

Application CRC223908 and CRC223909

by KeaX Limited

For a Land Use Consent (s9)

to undertake earthworks over aquifers

and for a Discharge Permit (s15)

to discharge operational phase stormwater to land

Section 42A Officer's Report of Cherie-Lynn Lewis

Date: 10 November 2022

INTRODUCTION

1. KeaX Limited (the Applicant) proposes to construct a new solar array (or solar farm) on a 258ha site in the Brookside area, approximately 10km north of Leeston in mid-Canterbury (Figure 1). Once operational the solar array will be capable of generating up to approximately 160 MW of renewable electricity, to be fed back into the electricity network via the Brookside Substation located in the north-western corner of the site.

2. The proposed site is legally described as:

115 and 150 Buckley's Road, Leeston	LOT 1 DP 46472 LOT 1 DP 54392 LOT 2 DP 3 87576 RS 8955 LOT 1 DP 7545 (Just the southern section)
187 Buckley's Road, Leeston	LOT 2 DP 54392 BLK IX LEESTON SD
883 Hanmer Road, Leeston	RURAL SEC 3658 BLK X LEESTON SD
821 Hanmer Road, Leeston	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

3. The resource consents required are:
 - a) CRC223908 - a s9 Land Use Consent to undertake earthworks over an aquifer, and
 - b) CRC223909 - a s15 Discharge Permit to discharge operational-phase stormwater onto land.
4. The proposed works also involve the management of construction-phase stormwater.
5. The application was lodged on the 9th of March 2022 and the application and associated Assessment of Environmental Effects (AEE) have been submitted by Claire Kelly from Boffa Miskell (the Consultant) and can be found at file reference C22C/54260-2 (AEE), C22C/54260-3 (Application form).

6. No site visit was conducted during the processing of this consent application.



Figure 1. Site Location

BACKGROUND

7. The land is owned by a number of different owners, as indicated below. Written approval has been obtained from both the owners and the occupiers (where the owner does not reside on the property) of the land.

Property	Registered Owner	Occupier	Written Approval
115 and 150 Buckley's Road, Leeston	Pitcairn Farm Ltd Mr & Mrs P A Ward	Darren Osborne and Danica Williams	C22C/54260-20
187 Buckley's Road, Leeston	Ward Angela Marie & Mike Lay		C22C/133210
883 Hanmer Road, Leeston	Geddes & Price Farms Ltd KR & MC Price	David Duncan and Raye Packer	C22C/54260-19
821 Hanmer Road, Leeston	Price Farm Ltd Price Keith Richard	Kim and Shane Price	C22C/54260-21 C22C/54260-18

Other Consents and Authorisations

8. The Applicant has submitted an application to the Selwyn District Council for a land use consent (RC215206). Ongoing correspondence between the SDC planner and myself, has ensured that all issues have been captured adequately (C22C/133219).

DESCRIPTION OF THE PROPOSED ACTIVITY

9. The Applicant has requested a consent duration of 35 years for both the s9 and s15 consents (C22C/41597-3).
10. A detailed description of the proposal is provided on Page 5 of the AEE. The relevant sections of the description are summarized below:

Staging

11. The Applicant proposes to construct the solar farm across three stages and has estimated approximately three years for completion of the construction project.
12. The Applicant estimates the following construction timeframe:

Stage	Timing of Construction	Approximate size of area
Stage 1	Commence mid-2022	22 ha
Stage 2	Commence late 2022	89 ha
Stage 3	Commence mid-2023	128 ha

Earthworks

13. The earthworks are comprised of approximately 16,125m³ of material to be excavated, related to the following activities:
- a) trenching of up to 1m depth bgl to lay the cables which connect the frames of solar panels together and to the inverters, and which also connect the solar array to the Brookside Substation; and
 - b) topsoil disturbance to prepare areas for the relocatable buildings, inverters, and future battery sites.
 - c) spreading of gravel to form internal tracks, where required.
14. The piles required to hold up the panels will be driven mechanically, thus requiring no excavation.
15. Due to the nature of the works, and the staged approach, the Applicant concludes that only a small area of land will be exposed at any one time, and thus anticipates that potential dust and sedimentation effects can be readily managed (Pg 11 of the AEE)
16. The Consultant indicates that the work is to be undertake in accordance with an Erosion and Sediment Control Plan (ESCP), incorporating a Dust Management Plan. No draft ESCP was provided with the application, but the Consultant has included the principles that will be adopted and incorporated into the ESCP (Pg 12 of the AEE), which are generally in accordance with those of the ECan Erosion and Sediment Control Online Toolbox.

