by a requiring authority in relation to a designation or notice of requirement under the Act.

(i) it provides for public access.

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

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

6.17 Clause 3.9(3) provides that SDC must take measures to ensure that any use or development on highly productive land:

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

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

6.18 I agree with Mr Aimer that the exemption in clause 3.9(2)(j)(i) applies to the Proposal. I also consider that the measures in clause 3.9(3) are achieved. I discuss both these aspects below in response to Mr Aimer's questions.

Operational need

6.19 Mr Aimer has focused on operational need as clause 3.9(2)(j) of the NPS-HPL refers to 'functional or operational need'. I agree with this approach. I also agree with the definitions set out at Paragraph 274 of his report, which are taken from the New Zealand Planning Standards. I set out the definition of 'operational need' for ease of reference below:

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

6.20 One matter to note is that subclause 3.9(2)(j) only refers to the 'maintenance, operation, upgrade, or expansion of specified infrastructure'. It does not refer to 'new' or the 'establishment of' infrastructure. However, the NPS-HPL: Guide to implementation (Part

1) dated December 2022 (the Guidelines) states that 'the intention of this clause is to recognise situations where the use or development of specified infrastructure, may occur on HPL'. It then goes on to state that 'The key test is to demonstrate that the use and development has a 'functional need' and/or 'operational need' to be on HPL. With specific regard to specified infrastructure, the functional and operational needs of specified infrastructure mean that they may need to be located on HPL – such as where a new road or transmission lines may need to traverse over an area of HPL. Further, in many cases, the presence of specified infrastructure on HPL does not preclude the balance of the HPL being used by land-based primary production. For example, land surrounding structures used for infrastructure can often be used for animal grazing or some forms of horticulture.'

6.21 Specified infrastructure is defined in the NPS-HPL as including infrastructure that is recognised as regionally significant in a regional policy statement. The Canterbury Regional Policy Statement defines regionally significant infrastructure as including 'National, regional and local renewable electricity generation activities of any scale'. So, this Proposal can be defined as 'specified infrastructure' in terms of the NPS-HPL.

6.22 However, it still needs to be determined if it has an operational need to locate on HPL.

6.23 Solar farms require large, generally open sites with little internal vegetation or large scale buildings or structures on adjoining sites that could cause shading. Such sites are generally found in rural areas. I acknowledge that there may be some sites available in industrial areas but these are likely to be few in number or of sufficient size. Other limitations are likely to relate to the availability of land for sale or lease, the price of land, access to infrastructure, land topography (steeply sloping land or undulating land can require excessive earthworks or the land itself can cause shading of panels), geology (it is difficult to pile into rocky ground), the presence of indigenous flora and fauna, outstanding natural landscapes or features and areas with outstanding natural character.

6.24 From an technical perspective, I understand proximity to a substation is key. The cost of constructing a new substation is prohibitive for

projects of the scale being proposed. This is addressed in Paragraph 5.6 of Mr McMath' s evidence.

6.25 I also rely on the evidence of Mr McMath, when stating that choosing a site involves a range of extensive studies that include (but not exclusively) electricity modelling, land type (is it suitable for piles), proximity to infrastructure such as substations and power lines with capacity available, and sun hours. I also understand that when searching for a suitable site, Mr McMath investigated other substations in the Selwyn area, but all had their own constraints. These are listed in his evidence at Paragraph 5.9 and I do not repeat them here. However, it is clear that choosing a site is complex and involved, and the process essentially limits the locations where a solar farm can be located, without excessive costs that may well be passed on to the consumer or prohibit development altogether.

6.26 In my opinion, for the reasons stated above and in Mr McMath's evidence, I consider that there is a clear operational need for the solar farm to locate in proximity to the Brookside substation. The availability of an appropriate site dictated that the subject site was chosen.

The ability for pasture to survive under the panels throughout the life of the solar farm

6.27 Mr McMath addresses this at Paragraph 5.12 of his evidence and I rely on his knowledge in determining that sufficient grass will grow under the panels to enable farming to occur, and that the future productivity of the soils will not be adversely affected. There are some photographs in part 8.11 of his evidence that support this outcome.

6.28 I also understand that in June 2015, the Applicant established solar panels on the same site as the proposed Brookside Solar Array, and some on a site 200m away.

6.29 The photographs below show how well the grass grows beneath, between and around the panels, and whilst there are some bare patches (not unusual in an undulating paddock) there is no evidence of rills or channels caused by runoff.

How the provisions of the NPS-HPL otherwise bear on the application

6.30 I have already set out above my planning view on how the Objective and Policies of the NPS-HPL apply to this particular Proposal, being one which enables land-based primary production to continue on the Site and that has minimal impact, and may result in some improvement, in the quality of the subject soils.

6.31 I address the other relevant aspects of the NPS-HPL below.

6.32 The NPS-HPL (clause 3.9 (f)) states that a use or development of highly productive land is appropriate if it provides for the retirement of land from land-based primary production for the purpose of improving water quality. This does not automatically mean that the solar farm is also an appropriate use, as the matters outlined above in respect of 'operational or functional need' and 'specified infrastructure' for this activity still apply. However, it is useful context in terms of establishing the policy intentions of the NPS-HPL.

6.33 The Guidance document recognises that, in some situations, it may be necessary to retire portions of land from being actively used for land-based primary production, to improve water quality standards under

the National Policy Statement for Freshwater Management 2020 (NPS-FM).

6.34 The Site lies within the area managed under Section 11: Selwyn-Te Waihora of the Canterbury Land and Water Plan. It contains the following policy:

> *11.4.7 Reduce the total nitrogen load entering Te Waihora/Lake Ellesmere by restricting the losses of nitrogen from farming activities, industrial and trade processes and community sewerage systems in accordance with the target (the limit to be met over time) and limits in Tables 11(i) and 11(j).*

6.35 Furthermore, nitrate-nitrogen concentration in groundwater is quite high as shown in part 8.10 of Mr McMath's evidence. Whilst anecdotal, the replacement of dairy farming with solar panels and sheep farming is likely to reduce the volume of fertiliser used and therefore the concentration of nitrates discharging to the land and then to groundwater. So, in effect, the solar farm may well assist in improving water quality by replacing dairy farming with sheep farming.

6.36 Mr Aimer has raised the issue of whether the land will be used for sheep grazing or sheep farming, and is sheep grazing primary production in terms of the NPS-HPL. He also questions whether sheep farming can be undertaken if grass growth is limited and discusses the fact that a lower yield/productive output from the Site is not necessarily contrary to the policies of the NPS-HPL.

6.37 I have addressed this matter above. To provide more detail, my understanding is that the Site landowners propose to keep farming the land and using it as a productive unit with sheep rather than cows as this is compatible with the solar farm. Mr McMath's evidence addresses this aspect of the Proposal in more detail. On this basis, I conclude that this will be sheep farming and not a hobby/lifestyle block activity. I also note that should alternatives to sheep farming become available/economically viable in the future, then the landowners would likely pursue these too.

6.38 Mr McMath in his evidence at Paragraphs 6.2 to 6.4 introduces the concept of agri-voltaics. This is outside my area of expertise and I rely upon his knowledge when noting that work on understanding the

possibilities/opportunities of farming in and around solar farms is on-going but there appear to be opportunities for New Zealand to diversify its farming operations, whilst also generating renewable energy. In my opinion, this represents both a highly productive and an efficient and sustainable use of land and consequently, I do not consider that the proposal is contrary to the key outcome sought by the NPS-HPL to protect highly productive land. In my opinion, the solar panels in combination with sheep farming are an appropriate use. This also appears to be supported by the Guidance document prepared by MfE, provided an operational need can be established, which has been set out above in Paragraphs 6.19 to 6.26.

6.39 Clause (3)(a) requires SDC to 'take measures to ensure that any use or development on highly productive land minimises or mitigates any actual loss or potential cumulative loss of the availability and productive capacity of highly productive land in their district'.

6.40 Put simply, as discussed above, the HPL will not be lost as the Proposal will not disturb the structure of the soil on the Site or remove it from being able to be used for primary production. There may be a slight reduction in its productive capacity due to the solar panels but this will equate to a minimal loss as provided for in Clause (3)(a).

6.41 Clause (3)(b) seeks to avoid, if possible, or otherwise mitigate, any actual or potential reverse sensitivity effects on land-based primary production activities from the use of development.

6.42 This is addressed at Paragraphs 6.53 and 9.26 of my evidence and in my opinion, the Proposal will not result in reverse sensitivity effects as it will not curtail primary production on adjoining sites. Mr Aimer expressed concern about dust from ploughing etc affecting the operation of the panels but the Applicant has confirmed that this will not be an issue given the planting proposed around the Site. Furthermore, the panels will be cleaned during rain events, and can be washed if required.

If there is any conflict between the NPS-HPL and NPS-REG and, if so, whether that conflict can be resolved

6.43 I do not consider that the NPS-HPL directly conflicts with the NPS-REG. The NPS-REG seeks to support the establishment and expansion of

renewable energy generation, while recognizing the constraints of doing so. The NPS-HPL seeks to protect HPL from inappropriate uses and development. However, the NPS-HPL (clause 3.9(2)) provides a pathway for specified infrastructure (such as a solar farm) with an operational need to establish on a site that is HPL, in other words, such use and development of HPL is not inappropriate. As such, at a high level, in my opinion, there does not appear to be a conflict between the two NPS.

6.44 With regard to this Proposal, there is no requirement under the RMA for any particular NPS to take precedence over another. The NPS-HPL is obviously later in time and the regional and district councils have not had time to apply the NPS-HPL to the Canterbury region or the Selwyn District. As such, it is a matter of applying the NPS-HPL in a way that best reflects its relevance to this Proposal and the Selwyn District[2].

The appropriateness of the recommended 35 year duration

6.45 In light of the discussion in the paragraphs above, especially regarding agri-voltaics, I do not consider it necessary to limit the duration of the consent to 35 years as the land will remain productive throughout the life of the solar farm. Furthermore, the significant changes that will likely be made to planning processes, seem to me, to make such a requirement unnecessary.

Operative Selwyn District Plan

Utilities

6.46 Mr Aimer at Paragraph 218 of his report, accepts the finding in the Glint and Glare Report that the panels will be no more reflective than water and other elements of the natural environment. However, he does not consider the solar panels to be made of 'low reflective' materials. Accordingly, he considers that the proposal is not consistent with Policy B2.2.6: Require utility structures to be made of low reflective materials.

[2] MfE https://environment.govt.nz/publications/understanding-national-direction/about-national-direction/: *Because an NPS does not state rules, there is room for local authorities to apply it in a way that best reflects its relevance to their region*.

6.47 Having duly considered this, I have to concur with Mr Aimer. Therefore in my opinion, the Proposal is inconsistent with Policy B.2.2.6 but with mitigation (landscaping), any adverse effects associated with reflectivity (glint and glare) on the environment will be less than minor. Furthermore, I am of the opinion that, when considered holistically, the Proposal generally accords with the Utility objectives and policies.

Quality of the Environment

6.48 At Paragraph 223 of his report, Mr Aimer concludes that provided that appropriate conditions regarding landscaping are imposed, the proposal is consistent with Policy B3.4.18[3].

6.49 I question the relevance of Policy B3.4.18 as this relates to buildings in the Rural Zone. The 'buildings' associated with the Proposal including the panels and fences are defined as 'utility buildings' and not generally subject to the Rural Building rules as discussed in Paragraph 4.2 of my evidence. In my opinion therefore it seems inappropriate to apply the Rural zone policy on buildings to the Proposal.

Proposed Selwyn District Plan

General Rural Zone

6.50 The proposed solar farm is located in the General Rural Zone of the Proposed Selwyn District Plan. The Plan provides for development that supports, maintains, or enhances the function and form, character, and amenity values of rural areas; prioritises primary production and retains a contrast in character to urban areas. The character of the rural area is derived from an overall low building density, and predominance of vegetation cover; primary production and retaining a clear delineation and contrast between the district's rural areas and urban areas, including Christchurch City. The Rural Zone is also recognised as supporting economic development.

[3] Policy B3.4.18

Ensure buildings are setback a sufficient distance from property boundaries to:
(a) Enable boundary trees and hedges to be maintained;
(b) Maintain privacy and outlook for houses on small allotments; and
(c) Encourage a sense of distance between buildings and between buildings and road boundaries where practical.

Furthermore, reverse sensitivity effects on lawfully established primary production activities should be avoided.

6.51 Mr Aimer concludes that reverse sensitivity effects of the Proposal on neighbouring primary production activities will largely be avoided. But, it is considered that the issue of shading of paddocks immediately adjacent to the south and any residual dust issues need to be addressed before the proposal could be said to be consistent with GRUZ-P7 (Avoid reverse sensitivity effects on lawfully established primary production activities).

6.52 In my opinion, shading of the adjoining land to the south is not a reverse sensitivity effect, it is an effect of the Proposal and should be considered as such.