Discharge of Construction Phase Stormwater

17. The Consultant states that due to the nature of the works and the staged approach, only a small area of earth will be exposed during the trenching and pile driving. It is therefore anticipated that, for the vast majority of the earthworks, dust and sedimentation effects can be readily managed.
18. It is proposed that a Sedimentation and Erosion Management Plan be developed for the site. This will be in accordance with the principles of the Environment Canterbury (ECan) Erosion and Sediment Control Online Toolbox for erosion and sediment control.
19. The Consultant has concluded that the management of construction-phase stormwater can be conducted as a permitted activity. I have addressed this in more detail in the *Legal and Planning Matters* section.

Discharge of Operational Phase Stormwater

20. No purpose-built operational stormwater management technologies, e.g., swales or sedimentation ponds, etc are proposed for the site.
21. Once operational, the Applicant proposes to allow the site to remain grassed, and for the landowners to graze small stock, e.g., sheep under and around the solar panels.
22. Management of the pastures will be the responsibility of the landowners (Pg 15 of the AEE).

DESCRIPTION OF THE AFFECTED ENVIRONMENT

23. The Consultant has provided a description of the affected environment in Section 3 of the AEE. A summary, including any additional information from my audit, is provided below:
 - a) The total land area of the proposed Brookside Solar Farm is 258 ha. The site is bounded by Buckley's Road on the northernmost boundary, Branch Drain Road on its westernmost boundary, and Hanmer Road on its easternmost boundary. Water races are present in the reserves associated with these roads and are the closest surface waterbodies to the site.
 - b) The site falls into the Boggy Creek (to the west) and Hanmer Road Drain (to the east) catchments.
 - c) The topography of the site is generally flat with minor undulations.
 - d) Canterbury Maps layer "S-Maps" indicates that soils on site are primarily shallow clay. The soil is further described as being poorly drained with a moderate/slow permeability code.
 - e) The site is located over the semi-confined or unconfined aquifers.
 - f) Piezometric contours indicate that groundwater flows to the south-east.
 - g) The Consultant indicates that groundwater was encountered during the site investigation at 2-3 m bgl (Pg 24 of the AEE).
 - h) There are nine active wells on site, used for a mixture of domestic supply, stock watering and irrigation. All are drilled down to more than 20 m bgl.
 - i) There are 9 domestic supply wells within 500 m downgradient of the boundary of the site. All are drilled down to 30 m bgl or more.

Well Number	Depth	Separation from boundary
M36/4019	35.7 m	60 m
M36/5225	36 m	260 m
M36/5574	59.8 m	500 m
M36/0435	36 m	450 m
M36/5372	59 m	30 m
M36/8179	36 m	190 m
BX23/0294	36 m	250 m
BX23/0724	83 m	140 m
BX23/0996	56 m	300 m

- j) The site is not located in a Community Drinking Water Protection Zone (CDWPZ).
 - k) The nearest community drinking water supply is approximately 3.75 km to the east of the site and is drilled down to 58 m bgl.
 - l) The site is not subject to any Statutory Acknowledgement Areas or Silent Files.
 - m) Central to the site is a Rūnanga Sensitive Area, a Wāhi Taonga Management Site (C59).
 - n) The site is not listed on the Listed Land Use Register (LLUR).
 - o) The site is not within or adjacent to a New Zealand Archaeological Association Archaeological Site.
24. I have audited the above information and agree that this is an accurate description of the affected environment.

CONSULTATION

Interested Parties Informed by the Canterbury Regional Council (CRC)

- 25. Following lodgement, the (CRC) informed Mahaanui Kurataiao Ltd (MKT) of the application on 11 March 2022 (file reference C22C/55014).
- 26. Further potentially interested parties were also informed of the lodgement of the application via email.
- 27. The application triggered the requirement for a Tangata Whenua Advisory Service (TWAS) request as the site falls within the Te Waihora Co-Governance Agreement Area. A TWAS request was submitted via the CRC TWAS portal on 21 March 2022.
- 28. A response was received from MKT on 7 April 2022 on behalf of Te Taumutu Rūnanga (C22C/99168). The rūnanga do not consider themselves to be an affected party, provided that the recommendations provided are appropriately captured in the consent conditions. I have discussed these recommendations in more detail in *Assessment of Adversely Affected Persons* section below.