6.53 At Paragraph 130 of his report, Mr Aimer discusses the effect of dust effects on the solar farm, noting that this had been raised with the Applicant who did not have any concerns as the panels will be cleaned during rain events and can be washed. Furthermore, landscape planting will assist to reduce, but not eliminate, any dust entering the Site. Importantly, he notes that cultivation and soil disturbance is also provided for as a permitted activity in the District Plan, which protects the ability of adjoining properties to continue to undertake legitimate farming practices. Furthermore, he considered the reverse sensitivity effects raised by the submitters were not of sufficient risk to be addressed (Paragraph 124 of his report).

6.54 I agree with Mr Aimer's conclusions on dust and consider that there are no on-going dust effects or reverse sensitivity matters that need to be addressed.

6.55 Overall, I consider that the Proposal accords with the General Rural Zone objectives and policies.

7 PART 2 OF THE RESOURCE MANAGEMENT ACT

7.1 The various elements of Part 2 will be well known to the Commissioner. Many of the relevant Part 2 issues are directly addressed by the various planning instruments that I have referred to earlier, and so I do not repeat that analysis here. That analysis is directly applicable to your ultimate evaluation of Part 2 matters,

insofar as you need to do that, in light of the most recent determination on *Davidson*.

7.2 By way of summary, the key matters which stand out to me are:

7.2.1 The extent to which the solar farm will contribute to and assist the social and economic wellbeing of the Canterbury region;

7.2.2 There are no s6 matters of relevance to this proposal;

7.2.3 With respect to s7(b), the project will enable the efficient use and development of the land, providing for the generation of renewable energy and the use of the land for primary production;

7.2.4 With respect to s7(c), amenity values will be maintained in accordance with the expectations set out within the District Plan;

7.2.5 With respect to s7(f), the quality of the environment will be maintained in accordance with the expectations of the various planning documents; and

7.2.6 There do not appear to be any particular issues in respect of the various tangata whenua aspects of Part 2, including s6(e), 7(a), 7(aa) and 8.

7.3 I consider that the Proposal represents sustainable management of resources and is consistent with the purpose of the RMA.

8 SECTION 42A REPORT MATTERS

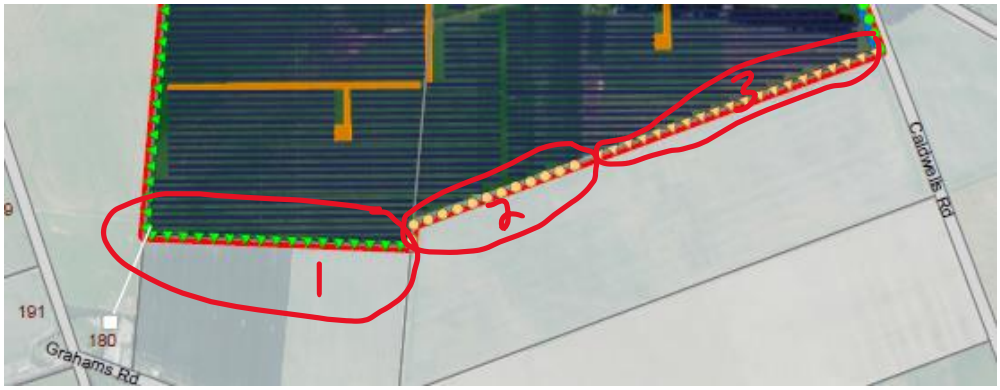
8.1 A number of other matters not addressed or identified in the application have been raised in the s42a report.

Shading of neighbouring properties

8.2 Mr Aimer at Paragraph 129 of his report notes that a relatively small area of the adjoining properties to the south of the Site (Lot 1 DP 37121 and Lot 1 DP 21302) will be shaded but that the planting will provide amenity and ecological benefits. However, given the strong direction in the district planning documents and National Policy Statement for Highly Productive Land to avoid adverse effects on the

productive potential of neighbouring land, he considers that the proposed shelterbelt on the shared boundary should be setback 10m into the Site to reduce shading effects.

8.3 I note that the area to be planted with indigenous plants is replacing an existing shelterbelt, which must already shade the adjoining land (Area 1). Further there is also an existing exotic shelterbelt that is remaining with some infill planting proposed (Area 2) and there is a remaining section of 'new' exotic planting (Area 3).



8.4 I also advise that there is a decision pending from Mr Casey on whether the shelterbelt identified in Area 1 is to be replaced.

8.5 Regardless of that outcome, if the proposed ('new') planting is setback 10m, it will result in a staggered shelterbelt that will require additional planting to connect the sections. Given the existing shelterbelt to be retained and the likely minimal area of shading that will result from the existing and proposed planting, I do not consider a 10m setback to be appropriate and that any resultant shading effects will be less than minor.

9 RESPONSE TO MATTERS RAISED IN SUBMISSIONS

9.1 I summarise below the issues raised by the submitters:

Name of submitter	Address	Position	Summary of submission
Clark James Casey	198 Branch Drain Road	Oppose	These submitters have prepared a joint submission.
Robyn Lynette Anne Casey	265 Branch Drain Road	Oppose	

Donna Jayne Kewish, David John Kewish and Ann William	324 Branch Drain Road	Oppose	The key concerns are: visual, acoustic (noisy inverters), electromagnetic radiation from inverters, chemical leachates, overseas investment, fire hazard, lack of community consultation and change from rural to industrial.
Donna Jayne Kewish, David John Kewish and Ann William	324 Branch Drain Road	Oppose	Views of the solar farm to the north from lounge window.
			Loss of property value.
Glenmore Farming Co Ltd C/o David Green.	43 Dunsandel Brookside Road	Oppose	Health and Safety – Fire risk. Linked to thistles and weeds. Want to see a Fire Emergency Assessment Plan.
			Noise – as below. Concern about noise levels from inverters.

9.2 However, I only address those matters of relevance to planning.

Out of scope

9.3 With due respect to the submitters, there are certain matters that cannot be considered as part of this hearing process. However, for completeness I have addressed these below.

Economic viability, business case and need for the Proposal

9.4 I agree with Mr Aimer at Paragraph 194 of his report that SDC is not required to judge the business viability of a Proposal. In addition, I advise that the cost-benefit analysis/business case is a matter for the Applicant to determine, generally prior to lodging an application for resource consent. As advised by Mr McMath in his evidence, a business case was prepared and considered, and the investor is a local Canterbury based company.

9.5 With regard to the need to increase solar generation, this is enshrined in Government policy as set out by Mr McMath, and will assist in addressing climate change. However, I do not consider it necessary to consider this further.

Community opposition to the proposal

9.6 With regard to the petition, again I agree with Mr Aimer, whose opinion in summary, is that it is the role of the Commissioner to evaluate the submissions and evidence before him against the relevant provisions of the RMA to make a decision on this Proposal.

9.7 I accept that the petition may represent the communities concerns about the solar farm, and in particular the change from rural to 'industrial' land use. However, the District Plan provides for solar farms as a discretionary activity. Put simply this equates to an activity that is appropriate in the rural zone but not on every site. The activity status also means that the solar farm is subject to a consent process, recognising that it may generate adverse effects that impact on the environment including people. Consequently, having determined the level of any effects, it is necessary to identify who is affected. In this case, the Council identified several affected parties and notified them of the proposal, enabling them to make submissions (limited notification). The Council did not consider it appropriate to publicly notify the application, whereby anyone could make a submission. I note that this is not a requirement for every application. As such, the petition is not a matter that can be considered, when determining the Proposal.

Notification decision

9.8 I agree with Mr Aimer at Paragraph 17 of his report that the notification decision cannot be revisited by the Commissioner. Whilst he cannot grant a consent if the application should have been publicly notified, the notification decision itself must be formally challenged and the case heard in the High Court.

Property value of 324 Branch Drain Road

9.9 Section 104 of the RMA relates to the consideration of environmental effects. As such, property values are not strictly something that can be contemplated under the RMA.

9.10 I advise that the question of adverse effects on property values has been addressed by the Environment Court on several occasions. Some of the case law articulates the idea that if it occurs at all, property value is simply another measure of adverse effects on amenity values[4]. In one case[5], the Court noted that a potential purchaser takes the situation as it exists at the time of purchase and may not be influenced by matters which are of note to a present owner and occupier. In my opinion, it would be very difficult to assess whether or not a proposed activity is likely to result in a reduction in property values.

9.11 Therefore, I am in agreement with Mr Aimer and consider it appropriate to only consider amenity effects, so as to avoid the potential for 'double counting' as noted by the Court in the case above.

Statutory obligations of local Government

9.12 Section 5.3.12 is actually a policy in Chapter 5 (Land Use and Infrastructure) in the Canterbury Regional Policy Statement. It states: *Maintain and enhance natural and physical resources contributing to Canterbury's overall rural productive economy in areas which are valued for existing or foreseeable future primary production, by*:

1. avoiding development, and/or fragmentation which;

a. forecloses the ability to make appropriate use of that land for primary production; and/or

b. results in reverse sensitivity effects that limit or precludes primary production.

[4] Foot v Wellington City Council, W73/98, 2 September 1998, paragraph [256
[5] Hudson v New Plymouth District Council W138/95, 9 November 1995, page 6

9.13 In my opinion, the Policy does not seek to avoid all development, just that which stops the land being used for primary production and/or results in reverse sensitivity effects that limit or preclude primary production.

9.14 The Proposal includes using the Site for sheep farming, and if cleared of all infrastructure associated with the solar farm, the Site could be used for any type of primary production. The Proposal will not result in reverse sensitivity effects as it will not curtail the operations of adjoining farmers. Also, in my opinion, the Policy needs to be considered in conjunction with others in the CRPS and national policy direction especially with regard to providing for renewable energy.

Landscaping

9.15 The submissions appear to criticise the proposed landscaping, noting that Mr Casey has previously had issues with bird damage to seed crops that 'required extensive use of netting to limit bird damage to the crop. With a likely 5-10-fold increase in bird numbers as trees are established this type of crop will not be able to be grown. Other types of standard seed crops (wheat, barley, oats, etc.) will be severely impacted with crop damage likely to be around 20% of yield (e.g., Coleman & Spurr 2001).'

9.16 I cannot comment on the current situation or the figures quoted but they suggest that there is already an issue. However conversely, I also note that the submitters appear concerned that the Proposal will adversely impact on fauna (including birds) that are being actively encouraged into the area by organisations such as 'Te Ara Kakiriki' (an organization establishing green dots of native vegetation across the Canterbury landscape) who are attempting to create a corridor for wildlife from the Alps to Banks Peninsula. In my opinion, the planting of indigenous vegetation associated with this Proposal directly supports this work.

9.17 I also understand that Mr Casey requested that the existing shelterbelt on the southern boundary of the subject site, in proximity to his dwelling, be removed and replaced with indigenous planting. Given the concerns now being raised, I would like to offer Mr Casey the opportunity to retain the exotic pine shelterbelt, which may attract less birds.

Electromagnetic radiation

9.18 In response to submitter's concerns, Mr Martin Gledhill of EMF Services was engaged to prepared a report on electric and magnetic fields. The findings of the report are based on actual readings at Kea Energy's Wairau Valley solar farm, which is smaller in scale to the Proposal, but the modules are similar. Mr Gledhill addresses the matter further in his evidence and based on his findings, it is considered that the Proposal will not result in adverse effects on the health of surrounding residents or fauna such as bees.

Chemical leachates

9.19 In my opinion, the issue of chemical leachates relates to matters that lie more within the jurisdiction of Canterbury Regional Council (CRC). However, I acknowledge that the submitters may not be aware that CRC has granted consent to discharge operational stormwater to land. As such, I consider that any matters regarding potential contamination of soil and water have been appropriately considered, and conditions of consent will ensure that potential effects are actively managed. I have included the consent in **Attachment 1**.

9.20 I also agree with Mr Aimer[6] that the storage of any hazardous substances at the Site (including any substances contained within the solar panels and batteries) will be managed under other legislative regimes, including the Hazardous Substances and New Organisms Act 1996 and Health and Safety at Work Act 2015.

Fire fisks

9.21 It is my understanding that fire risks associated with the solar farm will be managed under the Fire and Emergency New Zealand (FENZ) Regulations 2018, which require the Applicant to prepare a Fire Emergency Assessment Plan and provide it to FENZ. Furthermore, I attach as **Attachment 2** to my evidence, confirmation that the inverters and transformers can contain an internal fire and, installation guidance to minimise fire risk related to the transformers. The batteries (Energy Storage System: ESS) will have an integrated Fire Suppression System.

[6] Paragraph 183 of his s42a report.

9.22 I also understand that grass beneath and around the panels will be grazed and mown (if required where there are no panels) given that the operator will not want long grass that could potentially interfere with the efficiency of the panels or result in an increased risk of fire. I therefore consider that this risk can be appropriately managed to minimise any danger to surrounding properties.

Legal precedents

9.23 I will touch briefly on legal precedents. The 'visual impacts' case identified was pre-RMA and the context for the case is not set out i.e. if consent was required and not sought. Mr Reeve addresses noise effects in his evidence, but I note that post construction, the noise produced by the solar farm will be conditioned to be below the Operative and Proposed District Plan noise standards.

9.24 I do not agree that the Proposal does not comply with the general principles as set out under s5 of the RMA for the following reasons:

- The Proposal will use the land (natural resource) and physical resources (existing transmission infrastructure) for both primary production and energy generation to generate renewable electricity close to demand.
- The electricity generated will enable people to provide for their social, economic, and cultural wellbeing, as well as contributing to meeting the 'reasonably foreseeable needs of future generations.'
- The life-supporting capacity of the air will not be affected by the Proposal.
- The discharge of stormwater to land and subsequently groundwater has been granted approval by CRC subject to conditions that will manage potential effects on the soil and groundwater.
- The soil on the Site will remain relatively undisturbed and capable of supporting grazing.
- Local ecosystems will be enhanced by the planting of indigenous vegetation.

- Furthermore, with mitigation, adverse effects on the environment can be appropriately mitigated.

9.25 Therefore, in my opinion, the Proposal represents sustainable development.

Reverse sensitivity

9.26 I am in agreement with Mr Aimer that the Proposal will not result in reverse sensitivity effects i.e. dust from adjoining properties affecting the solar farm (which means they seek to limit activities on adjoining sites) due to the density of the proposed shelterbelt planting along the Site boundaries.

Servicing of on-site facilities

9.27 It is proposed to have a site office with toilets and washing facilities. This will be serviced by a surface effluent tank (2,700L capacity) that will be emptied as required, via a truck that will take sewerage offsite to be disposed of appropriately at an authorised facility. This does not require consent from CRC as there will be no discharge to land[7].

9.28 However, showers are not considered necessary as staff will not be exposed to any toxic substances that would require a person to shower.

Future expansion of the solar farm

9.29 The submitters express concern that future expansions areas have not been identified as part of this Proposal.

9.30 I understand that there are no plans to extend the solar farm, and in any case, future development would be subject to a resource consent process as a discretionary activity. Furthermore, any upgrading of transmission infrastructure including the substation are outside the scope of this application and cannot be considered by the Commissioner. I advise that this work will be undertaken by other parties and subject to the relevant statutory provisions including the Operative and Proposed District Plans.

[7] And even if it did, the discharge will likely meet the requirements of Rule 5.8 and be a permitted activity.

9.31 Concern is also expressed about the future of the solar farm should it stop operating. I advise that this will be addressed by a condition of consent (Draft Condition 43 in **Attachment 4**), which is enforceable by the Council. I consider that this appropriately manages the risk of panels rusting on the Site, noting that the cost of removing and disposing/recycling of the panels is a matter for the Applicant to manage and technology may have advanced in this area, by the time this works needs to be carried out.

10 PROPOSED CONDITIONS OF CONSENT

10.1 In my opinion, the resource consent conditions proposed appropriately address the risks associated with the establishing and operating a large scale solar farm on the subject Site in proximity to rural properties. The proposed conditions are comprehensive and include all necessary precautions that must be adopted to mitigate any adverse effects on surrounding residential dwellings and primary production land and, appropriately manage changes to rural amenity and character.

10.2 Prior to the hearing I intend to conference with Mr Aimer in relation to the wording of the draft conditions. I have included a track changed version of the section 42a report conditions in **Attachment 4** to my evidence however I expect that these will evolve further through expert conferencing prior to the hearing.

11 CONCLUSION

11.1 I have assessed the Proposal against the relevant statutory provisions and planning documents.

11.2 It is clear to me that the Proposal accords strongly with the objective of the NPS-REG to increase the energy produced from renewable resources and will protect HPL to enable it to be used for primary production as required by the NPS-HPL.

11.3 In my opinion, the Operative and Selwyn District Plans seek similar outcomes: to manage the natural and physical resources of the District to ensure their use, development and protection are sustainably managed into the future. Both Plans prioritise primary production in the Rural Zone over other activities, to recognise its

importance to the economy and wellbeing of the district. There is no expectation that land uses will not change, but resulting activities should manage any adverse effects to maintain amenity values.

11.4 Of particular relevance, when considering the effects of the Proposal, are the planning provisions which relate to:

11.4.1 Maintenance of amenity values;

11.4.2 Effects on people's health and safety;

11.4.3 Protection of highly productive land.

11.5 The draft conditions proposed by Mr Aimer[8] have been informed and amended by appropriate expert assessment and are intended to maintain a reasonable degree of amenity in the Rural zone and ensure there is no decline in the quality of the environment. In my view this is an appropriate response in this location.

11.6 The Proposal will have a number of positive effects, most notably those which relate to the efficient use and development of natural and physical resources, including the use of existing transmission infrastructure, to provide renewable energy to assist in meeting the objective of the NPS-REG and protect and utilise the land for primary production as per the NPS-HPL.

11.7 I consider that overall, the Proposal is consistent with most (and not contrary to the balance) of the objectives and policies of the relevant national and district planning documents. It is also consistent with the purpose and principles set out in Part 2 of the RMA. There is no impediment in the planning provisions to granting the consent sought.

Claire Kelly

February 2023

[8] An updated draft set of proposed conditions is attached to my evidence. That set of conditions identifies (using track changes) amendments suggested by the experts for the applicant. These will be the subject of expert conferencing before the hearing, therefore I expect that they will evolve further through that process and possibly during the hearing.

Attachment 1: ECan Earthworks and Stormwater Consents

15 November 2022

Environment Canterbury
Regional Council
Kaunihera Taiao ki Waitaha

Customer Services
P. 03 353 9007 or 0800 324 636
200 Tuam Street
PO Box 345
Christchurch 8140
E. ecinfo@ecan.govt.nz
www.ecan.govt.nz

KeaX Limited
Attn To: Campbell John McMath
PO Box 38
Leeston 7656

Dear Campbell,

Notice of Resource Consent Decision

Record Number: CRC223908
Applicant Name: KeaX Limited
Activity Description: To undertake earthworks over aquifers.
Decision: Granted

Decision

The decision of Environment Canterbury is to grant your application on the terms and conditions specified in the attached resource consent document. The reasons for the decision are:

1. The activity will achieve the purpose of the Resource Management Act 1991.

2. Any adverse effects on the environment of the activity will be minor.

Commencement of consent
Your resource consent commences from the date of this letter advising you of the decision.

If you object to or appeal this decision, the commencement date will then be the date on which the decision on the appeal is determined.

Lapsing of consent
This resource consent will lapse if the activity is not established or used before the lapse date of 15 November 2027. If you require more time in which to start the activity you can apply to extend the lapse date provided your request is received by Environment Canterbury before 15 November 2027.

Your rights of objection and appeal

- **Objection to Decision**
  If you do not agree with the decision of the consent authority, you may object to the whole or any part in accordance with Section 357A(1)(g) of the Resource Management Act 1991 (RMA). Notice of any objection must be in writing and lodged with Environment Canterbury **within 15 working days** of receipt of this decision in accordance with Section 357C(1) of the RMA.

- **Right to Appeal**
  You may appeal the decision of the consent authority to the Environment Court in accordance with section 120 of the RMA. The notice of appeal must be lodged with the Court within 15 working days of receipt of this decision, at PO Box 2069, Christchurch. A copy of the appeal should also be forwarded to Environment Canterbury within the same timeframe.

If you are in any doubt about the correct procedures, you should seek legal advice.

- **Objection to Costs**
  Section 357B of the RMA allows you to object to costs. Your objection must be received **within 15 working days** of the date on which you receive your invoice. Your objection must be in writing and should clearly explain the reasons for your objection as detailed in section 357C of the RMA.

Monitoring of conditions

It is important that all conditions of consent are complied with, and that the consent holder continues to comply with all conditions, to ensure that the activity remains lawfully established.

You can find online Information regarding the monitoring of your consent at www.ecan.govt.nz/monitoringconsent.pdf.

Charges, set in accordance with section 36 of the Resource Management Act 1991, shall be paid to the Regional Council for the carrying out of its functions in relation to the administration, monitoring and supervision of resource consents and for the carrying out of its functions under section 35 of the Act.

Further information about your consent

For some activities a report is prepared, with officer recommendations, to provide information to the decision makers. If you require a copy of the report please contact our Customer Services section. You can find online information about your consent document at www.ecan.govt.nz/yourconsent.pdf.

Queries

For all queries please contact Customer Services Section quoting your CRC number noted above.

Thank you for helping us make Canterbury a great place to live.

Yours sincerely

Consents Planning Section

RESOURCE CONSENT CRC223908

Under Section 104 of the Resource Management Act 1991

The Canterbury Regional Council (known as Environment Canterbury)

GRANTS TO:	KeaX Limited
A LAND USE CONSENT (S9):	To undertake earthworks over aquifers.
COMMENCEMENT DATE:	15 Nov 2022
DATE CONSENT NUMBER ISSUED:	15 Nov 2022
EXPIRY DATE:	15 Nov 2027
LOCATION:	150 Buckleys Road and 821 Hanmer Road, Leeston

SUBJECT TO THE FOLLOWING CONDITIONS:

Limits

1 The works authorised by this resource consent shall be limited to the excavation of land associated with the development of Brookside Solar Array at 150 Buckleys Road, 115 Buckleys Road and 821 Hanmer Road, Brookside, Selwyn, legally described as Lot 1 DP 46472, Lot 1 DP 54392, Lot 2 DP 3 87576, RS 8995, Lot 1 DP 7545, Lot 2 DP 54392 BLK IX Leeston SD, Rural SEC 3658 BLK X Leeston SD, and RS 5565 & PT RS 9500 BLK X Leeston SD, at or about map reference NZTM2000 1543065 mE – 5160320 mN, within the site shown on the attached Plan CRC223908, which forms part of this resource consent.

2 The maximum depth of excavation for the works authorised by this resource consent must not exceed 1.8 metres below ground level.

3 No excavation works must be carried out within the exposed water table during times when groundwater levels are higher than the deepest part of the excavations.

4 No excavation works must take place within 50 m of the Wahi Taonga Management Area (C59) identified within the site.

Prior to Commencement of Works

5 Prior to commencement of the works described in Condition (1), all personnel working on the site must be made aware of, and have access to, the following:

a. The contents of this resource consent document and all associated documents; and

b. Resource Consent CRCC223909 and all associated documents, and

c. The Erosion and Sediment Control Plan required to be prepared and maintained under Condition (9) of this consent.

6 At least five working days prior to the commencement of works on site, the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring (via ECInfo@ECan.govt.nz) must be informed of the commencement of works.

7 At least 10 working days prior to the commencement of works on site, the consent holder must request a pre-construction site meeting with the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring (via ECInfo@ECan.govt.nz), and all relevant parties, including the primary contractor. At a minimum, the following shall be covered at the meeting:

a. Scheduling and staging of the works;

b. Responsibilities of all relevant parties, including confirmation that the person [or persons] implementing the ESCP on the site is [are] suitably trained and/or experienced;

c. Contact details for all relevant parties;

d. Expectations regarding communication between all relevant parties;

e. Procedures for implementing any amendments;

f. Site inspection; and

g. Confirmation that all relevant parties have copies of the contents of this resource consent document and all associated erosion and sediment control plans and any other discharge treatment methodologies employed.

8 All erosion and sediment control measures detailed in the ESCP required by Condition (9) of this resource consent must be installed prior to the commencement of any earthworks or stripping of vegetation and topsoil occurring on the site.

Erosion and Sediment Control

9 The works authorised under Condition (1) must occur in accordance with an ESCP. The ESCP must:

a. Detail best practicable sediment control measures that will be implemented to ensure compliance with the conditions of this resource consent;

b. Be prepared by a suitably qualified person with experience in erosion and sediment control in accordance with:

i. Canterbury Regional Council's "Erosion and Sediment Control Toolbox for the Canterbury Region" (ESCT), which can be accessed under http://esccanterbury.co.nz/; or

ii. An equivalent industry guideline. If an alternative guideline is used, the ESCP must provide details of the relevant alternative methods used and an explanation of why they are more appropriate than the ESCT.

c. Be signed by an engineer or suitably qualified person with experience in erosion and sediment control, confirming that the erosion and sediment control measures for the site are appropriately sized and located in accordance with the ESCT or alternative guideline.

10 The ESCP shall:

a. Include a map showing the location of all works;

b. Detailed plans showing the location of sediment control measures, on-site catchment boundaries, and sources of runoff;

c. Detail how best practicable measures are taken to minimise discharges of construction-phase stormwater run-off beyond the boundaries of the site;

d. Include drawings and specifications of designated sediment control measures, if these are not designed and installed in accordance with the ESCT;

e. Include a confirmation that the erosion and sediment control devices have been sized appropriately in accordance with the ESCT;

f. Include a programme of works, including a proposed timeframe for each stage of the works and the earthworks methodology;

g. Detail the management of any stockpiled material;

h. Detail inspection and maintenance of the sediment control measures;

i. Define the discharge points where stormwater is discharged onto land / infiltrates into land;

j. Include a description of dust mitigation to be used and details of best practicable options to be applied to mitigate dust and sediment discharge beyond the site boundary;

k. Detail the methodology for stabilising the site if works are abandoned; and

l. Detail the methodology for stabilising the site and appropriate decommissioning of all erosion and sediment control measures after works have been completed.

11 a. The ESCP must be submitted to the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring, at least ten working days prior to works commencing, for certification that it complies with the ESCT and the conditions of this resource consent.

b. The discharge shall not commence until certification has been received from the Canterbury Regional Council that the ESCP is consistent with the ESCT or equivalent industry guideline as per the requirements under Condition (9)(b)(ii), and the conditions of this resource consent.

c. Notwithstanding Condition (11)(a), if the ESCP has not been reviewed and/or certified within ten working days of the Regional Leader – Compliance Monitoring receiving the ESCP, the discharge may commence.

12 The ESCP may be amended at any time. Any amendments shall be:

a. Only for the purpose of improving the efficacy of the erosion and sediment control measures and shall not result in reduced discharge quality; and

b. For the purpose of applying best practicable measures to mitigate [dust and] sediment transport off-site;

c. Consistent with the conditions of this resource consent; and

d. Submitted in writing to the Canterbury Regional Council, Attention: Regional Leader Compliance Monitoring, prior to any amendment being implemented.

13 Erosion and sediment control measures must be inspected at least once per day, as well as following any rainfall event that results in more than five millimetres of rainfall at the site. Any accumulated sediment shall be removed, and repairs made, as necessary, to ensure effective functioning of measures and devices. Records of any inspections shall be kept and provided to the Canterbury Regional Council on request.

14 If the consent holder abandons work on-site, adequate preventative and remedial measures must be taken to control sediment discharged from exposed or unconsolidated surfaces. These measures must be maintained for so long as necessary to prevent sediment discharges from the earth worked areas.

During Works

15 All practicable measures must be taken to:

a. Minimise soil disturbance and prevent soil erosion;

b. Avoid placing excavated material in a position where it may enter:

i. Any neighbouring site, public road or the water race along Hanmer Road.

Accidental Discovery of Contaminants

16 In the event that any unexpected contaminated soil or material is uncovered by the works, an accidental discovery protocol must be implemented, including but not limited to the following steps:

a. Earthworks within ten metres of the encountered contaminants must cease immediately;

b. All practicable steps must be taken to prevent the contaminated material becoming entrained in stormwater. Immediate steps must include, where practicable:

i. Diverting any stormwater runoff from surrounding areas away from the contaminated material; and

ii. Minimising the exposure of the contaminated material, including covering the contaminants with an impervious cover;

c. Notification of the Canterbury Regional Council, Attention: Contaminated Sites Manager and Regional Leader – Compliance Monitoring, within 24 hours of the discovery;

d. Earthworks within ten metres of encountered contaminants must not recommence until a suitably qualified and experienced contaminated land practitioner (SQEP) confirms to Canterbury Regional Council, Attention: Regional Leader –Compliance Monitoring that continuing works does not represent a significant risk to the environment;

e. All records and documentation associated with the discovery shall be kept and copies must be provided to the Canterbury Regional Council upon request.

17 Any material removed from the site during the works that is potentially or confirmed as contaminated, must be disposed of at a facility authorised to receive such material.

Spills

18 All practicable measures must be taken to avoid spills of fuel or any other hazardous substances within the site. These measures must include:

a. Refuelling of machinery and vehicles must not occur within 20 metres of:

i. Open excavations;

ii. Exposed groundwater; and

iii. Stormwater devices.

b. A spill kit must be kept on site that is capable of absorbing the quantity of oil and petroleum products that may be spilt on site at any one time, remains on site at all times.

c. In the event of a spill of fuel or any other hazardous substance, the spill must be cleaned up as soon as practicable, the stormwater system must be inspected and cleaned, and measures taken to prevent a recurrence;

d. The Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring, must be informed within 24 hours of a spill event exceeding five litres and the following information provided:

i. The date, time, location and estimated volume of the spill;

ii. The cause of the spill;

iii. The type of hazardous substance(s) spilled;

iv. Clean up procedures undertaken;

v. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;

vi. An assessment of any potential effects of the spill; and

vii. Measures to be undertaken to prevent a recurrence.

Accidental Artesian Aquifer Interception

19 In the event of an accidental interception or unanticipated levels of artesian flows, all practicable measures must be undertaken to remedy or mitigate any change in aquifer pressure, water quality or temperature. This must include:

a. The contractor must immediately cease all works within the immediate area of excavation that caused the interception of the artesian flows;

b. The contractor must determine and document whether the flow is constant or increasing, if the turbidity is constant or increasing and if the flow is confined to the excavation;

c. The contractor must notify the site engineer and/or other appropriate personnel to determine the emergency measures required to arrest the artesian flow. Emergency measures must include, but not be limited to:

i. The installation of a layer of impermeable material to the extent required to reform a capping layer over the aquifer to prevent the upward movement of groundwater through the confining layer; or

ii. Inserting a vertical pipe in the aquifer interception point (if practicable) and provide for a secure seal against the pipe to enable the stabilisation of the artesian flow in the pipe, and to determine the above ground water level to assess any further measures.

d. The temporary artesian flow beyond the excavation must be controlled and mitigated with appropriate erosion and sediment control measures;

e. The Canterbury Regional Council, Attention: Regional Leader – Monitoring and Compliance must be notified as soon as practicable but no later than two working days after the interception; and

f. Upon remediation and arresting of flow from the aquifer interception, the construction methodology must be reconsidered and, if required, revised to avoid future interceptions of the aquifer.

Accidental Discovery of Archaeological Material

20 In the event of any discovery of archaeological material the consent holder must immediately:

a. Cease earthmoving operations in the affected area and mark off the affected area; and

b. Advise the Canterbury Regional Council of the disturbance; and

c. Advise Heritage New Zealand Pouhere Taonga (HNZPT) of the disturbance.

***Advice Note**: Affected area means the whole or any part of any site known or reasonably suspected to be an archaeological site, and which could be disturbed or otherwise impacted by any works.*

***Advice Note**: This condition may be in addition to any agreements that are in place between the consent holder and the Papatipu Runanga. (Cultural Site Accidental Discovery Protocol).*

***Advice Note**: Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Maori origin, this evidence may be in the form of accumulations of shell, bone, charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc. may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains/koiwi may date to any historic period. It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides for substantial penalties for unauthorised damage or destruction.*

21

a. If accidentally discovered material is suspected to be Koiwi Tangata (human bones), taonga (treasured artefacts) or a Maori archaeological site:

    i. The consent holder must immediately advise the office of the Kaitiaki Runanga (office contact information can be obtained from the Canterbury Regional Council) of the discovery; and

    ii. The nature of the material must be confirmed by a qualified archaeologist appointed by the Kaitiaki Runanga and HNZPT.

b. If the archaeological material is determined to be Koiwi Tangata (human bones) by a qualified archaeologist, the consent holder must:

    i. Immediately advise the New Zealand Police of the disturbance;

    ii. Consult with the Kaitiaki Runanga on any matters of tikanga (protocol) that are required in relation to the discovery and prior to the commencement of any investigation; and

    iii. Treat the area with utmost discretion and respect and manage the koiwi in accordance with both statutory obligations under the HNZPT Act 2014 and tikanga, as guided by the Kaitiaki Runanga.

c. Works in the site area must not recommence until authorised by the Kaitiaki Runanga, HNZPT (and the NZ Police in the case of koiwi) and any other authority with statutory responsibility, to ensure that all statutory and cultural requirements have been met.

22 If accidentally discovered material is not suspected or confirmed to be Koiwi Tangata (human bones), taonga (treasured artefacts) or a Maori archaeological site, work may recommence once Heritage New Zealand Pouhere Taonga Trust advises the consent holder that work can recommence.

After Completion of Works

23 Within two weeks of the completion of each stage of works authorised by this resource consent:

a. All disturbed areas must be stabilised and/or revegetated; and

b. All spoil and other waste materials from the works must be removed from site.

Administration

24 The Canterbury Regional Council may annually, on the last working day of May or November, serve notice of its intention to review the conditions of this resource consent for the purposes of:

a. Dealing with adverse effect on the environment which may arise from the exercise of this resource consent, and which is not appropriate to deal with at a later stage; or

b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

25 If this resource consent is not exercised before 15 November 2027, it shall lapse in accordance with Section 125 of the Resource Management Act 1991.

Advice Note: *'Exercised' is defined as implementing any requirements to operate this resource consent and undertaking the activity as described in these conditions and/or application documents.*

Issued at Christchurch on 15 November 2022

Canterbury Regional Council

Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

Plan CRC223908

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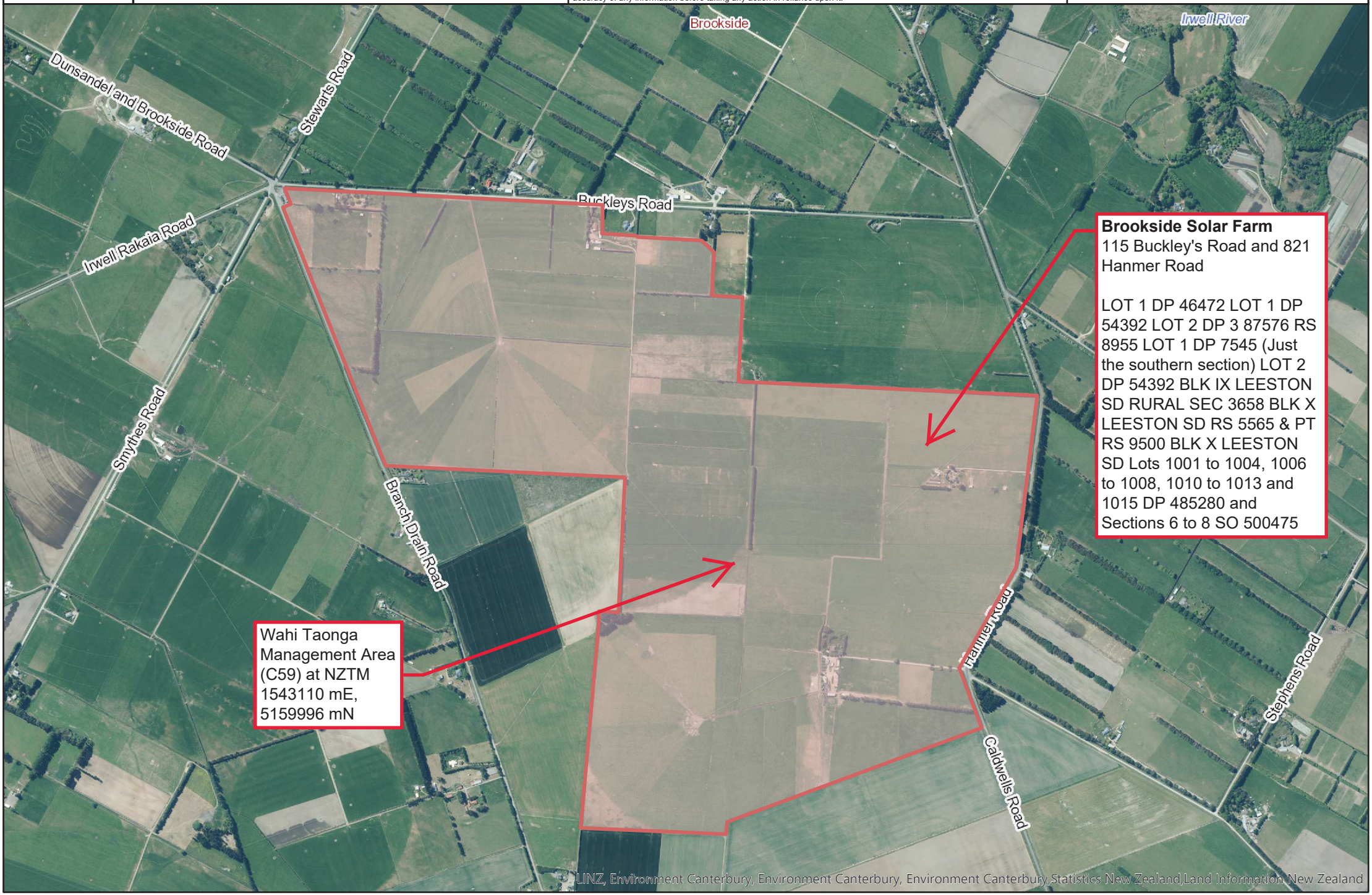

15 November 2022

Environment Canterbury
Regional Council
Kaunihera Taiao ki Waitaha

Customer Services
P. 03 353 9007 or 0800 324 636
200 Tuam Street
PO Box 345
Christchurch 8140
E. ecinfo@ecan.govt.nz
www.ecan.govt.nz

KeaX Limited
Attn To: Campbell John McMath
PO Box 38
Leeston 7656

Dear Campbell,

Notice of Resource Consent Decision

Record Number: CRC223909
Applicant Name: KeaX Limited
Activity Description: To discharge operational phase stormwater to land.
Decision: Granted

Decision

The decision of Environment Canterbury is to grant your application on the terms and conditions specified in the attached resource consent document. The reasons for the decision are:

1. The activity will achieve the purpose of the Resource Management Act 1991.

2. Any adverse effects on the environment of the activity will be minor.

Commencement of consent
Your resource consent commences from the date of this letter advising you of the decision.

If you object to or appeal this decision, the commencement date will then be the date on which the decision on the appeal is determined.

Lapsing of consent
This resource consent will lapse if the activity is not established or used before the lapse date of 19 December 2027. If you require more time in which to start the activity you can apply to extend the lapse date provided your request is received by Environment Canterbury before 19 December 2027.

Your rights of objection and appeal

- **Objection to Decision**
  If you do not agree with the decision of the consent authority, you may object to the whole or any part in accordance with Section 357A(1)(g) of the Resource Management Act 1991 (RMA). Notice of any objection must be in writing and lodged with Environment Canterbury **within 15 working days** of receipt of this decision in accordance with Section 357C(1) of the RMA.

- **Right to Appeal**
  You may appeal the decision of the consent authority to the Environment Court in accordance with section 120 of the RMA. The notice of appeal must be lodged with the Court within 15 working days of receipt of this decision, at PO Box 2069, Christchurch. A copy of the appeal should also be forwarded to Environment Canterbury within the same timeframe.

If you are in any doubt about the correct procedures, you should seek legal advice.

- **Objection to Costs**
  Section 357B of the RMA allows you to object to costs. Your objection must be received **within 15 working days** of the date on which you receive your invoice. Your objection must be in writing and should clearly explain the reasons for your objection as detailed in section 357C of the RMA.

Monitoring of conditions

It is important that all conditions of consent are complied with, and that the consent holder continues to comply with all conditions, to ensure that the activity remains lawfully established.

You can find online Information regarding the monitoring of your consent at www.ecan.govt.nz/monitoringconsent.pdf.

Charges, set in accordance with section 36 of the Resource Management Act 1991, shall be paid to the Regional Council for the carrying out of its functions in relation to the administration, monitoring and supervision of resource consents and for the carrying out of its functions under section 35 of the Act.

Further information about your consent

For some activities a report is prepared, with officer recommendations, to provide information to the decision makers. If you require a copy of the report please contact our Customer Services section. You can find online information about your consent document at www.ecan.govt.nz/yourconsent.pdf.

Queries

For all queries please contact Customer Services Section quoting your CRC number noted above.

Thank you for helping us make Canterbury a great place to live.

Yours sincerely

Consents Planning Section

RESOURCE CONSENT CRC223909

Under Section 104 of the Resource Management Act 1991

The Canterbury Regional Council (known as Environment Canterbury)

GRANTS TO:	KeaX Limited
A DISCHARGE PERMIT (S15):	To discharge operational phase stormwater to land.
COMMENCEMENT DATE:	15 Nov 2022
DATE CONSENT NUMBER ISSUED:	15 Nov 2022
EXPIRY DATE:	15 Nov 2037
LOCATION:	150 Buckleys Road and 821 Hanmer Road, Leeston

SUBJECT TO THE FOLLOWING CONDITIONS:

Limits

1 The discharge shall be only stormwater generated from:

a. Solar array panels,

b. Roofs,

c. Roads, hardstand areas, and impervious areas,

associated with the proposed Brookside Solar Array on 150 Buckleys Road, 115 Buckleys Road and 821 Hanmer Road, Brookside, Selwyn, legally described as Lot 1 DP 46472, Lot 1 DP 54392, Lot 2 DP 3 87576, RS 8995, Lot 1 DP 7545, Lot 2 DP 54392 BLK IX Leeston SD, Rural SEC 3658 BLK X Leeston SD, and RS 5565 & PT RS 9500 BLK X Leeston SD, labelled as 'Site' on Plan CRC223909 attached to and forming part of this consent.

2 Stormwater shall only be discharged onto and into land within the boundary of the site.

3 The discharges shall not arise from a site where any of the activities or industries listed in Schedule 3 of the Land and Water Regional Plan, which forms part of this consent, are conducted or operated.

4 Unless treatment is provided, the discharge of roof stormwater shall not arise from:

a. Copper building materials; or

b. Unpainted galvanised sheet materials.

5 Stormwater shall not pond on the land for longer than 48 hours after the cessation of any storm event.

Inspections and Maintenance

6 The land shall be maintained by:

a. Inspecting the pasture at least once every three months in the first two years, thereafter every six months;

b. Removing any visible hydrocarbons, debris or litter within five working days of the inspection;

c. Repairing any scour or erosion within ten working days of the inspection.

7 The land shall be:

a. Maintained so that vegetation or grass is in a healthy and uniform state with the exception of seasonal browning off;

b. Replanted where erosion or die-off has resulted in bare or patchy soil cover;

c. Maintained so that vegetation or grass is at a minimum length of 50-150 millimetres.

8 If during the life of the solar array, stormwater causes visible channels or rills and there is associated sediment runoff and/or stormwater is visibly pooling on the soil surface for longer than 48 hours and moving laterally, the Consent Holder shall:

a. Implement mitigation measures including, but not limited to, the installation of a strip of gravel, mulch, geotextile or some type of splash distribution panel;

b. Notify the Canterbury Regional Council, Attention: Regional Leader – Compliance Monitoring (via ECInfo@ECan.govt.nz) within 10 working days of the issue arising and within 10 working days of the mitigation measures being implemented.

Spills

9 All practicable measures shall be taken to avoid spills of fuel or any other hazardous substances within the site. In the event of a spill of fuel or any other hazardous substance:

a. The spill shall be cleaned up as soon as practicable, the affected land area shall be inspected and cleaned, and measures shall be taken to prevent a recurrence;

b. The Canterbury Regional Council, Regional Leader – Monitoring and Compliance shall be informed within 24 hours of a spill event exceeding five litres and the following information provided:

i. The date, time, location and estimated volume of the spill;

ii. The cause of the spill;

iii. The type of hazardous substance(s) spilled;

iv. Clean up procedures undertaken;

v. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;

vi. An assessment of any potential effects of the spill; and

vii. Measures to be undertaken to prevent a recurrence.

10 All best practicable options shall be used to contain spills or leaks of any hazardous substance from being discharged onto the land. These shall include, but not be limited to the following:

a. Using a tank filling procedure to minimise spills during any fuel delivery;

b. Making spill kits available to contain or absorb any hazardous substances used or stored on the site;

c. Maintaining signs to identify the location of the spill kits; and

d. Maintaining written procedures in clearly visible locations that are to be undertaken to contain, remove and dispose of any spilled hazardous substance.

Administration

11 The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of:

a. Dealing with any adverse effect on the environment that may arise from the exercise of the consent; or

b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

12 If this resource consent is not exercised before 19 December 2027, it shall lapse in accordance with Section 125 of the Resource Management Act 1991.

Advice Note: *'Exercised' is defined as implementing any requirements to operate this resource consent and undertaking the activity as described in these conditions and/or application documents.*

Issued at Christchurch on 15 November 2022

Canterbury Regional Council

Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

Plan CRC223909

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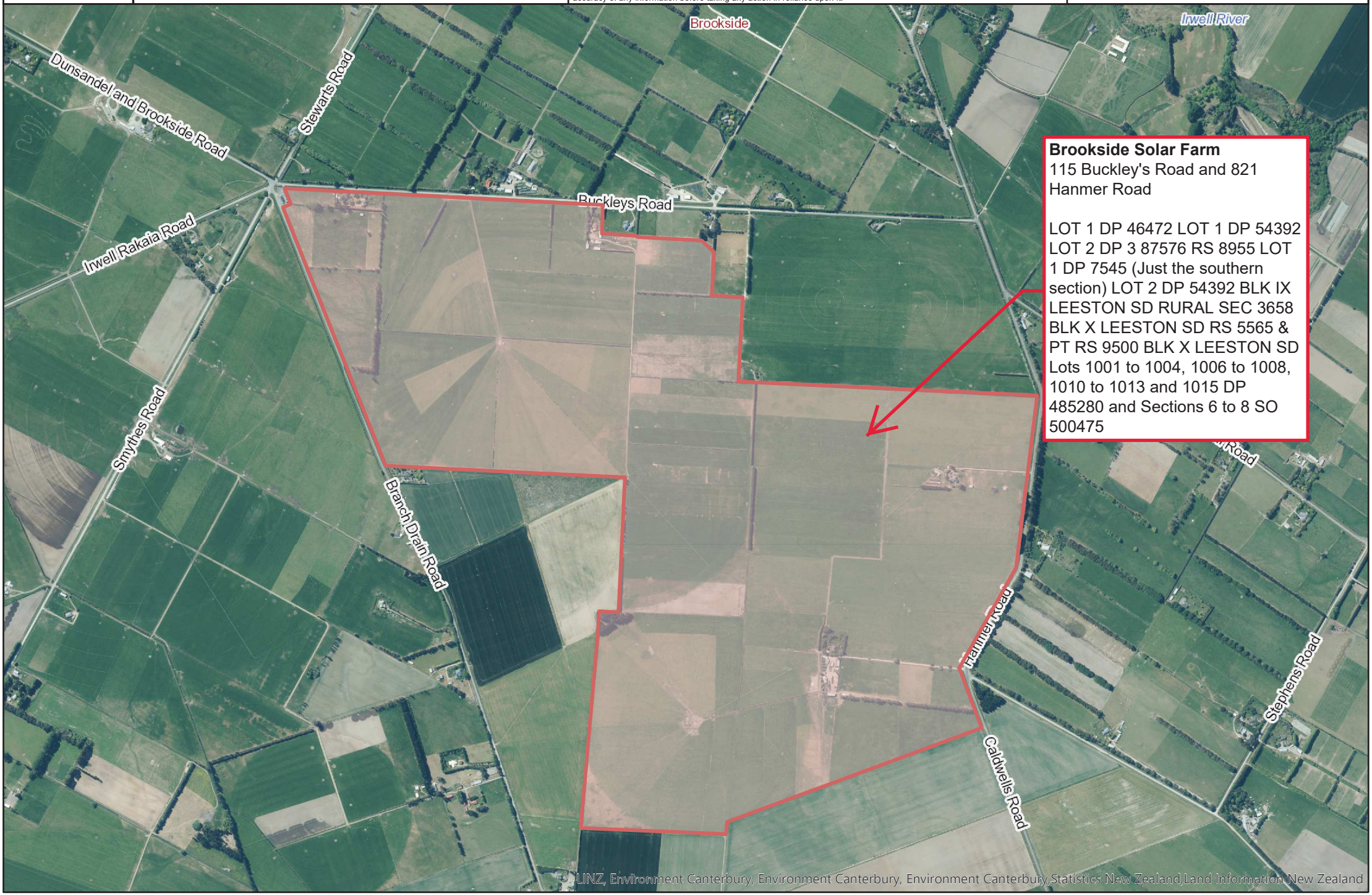
0 0.1 0.2 0.3 0.4 Kilometres

Scale: 1:14,000 @A4

Map Created by Environment Canterbury on 29/03/2022 at 12:52 PM



Brookside Solar Farm
115 Buckley's Road and 821 Hanmer Road

LOT 1 DP 46472 LOT 1 DP 54392 LOT 2 DP 3 87576 RS 8955 LOT 1 DP 7545 (Just the southern section) LOT 2 DP 54392 BLK IX LEESTON SD RURAL SEC 3658 BLK X LEESTON SD RS 5565 & PT RS 9500 BLK X LEESTON SD Lots 1001 to 1004, 1006 to 1008, 1010 to 1013 and 1015 DP 485280 and Sections 6 to 8 SO 500475

Attachment 2: Fire Risk Documents

Power Electronics España S.L.
Polígono Pla de Carrases B
CV-35 Salida 30, 46160
Liria - Valencia

To whom it may concern,

Power Electronics states that the MV / Twin Skid Compact complies with IEC 62271-212 standard which refers to IEC 62271-1 standard for requirements regarding fire containment.

Additionally, the IEC 61936-1 is the international standard for high voltage installations. Fire related safety is mainly based on clearance between transformers to avoid possible propagation of the fire. This matter applies to the installation (it is not a product requirement) therefore installing the stations with enough clearance is responsibility of the client when designing the layout of the plant.

Furthermore, the MV / Twin Skid Compact includes a temperature protection relay which stops the station when the temperature exceeds a specific threshold, providing a safety stop if the temperature is rising and reducing the fire risk.

Finally, the MV / Twin Skid Compact can optionally include a fire suppression system in the oil tank, which prevents the presence of oxygen inside the tank, and therefore the risk of fire, and a continuous analog measurement of the oil temperature that can be displayed by communications.

Product and Applications Department

Valencia, 31th May 2022

Power Electronics España S.L.
Polígono Industrial Carrases
Ronda del Camp d'Aviació,4
46160 Liria, Valencia (Spain)
CV-35 Salida 30

To whom it may concern,

Power Electronics confirms the inverter series Freesun HEMK and Freemaq PCSMK are in compliance with the UL 1741 which includes in its scope the requirements regarding fire containment. That is to say that in case of fire inside the inverter, the inverter's enclosure with all the doors and covers closed is capable to contain the fire avoiding it from spreading.

On the other hand, the materials and components inside the enclosure are in compliance with one of the following requirements.

- Flammability standard V-2 o HF-2
- To be in compliance with fire protection requirements of its specific UL product norm.

Additionally, plastic materials inside the enclosure are separated from components that produces electrics arcs in normal operation by a distance in the air of at least 13mm.

Finally, the inverter is equipped with temperature protection which stops the inverter when the temperature exceeds 125 ºC providing a safety stop if the temperature is rising and reducing the fire risk.

Product and Application Department

Valencia, 27th October 2022

Microgrid
Energy Storage System
Fire Suppression System

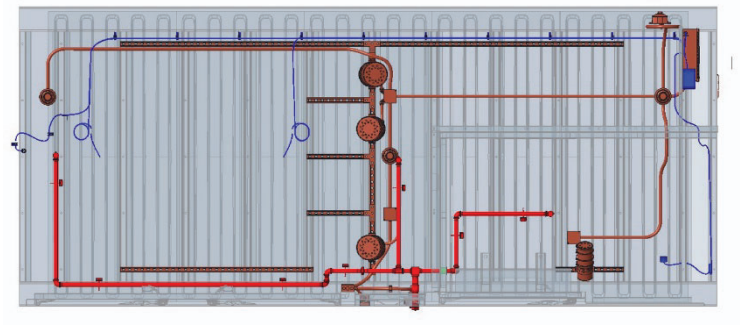


Image shown may not reflect actual configuration.

Features

Intelligent Central Fire Alarm System

- Class A wiring with redundancy
- The intelligent fire alarm control panel may be used in stand-alone or network configurations. Features include:
  - – Alarm verification selection per point, with automatic counter.
  - – Pre-signal/Positive Alarm Sequence (PAS).
  - – Silence inhibit and Auto Silence timer options.
  - – NAC coding functions:
    - ○ March time.
    - ○ Temporal.
    - ○ California two-stage coding.
    - ○ Canadian two-stage.
    - ○ Strobe synchronization.
  - – Field-programmable with program check, compare, simulate.
  - – Full QWERTY keypad.
  - – Battery charger supports 18 – 200 AH batteries.
  - – Extensive, built-in transient protection.
  - – Powerful Boolean logic equations.

Aerosol generators

Electrically operated aerosol suppression systems may be used in critical applications across a wide range of industries due to their fast response time, low fire extinguishing concentration and these other characteristics:

- Environmentally friendly -Ozone depletion potential (ODP) = 0 - No global warming potential
- Ease of installation – no pressure vessels or installation piping
- Very low maintenance
- Compact
- Provides reliable, effective protection for a wide range of fire hazards
- Listed for Class A, B, C fires by UL, ULC, CSIRO, ECB, and many others
- Favorably reviewed by EPA for SNAP listing
- Suitable for enclosed facilities and local applications

Fire Suppression System (FSS)

The Energy Storage System (ESS) module is designed with a Fire Suppression System (FSS) comprised of three different product offerings. Depending on the ESS application, a single FSS product or a combination of the FSS products may be ordered for added protection. The FSS is fully integrated into the ESS module at the Caterpillar factory prior to shipment.

- Safe for personnel - non-harmful to personnel at design application rates.
- Safe for equipment -will not harm electronic equipment
- Minimal cleanup - aerosol suspends in air for quick and easy venting after discharge.

Gas Detection System (Optional Equipment)

The Gas detection system monitors lithium-ion batteries for increased safety. The Rack Monitoring system consists of three primary components:

- The Controller
- The Li ion Off Gas Sensors
- and the cables for connecting the sensors to the controller, controller to power, and signal distribution.

The Off Gas Detection System sensors are installed near or at the battery rack and are aggregated at the Controller which also distributes power to the sensors. The Controller contains logic to diagnose when and where single cell off gas events have happened. The Gas Detection System is integrated to the Bi-Directional Energy Storage Inverter (BDP) which allows the power conversion to cease if gas is detected.

Water Lines (Optional Equipment)

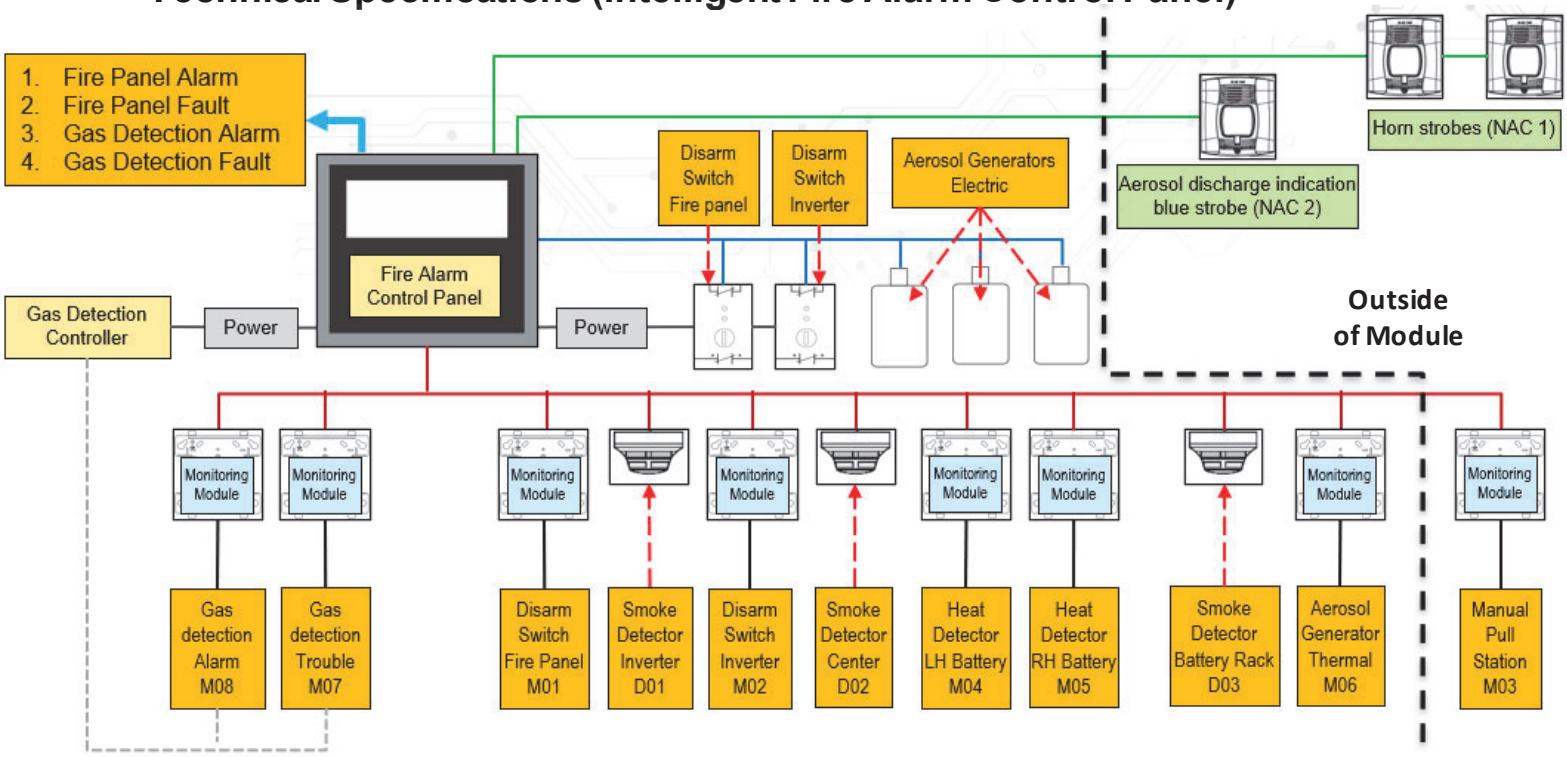
The ESS design can incorporate an optional dry pipe water distribution system. The water lines are equipped with nozzle/sprinkler with melting head(s) of 123°C (254°F). System water supply working pressure is not to exceed 150psi.

Horn and Strobes

Outdoor horn, strobes with red plastic housing, wall mounting with FIRE-printed devices that meet virtually any application requirement, including indoor, outdoor, wet, and dry applications in temperatures from –40°C to 66°C (−40°F to 151°F).

- Strobe Flash Rate 1 flash per second
- Nominal Voltage Regulated 12 DC/FWR or regulated 24 DC/FWR1
- Operating Voltage Range 8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
- Operating Voltage with MLD3 Sync Module
- 8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)

Technical Specifications (Intelligent Fire Alarm Control Panel)



Technical Specifications (Aerosol Generators)

Operation /Description

Upon detection of a fire, aerosol generators will be activated automatically from a suitable listed releasing device. All auxiliary system components (release panel, detection, remote pull stations, etc.) are listed/approved by UL, ULC, FM, New York City MEA, and California State Fire Marshall. Upon activation, the generators produce an exceptionally effective, ultra-fine, potassium-based aerosol. Unlike gaseous systems, aerosol generators are very effective to install and maintain - as they do not require the pressure vessels, piping or installation associated with other extinguishing systems. Space and weight requirements are minimal. On an agent weight basis, aerosol is ten times more effective than gaseous agent alternatives. The aerosol generator's effectiveness is a function of its patented design, aerosol composition, and ultra-fine particle size. Fire suppression is rapidly achieved through interference between the ultra-fine aerosol particulate and the flame's free radicals – terminating propagation of the fire. Aerosol generators are virtually maintenance free and have a service life of over 10 years. This makes them an extremely effective fire protection solution.

Applicable Standards and Certifications*

- UL Listed to the following standards
  - $_{c}UL_{us}$ mark
- Declarations (pending):
  - CE Declaration of Conformity

*(Contributes to Energy Storage System (ESS) level UL 9540 compliance)

Worldwide Product Support

- Cat® dealers provide extensive post-sale support including maintenance and repair agreements.
- Cat dealers have over 1,800 dealer branch stores operating in 200 countries.

Attachment 3: Produce Encapsulation and Leakage Statement

Yingli Energy Development Co., Ltd.
No. 2599, Xiangyang North Street, gaoxin Zone,
Baoding City, Hebei +86 031 2892 9996

Dec 12th, 2022

Mr Campbell McMath
Kea Energy Ltd
PO Box 38,
Leeston, 7632, Canterbury, New Zealand
+64 3 390 0009 (Ph)
www.keaenergy.nz

PRODUCT ENCAPSULATION AND LEAKAGE STATEMENT

Yingli Solar panel Series YLxxxDF72e/2 (xxx=Pmax), YLxxxCF72 e/2 (xxx=Pmax), YLxxxCF78 e/2 (xxx=Pmax).

Introduction:

Yingli Energy Development Limited, known as "Yingli Solar", is one of the world`s leading solar module manufacturers. A technical statement about the solar panel water tight encapsulation and mechanical strength is provided here. With high quality encapsulation materials and strengthened double structure, Yingli solar panels have proven, with over two decades of field installations around the world, to be highly reliable and well suited to harsh environments.

Description:

In the real environment (field), the solid state silicon cell is encapsulated (sealed in) by a POE, Polyolefin material that is used in the Yingli 'Bifacial' solar panels. This solid encapsulation acts as a moisture barrier that has corrosion inhibiting properties to support stability to a higher standard than EVA, ethylene vinyl acetate, encapsulation materials that is used typically in other solar panels. The POE is then sandwiched (bonded) between two glass sheets and the perimeter of the glass sheets are framed within a solid Aluminium extrusion. Once this process is finalised and the solar panel construction is complete, the main elements exposed to the environment are glass and aluminium. This would be similar to a common aluminium window or door.

Should the glass surface crack, then the silicon cells remain encased in the POE material and the faulty module can be visually identified and replaced. There are a number of other ways that a faulty panel can be identified :

An electrical earth fault would trigger a warning to the inverter, and that faulty panel can be isolated within the solar array followed by,

- A visual site inspection, either done manually or with a drone (EL or IR imagery), to identify the cracked module within the isolated PV array and that panel can be replaced.
- An appropriate system design for the specific site conditions should align with a comprehensive Operational and Maintenance (O&M) program to maintain optimal system performance and electrical safety.

An appropriate system design for the specific site conditions should align with a comprehensive Operational and Maintenance (O&M) program to maintain optimal system performance and electrical safety.

Your sincerely,

Yingli Energy Development Co., Ltd.
No. 2599, Xiangyang North Street,gaoxin Zone,
Baoding City, Hebei +86 031 2892 9996

Chao Ma

Manager of Module Technology Department

Tel.: 0086 312 218 8055

Email: service@yingli.com

Attachment 4: Draft Conditions SDC

Attachment 4: Draft conditions

Revised as per Expert Evidence

Dated: 9th February 2023.

General

1. That the proposed activities shall proceed in general accordance with the information and plans submitted with the application, except where otherwise stated in the conditions of this consent, including the following documents and plans:

   1.1 '*Brookside Solar Array, Application for Resource Consent and Assessment of Environmental Effects*', prepared for KeaX Limited, dated 9th March 2022, by Boffa Miskell Limited

   1.2 '*Brookside Solar Farm*, (Report Number: AC22245-01-R1), prepared by acoustic engineering services, dated 12 August 2022.

   1.3 '*Brookside Solar Farm Landscape and Visual Effects Assessment*', prepared by Boffa Miskell Limited, dated 9 March 2022.

   1.4 '*Appendix 2 Brookside Solar Farm Graphic Supplement*', prepared by Boffa Miskell Limited, dated February 2022.

   1.5 '*Brookside Solar Array - Ecological Impact Assessment Memo*', prepared by Boffa Miskell Ltd, dated 14 December 2021.

   1.6 '*Brookside Solar Farm' Site* Plan, prepared by Boffa Miskell Ltd, dated August 2022. Revision 3.

   1.7 '*Proposed Solar Farm Selwyn*' Geotechnical Report, prepared by Tonkin and Taylor for KeaX Ltd, dated December 2021….

   1.8 '*Solar Photovoltaic Glint and Glare Study*', prepared by Pager Power, dated August 2022.

Review

~~1.~~2. The SDC may, under sections 128 and 129 of the Resource Management Act 1991 (Act), initiate a review of any or all conditions of this resource consent on the first, second and third anniversary of the commencement of the consent and every three years after that, for the duration of the resource consents. Any such review of conditions shall be the for the purposes of:

~~1.1~~2.1 responding to any adverse effect on the environment which may arise from the exercise of the consent and which it is most appropriate to deal with at a later stage; or

~~1.2~~2.2 dealing with any unanticipated adverse effects on the environment which may arise from the exercise of the consent, which it is appropriate to deal with at a later stage; or

~~1.3~~2.3 ensuring that the conditions are effective and appropriate in managing the effects of the activities authorised by these consents.

Management Plans

~~2.~~3. The Consent Holder shall prepare the following management plans for certification by~~approval~~ by SDC ~~in a technical certifying capacity~~. The Consent Holder shall prepare the management plans in accordance with the requirements of the relevant conditions and in general accordance with the application documents:

~~2.1~~3.1 Construction Management Plan;

~~2.2~~3.2 Construction Traffic Management Plan;

~~2.3~~3.3 Construction Noise and Vibration Management Plan;

~~2.4~~3.4 Sediment Control Plan (which will incorporate Dust Management Plan);

~~2.5~~3.5 Landscaping Management Plan;

~~2.6~~3.6 Operational Management Plan;

~~2.7~~3.7 Health and Safety Management Plan;

~~2.8~~3.8 ~~Fire Emergency Plan~~.

Commented [CK1]: This should be a Fire Response Plan prepared under different legislation and provided to FENZ. Happy to provide to SDC but not for certification.

~~3.~~4. The Consent Holder shall ensure that all management plans are prepared by a suitably qualified and experienced person (SQEP).

~~4.~~5. The Consent Holder must comply with all certified management plans.

Management Plan Certification

~~5.~~6. The Consent Holder shall submit the above management plans to SDC in accordance with the timeframe specified in [TBC].

~~6.~~7. The certification process shall be limited to confirming that the M~~m~~anagement Plan has been prepared in accordance with the relevant conditions(s) and will achieve the objectives of the M~~m~~anagement P~~p~~lan.

~~7.~~8. ~~If no response is received by SDC within~~ If the Consent Holder has not received a response from SDC within twenty (20) working days of the ~~lodgement~~lodgment of any management plan, the relevant management plan shall be deemed to be certified.

~~8.~~9. If the SDC response is that they are not able to certify the management plan, the Consent Holder shall consider any reasons or recommendations provided by SDC and resubmit an amended Management Plan for certification.

~~9.~~10. If the Consent Holder has not received a response from SDC within ten (10) working days of the date of resubmission under Condition 9~~X~~ above, the management plan will be deemed to be certified.

Amendments to Management Plans

10.11. The Consent Holder may make amendments to the above Management Plans that areAny such amendment shall be consistent with the objectives and performance requirements of the management plan and relevant consent conditions. The Amended Management Plan shall be submitted to SDC for certification in accordance with Conditions 6-10. at least twenty working days before the relevant works (or relevant portion of works) are undertaken, in accordance with conditions X above, and subject to the certification of the amendment prior to works being undertaken. Any such amendment shall be consistent with the objectives and performance requirements of the management plan and relevant consent conditions.

11.12. If the SDC response is that they are not able to certify the Management Plan, the Consent Holder shall consider any reasons or recommendations provided by SDC and resubmit an amended Management Plan for certification.

Landscape Management

12.13. At least 30 working days prior to the commencement of landscaping construction, the Consent Holder shall submit to SDC for certification a Landscape Management Plan (LMP). The LMP shall include (but not be limited to):

12.113.1 Identification of planting zones in accordance with the approved landscape Site Plan (Dated August 2022), Figure 3 of the Landscape and Visual Assessment Graphic Supplement dated February 2022 and the recommendations in the Visual and Landscape Assessment (dated XXXX)plans and development plans in [TBCand to address Conditions 14, 16, 17, 18 and 19 below];

12.213.2 For each planting zone, details of species, spacing, size and planting;

12.313.3 Timeline for planting works;

12.413.4 Details of site preparation and maintenance required for plant establishment;

12.513.5 Requirements forThe location and design of fencing of the Ssite;

12.613.6 Requirements forDetails of ongoing maintenance including weed control management and monitoring;

12.7 Requirements, including methods and timing, or plant weed control;

Monitoring to determine the success of management plan objectives.

13.14. All landscaping shall be in accordance with the plan [TBC] and as described in the AEE, as described in condition [TBC].

14. All landscaping shall be implemented and maintained in accordance with the certified management plan required under Condition 13.

15. In the first planting season following the grant of this consent, and prior to the construction of Stage 1 of the proposed activity, the Consent Holder shall implement landscape planting as described in [plan], with the

Commented [CK2]: The Consent Holder only has to submit an LMP, for example 30 WD prior to commencing works, so 20 working days prior for amendments seems limiting. Surely changes to MPs are at Consent Holder risk and understanding that works could be delayed. Amendments, which could very simple, should be subject to 10 WD certification timeframe. Also, what if MPs need to be amended after works commence to manage an issue?

Commented [CK3]: Addressed above.

~~exception that an additional row of planting be established on the southern boundary of the site with 324 Branch Drain Road.~~

~~16. The planting along Branch Drain Road and Buckleys Road (the northern boundaries of Lot 2 DP 54392, Lot 1 DP 7545, RS 8955 and Lot 2 DP 387576) be 2 metres in height and 3 metres in width prior to the construction works beginning.~~

~~17. The planting along the boundary with Branch Drain Road, and along the boundary with Lot 1 DP 37121 and Lot 1 DP 21302, must be setback 10 metres and retained to a height of 4 metres.~~

16. The Consent Holder shall take all reasonable measures to ensure that existing heritage trees identified in AEE set out in Condition 1 as being recommended for retention, are protected from damage during construction.

17. The Consent Holder shall retain all existing Site boundary shelterbelts and vegetation, with the exception of:

(a) the shared Site boundary with 180 Grahams Road, where the exotic shelterbelt shall be removed and replaced with a 3m wide indigenous buffer planting (as part of the Stage 1 works). The clearance shall occur outside of the main bird breeding season (September – January) to avoid any risk of impacts to nesting indigenous birds.

Commented [CK4]: TBC with the owner of 180 Grahams Road.

(b) the planting along Branch Drain Road, where the existing vegetation will be removed once the new indigenous planting has achieved a height of 2m.

18. The Consent Holder shall ensure that all shelterbelt planting is 2 metres in height and 3 metres in width:

14.1 along Buckleys Road (the northern boundary of Lot 2 DP 54392)) prior to Stage 1 construction works commencing.

14.2 along Buckleys Road (the northern boundaries of Lot 1 DP 7545, RS 8955 and Lot 2 DP 387576) prior to Stage 2 construction works commencing.

14.3 adjacent to or within 10m of Branch Drain Road prior to Stage 1 construction works commencing.

19. The planting along the boundary with Branch Drain Road, and along the boundary with Lot 1 DP 37121 and Lot 1 DP 21302, must be setback 10 metres and retained to a height of 4 metres.

Commented [CK5]: To be confirmed.

20. The Consent Holder shall take all reasonable measures to ensure that existing heritage trees on Hanmer Road identified on the Site Plan and in the AEE, are retained and protected from damage during construction.

21. The Consent Holder shall utilise locally appropriate indigenous species that are sourced in this corresponding order: firstly, where practicably obtainable from within the Low Plains Ecological District, and secondly from the wider Canterbury Plains Ecological Region.

22. The perimeter security fencing shall be located internally and screened from outside views by the existing and proposed planting.

23. In the first planting season following the grant of this consent, and prior to the construction of Stage 1, the Consent Holder shall implement the Landscape Management Plan required under Condition X above.

Ecology

~~18.~~24. The Consent Holder shall not clear any ~~No~~ internal shelterbelts ~~at the site may be cleared~~ between of 1 September and 31 January (inclusive) of each year.

~~19.~~25. ~~Each year, prior to construction of each stage of the activity taking place, a pre-construction survey of the site must be carried out by a suitably qualified ecologist / ornithologist with over five years of experience conducting bird surveys (SQE), in order to:~~The Consent Holder shall undertake the construction of solar panel arrays outside of the main bird breeding season (September – January). Alternatively, a pre-construction survey of the solar farm site shall be carried out by a suitably qualified ecologist / ornithologist with over five years of experience conducting bird surveys (SQE), in order to:

a. Determine whether the South Island pied oystercatcher ((or other bird species observed during the survey deemed of conservation concern by an SQE) are breeding within the solar farm footprint. Subsequently;
   i. If breeding SIPO (or other species of conservation concern in the opinion of the SQE) are absent, works could proceed within the breeding season; or
   ii. If breeding SIPO (or other species of conservation concern in the opinion of the SQE) are present within the solar farm footprint, ~~works may only proceed subject to an Ecological Management Plan (EMP) prepared by a SQE.~~works shall proceed subject to setbacks from nests or other similar measures to avoid or otherwise manage impacts to breeding birds, as advised by an SQE.

~~Where an EMP is required in accordance with condition [TBC], prior to the commencement of construction, the Consent Holder shall submit the EMP for certification. Construction shall not begin until the EMP has been certified.]~~

Monitoring

26. The Consent Holder shall undertake monitoring for bird strike to include:
   a. recording information about any bird species found dead at the Site that appears to have suffered trauma injuries, including species, number, and suspected cause of death. Input from an SQE or veterinarian may be required.

   Note: Due to Wildlife Act 1953 requirements the handling of injured indigenous birds or the storage of dead indigenous birds would likely require approval from the Department of Conservation.

b. Provide this information on an annual basis to Selwyn District Council and / or the Department of Conservation, in order to increase the understanding of possible bird strike issues with solar arrays.

Erosion and Sediment Control

27. ~~Prior to the commencement of construction, the Consent Holder shall submit to SDC for certification an Erosion and Sediment Control Plan (ESCP) for the construction works and operation of the activity.. The plan shall be prepared by a SQEP, taking into account Environment Canterbury's Erosion and Sediment Toolbox.~~The Consent Holder shall operate under the Erosion and Sediment Control Plan required by Condition 9 of CRC223908 and certified by Canterbury Regional Council.

Construction Management Plan

~~20.~~28. The Consent Holder shall, at least 30 working days p~~P~~rior to the commencement of construction, the Consent Holder shall submit to the SDC for certification a Construction Management Plan. The plan shall include, but not be limited to:

a. Confirmation of the construction works program, including staging of work, construction methodology;

b. Identification of the key personnel and contact person(s);

c. Methods and systems to inform and train all persons working on the site of potential environmental issues and how to avoid, remedy or mitigate potential adverse effects;

d. Measures to ensure compliance with the protection of the wāhi taonga site in accordance with condition [TBC];

~~e. Measures to ensure compliance with the noise requirements outlined in condition [TBC];~~

~~f. Measures to control the generation of dust to ensure compliance with condition [TBC];~~

~~g. Reference to, or inclusion of, the Construction Traffic Management Plan;~~

~~h.~~e. Inclusion of the Accidental Discovery Protocols and a list of contact names and numbers relevant to accidental discovery.

The Construction Management Plan shall include the following management plans:

a) Construction Traffic Management Plan

b) Construction Noise and Vibration Management Plan.

~~21.~~29. The Consent Holder shall, at least 30 working days p~~P~~rior to the commencement of construction, the Consent Holder shall submit to the SDC for certification a Construction Traffic Management Plan. The plan shall include, but not be limited to:

a. Roles, responsibilities and contact details, including for public enquiries.

b. Construction staging and proposed activities;

c. Expected number of vehicle movements, particularly heavy vehicle numbers during each phase of construction;

Commented [CK6]: Part of ESCP.

d. Hours of work;
e. Points of site access;
f. Construction traffic routes;
g. Nature and duration of any temporary traffic management proposed;
h. Any vehicle crossing upgrades proposed.
i. Location of on-site parking and loading areas for deliveries;
j. Measures to prevent, monitor and remedy tracking of debris onto public roads and dust onto sealed sections;
k. Measures for regulation communication with residents located within the vicinity of the site.

~~22.~~30. All construction work ~~for each stage~~ must be undertaken within a period totalling ~~occur for no longer than~~ four months in each calendar year for each stage~~, and twelve months in total.~~

Vehicle crossing upgrade

~~23.~~31. The Consent Holder is to upgrade the existing vehicle crossing in the site at Buckley's Road (as shown on plan [TBC] to comply with Appendix E10.C1 to the Operative Selwyn District Plan.

~~24.~~32. Prior to the commencement of the vehicle upgrade described in condition [TBC] above, the Consent Holder must contact the SDC Biodiversity Officer.

Wāhi Taonga Management Site

~~25.~~33. No earthworks shall~~can~~ take place within 50 metres of the Wāhi Taonga Management Site – C59, as identified on plan [TBC].

Noise

~~26.~~34. At least ~~3~~20 working days prior to any construction occurring on site, a Construction Noise and Vibration Management Plan (which will form part of the CMP) be prepared and submitted to SDC for certification that addresses, as a minimum, the measures identified in Annex E3 of NZS 6803: 1999 "Acoustics – Construction Noise". The report must ~~specifically~~ specify ~~what~~ measures ~~it proposes to take~~ to mitigate any adverse effects of construction activities on 324 Branch Drain Road during the construction of Stage 1 (as described in the AEE ~~described in Condition 1~~),

Commented [CK7]: To align with the CMP, which the CNVMP will be part of.

~~27.~~35. The consent holder shall ensure that all activities on the site measured in accordance with NZS6801:2008 Acoustics - Measurement of environmental sound, and assessed in accordance with the provisions of NZS6802:2008 Acoustics - Environmental noise, shall not exceed the following noise limits at any point within the notional boundary of any residential dwelling, during the following timeframes:

a. 0730 to 2000 hours: 50 dB L_{Aeq}
b. 2000 to 0730 hours: 40 dB L_{Aeq} and ~~7~~5 dB L_{Amax}

~~28.~~36. Within 6 weeks of commissioning of Stage 1 as described in the AEE described in Condition 1, a suitably qualified and experienced acoustic consultant shall perform measurements to confirm compliance with both the daytime and night-time noise limits in Condition [TBC] The assessment shall include an objective analysis of any special audible characteristics during the day and at night in accordance with Appendix B4 of NZS 6802:2008 Acoustics - Environmental Noise

~~29.~~37. Construction activities must be conducted in accordance with NZS 6803: 1999 "Acoustics – Construction Noise" and must comply with the "typical duration" noise limits contained within Table 2 of that Standard as far as practicable.

~~30. Within three months of the commencement of construction, noise shall be measured in accordance with the NZS6803:1999 Acoustics – Construction Noise and the results of that monitoring provided to SDC.~~

~~31. In the event that noise monitoring, completed under condition [TBC] above, demonstrates that the noise standard set out in condition [TBC] have not been complied with, the Consent Holder shall:~~

~~a. Take all necessary steps to reduce noise or vibration and provide details of those steps to the SDC;~~

~~b. Carry out further monitoring in accordance with the requirements of condition [TBC].~~

~~The requirements of subclauses [TBC] and [TBC] above must be repeated as required until such time that compliance with the noise standards set out in condition [TBC] are complied with.~~

~~32. Prior to the operation of Stage 1, as described in the AEE referenced in condition 1, the applicant shall prepare a Noise Management Plan in accordance with NZS 6803 and provide it to SDC for certification.~~

Dust

~~33. The Consent Holder shall adopt all reasonable and practicable measures to prevent any dust caused by operations on the site from causing an effect that is noxious, dangerous, offensive or objectionable at or beyond the site.~~

~~34. All areas of the site must be re-vegetated following the completion of each stage.~~

Solar panels

~~35.~~38. Solar Panels shall be a maximum of 3.02~~000~~m~~m~~ above ~~finished~~ ground level.

~~36.~~39. Solar Farm Infrastructure within the S~~s~~ite (including, but not limited to panels; inverters; transformers and switchgear) shall only be cleaned with water or a biodegradable cleaner.

Operational Site Management

~~37.~~40. The Consent Holder shall submit to Council for certification an Operational Site Management Plan (OSPM). The purpose of the OSMP is to ensure that the solar farm is operated in a manner that

Commented [CK8]: Mr Reeve has advised that because he has outlined an exceedance at 324 Branch Drain Rd in the assessment (for a couple of days), need to address this in the conditions.

Commented [CK9]: Mr Reeve advises that these seem to have been recommended by Mr Aimer and not the peer reviewer. He is not convinced that there is any particular value in monitoring construction noise for this Application.

If the condition remains, it will need to be amended as it talks about compliance - see comment on condition 38 above.

Commented [CK10]: Mr Reeve is of the opinion that this is not required. He questions what would be in an operational NMP apart from contact details (already covered by the complaints mechanism), noise limits and operating hours. He also notes that this was not recommended by the peer reviewer.

Commented [CK11]: Not required as it will form part of the ESCP.

Commented [CK12]: Not possible if have gravel roads.

avoids, remedies or mitigates adverse effects on the environment. This must include, but not be limited to:

a. A Noise Management Plan containing the requirements set out in conditions [TBC]

b. Measures to ensure that food scraps and rubbish are appropriately disposed of;

c. Measures for the management of health and safety;

d. Measures for the scheduled maintenance and off-site monitoring of equipment;

~~Measures for pest and weed control, including the use of sheep for such purposes.~~

Commented [CK13]: As per comment above, is a separate NMP actually necessary? Could this just say measures to ensure compliance with the relevant noise limits

Commented [CK14]: Partly addressed in LMP and also general farm management and Fire Management Plan.

Contaminated Land

~~38.~~41. The Consent Holder shall retain any disturbed soil in the vicinity of the shed on 821 Hanmer Road to that area and stabilised to an erosion resistant state within one month.

~~39.~~42. The Consent Holder shall ensure that soil disturbed during earthworks in the shed area on 821 Hanmer Road shall not be deposited elsewhere on the wider site.

End of life

~~40.~~43. The Consent Holder shall, within 12 months of the expiry of this resource consent or the solar array reaching the end of its economic or operational life (not including periods when the solar array may not operate because of technical issues or maintenance/improvement works including the replacement of panels and other infrastructure), clear the site of all panels, buildings/structures and cabling, and the land ~~–~~shall be returned to to a state that enables it to be used for land-based primary production.

Accidental discovery

~~41.~~44. If bone material is discovered that could potentially be of human origin, the following protocols shall be adopted:

a. Earthworks works should cease in the immediate vicinity while an Archaeologist establishes whether the bone is human

b. The site will be secured in a way that protects the kōiwi as far as possible from further damage

c. If it is not clear whether the bone is human, work shall cease in the immediate vicinity until a specialist can be consulted and a definite identification made

d. If bone is confirmed as human (kōiwi), the Archaeologist will immediately contact Iwi representatives (if not present), Heritage New Zealand Pouhere Taonga and the New Zealand Police.

e. Consultation will be undertaken with Iwi representatives from Te Taumutu Rūnanga, Ngāi Tahu, the Heritage New Zealand Pouhere Taonga Regional Archaeologist and the Consent Holder to determine and advise the most appropriate course of action. No further action will be taken until responses have been received from all parties, and the kōiwi will not be removed until advised by Heritage New Zealand Pouhere Taonga

f. The Iwi representatives will advise on appropriate tikanga and be given the opportunity to conduct

any cultural ceremonies that are appropriate

g. If the Iwi representatives are in agreement and so request, the bones may be further analysed by a skilled bio-anthropological specialist prior to reburial, in line with the Heritage New Zealand Pouhere Taonga Guidelines Koiwi Tangata Human Remains(2014)

h. Activity in that place can recommence as soon the bones have been reinterred or removed and authorisation has been obtained from Heritage New Zealand Pouhere Taonga.

42.45. If taonga are discovered, the following protocols shall be adopted:

a. The area containing the taonga will be secured in a way that protects the taonga as far as possible from further damage

b. Consultation will be undertaken with Te Taumutu Rūnanga, who will advise on appropriate tikanga and be given the opportunities to conduct any cultural ceremonies that they consider to be appropriate

c. An archaeologist will examine the taonga and advise Heritage New Zealand Pouhere Taonga

d. These actions will be carried out within an agreed stand down period and work may resume at the end of this period or when otherwise advised by Heritage New Zealand Pouhere Taonga.

e. The Archaeologist will notify the Ministry for Culture and Heritage of the find within 28 days as required under the Protected Objects Act 1975.

f. The Ministry for Culture and Heritage, in consultation with Iwi representatives from Te Taumutu Rūnanga and Ngāi Tahu, will decide on custodianship of the taonga.

Complaints Mechanism

43.46. The Consent Holder shall maintain a register of any complaints received regarding the construction and operation activities authorised by thisese resource consents. As a minimum, the register shall include:

a. the name and contact details (if supplied) of the complainant;

b. the nature and details of the complaint

c. the location, date and time of the complaint and the alleged event giving rise to the complaint

d. weather conditions at the time of the complaint, where relevant to the complaint

e. other activities at the area that may have contributed to the complaint

f. the outcome of the Consent Holder's investigation into the complaint

g. a description of any measures taken to respond to the complaint

44.47. The consent holder shall notify the SDC of any complaint received that relates to the activities authorised by this resource consent as soon as reasonably practicable and no later than two working days after receiving the complaint.

45.48. The Consent Holder shall respond to any complainant as soon as reasonably practicable and,

within seven working days, advise the SDC and the complainant of the outcome of the Consent Holder's investigation and any measures taken, or proposed to be taken, to respond to the complaint.

Attachments

Development Contributions (Land Use)

Development contributions are not conditions of this resource consent and there is no right of objection or appeal under the Resource Management Act 1991. Objections and applications for reconsideration can be made under the Local Government Act 2002.

No development contributions would be applicable for this application should resource consent be granted. This is on the basis that the carpark does not generate demand. The development contributions for transportation associated with the town centre that may use the proposed carparks will be charged at the time of building consent for the Town Centre Buildings are consented.

Notes to the Consent Holder

Lapse Period

a) Pursuant to section 125 of the Resource Management Act 1991, if not given effect to, this resource consent shall lapse five years after the date of this decision unless a longer period is specified by the Council upon application under section 125 of the Act.

Monitoring

b) In accordance with section 36 of the Resource Management Act 1991, the Council's standard monitoring fee has been charged.

c) If the conditions of this consent require any reports or information to be submitted to the Council, additional monitoring fees for the review and certification of reports or information will be charged on a time and cost basis. This may include consultant fees if the Council does not employ staff with the expertise to review the reports or information.

d) Where the conditions of this consent require any reports or information to be submitted to the Council, please forward to the Council's Compliance and Monitoring Team, compliance@selwyn.govt.nz

e) Any resource consent that requires additional monitoring due to non-compliance with the conditions of the resource consent will be charged additional monitoring fees on a time and cost basis.

Vehicle Crossings

f) Any new or upgraded vehicle crossing requires a vehicle crossing application from Council's Assets Department prior to installation. For any questions regarding this process please contact transportation@selwyn.govt.nz. You can use the following link for a vehicle crossing information pack and to apply online: http://www.selwyn.govt.nz/services/roading/application-to-form-a-vehicle-crossing-entranceway

Building Act

g) This consent is not an authority to build or to change the use of a building under the Building Act. Building consent will be required before construction begins or the use of the building changes.

Accessible Carparking Space

h) The District Plan and the Building Code have different requirements for accessible carparking. Therefore, the consent holder shall ensure that the accessible carpark dimensions also meet the requirements of NZ Building Code clause D1. Early engagement with the building consent team is recommended to ensure all requirements can be met.

Regional Consents

i) This activity may require resource consent from Environment Canterbury. It is the consent holder's

responsibility to ensure that all necessary resource consents are obtained prior to the commencement of the activity.

Impact on Council Assets

j) Any damage to fixtures or features within the Council road reserve that is caused as a result of construction or demolition on the site shall be repaired or reinstated and the expense of the consent holder.