Consultation Carried out by the Applicant

29. The Consultant states that the Applicant has attempted to contact Te Taumutu Rūnanga, both directly, and via MKT. To date, no direct engagement with the Rūnanga has taken place.

LEGAL AND PLANNING MATTERS

The Resource Management Act (RMA) 1991

30. Section 9 (1) and (2) of the RMA states:
- (1) No person may use land in a manner that contravenes a national environmental standard unless the use—*
 - (a) is expressly allowed by a resource consent; or*
 - (b) is allowed by section 10; or*
 - (c) is an activity allowed by section 10A; or*
 - (d) is an activity allowed by section 20A.*
 - (2) No person may use land in a manner that contravenes a regional rule unless the use—*
 - (a) is expressly allowed by a resource consent; or*
 - (b) is an activity allowed by section 20A.*
31. If the use of land cannot comply with the relevant regional rule (if there is one) and there is no national environmental standard that authorises the activity, a resource consent is required.
32. Section 15 of the RMA states:
- (1) No person may discharge any—*
 - (a) Contaminant or water into water; or*
 - (b) Contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water; or [...]*
- unless the discharge is expressly allowed by a national environmental standard or other regulations, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent.*
33. There is no National Environmental Standard permitting the proposed stormwater discharges. Therefore, a resource consent (discharge permit) is required if the proposed stormwater discharges cannot comply with the relevant regional rules.

National Environmental Standard

Resource Management (National Environmental Standards for Freshwater) Regulations 2020

34. The National Environmental Standard Freshwater (NES-F) came into effect on 3 September 2020.
35. The Consultant has undertaken a review of the receiving environment and potential contaminant receptors, including groundwater. The bulk of excavations are unlikely to expose groundwater. The Consultant concludes that the ESC measures and

conditions of consent will avoid any risk to human health through drinking water contamination and degradation of surface water quality.

36. Given the above, I consider that the provisions of the NES-F are not triggered, and by extension the project is consistent with the provisions of the NES-F.
37. As the NES-F regulates farming activities, works within or near wetlands, the reclamation of rivers and structures affecting fish passage, I consider that the NES-F is not relevant to the proposed excavation or discharge of stormwater to ground.

Regional Plans

Canterbury Land and Water Regional Plan

38. The application was submitted on 3rd March 2022 and is considered under the Canterbury Land and Water Regional Plan (LWRP), including Plan Change 7 (decisions version) (PC7).

Discharge of Construction-phase Stormwater

39. Rule 5.94A relates to the discharge of construction-phase stormwater to land, and is a permitted activity provided the conditions of the rule can be met.
40. The Consultant concluded that no resource consent is required for the discharge of construction-phase stormwater.
41. I agree that resource consent will not be required as the discharge of construction-phase stormwater can comply with the conditions of Rule 5.94A and therefore is a **permitted activity** in terms of Rule 5.94A.

Discharge of Operational Stormwater to Land

42. Rule 5.96 relates to the discharge of operational stormwater other than into or from a reticulated stormwater system and is a permitted activity provided that the conditions can be met.
43. The Consultant states that the application cannot meet the requirements of the Rule based on the industrial nature of the activity, i.e. condition 2(d) cannot be met.
44. I consider that in addition to condition 2(d), there is no evidence provided that the activity can meet the requirements of conditions 2(b) and 2(c).
45. As Conditions (2b), (2c) and (2d) of Rule 5.96 cannot be met, resource consent will be required under Rule 5.97, as a **discretionary activity**.

Earthworks over an Aquifer

46. Rule 5.175 relates to the use of land to excavate material and is a permitted activity as long as the conditions of the rule can be met.
47. The Consultant has indicated that conditions 2(a) and 2(b) of the rule cannot be met.
48. I agree with this assessment, and as the conditions of the rule cannot be met, resource consent is required under Rule 5.176 as a **restricted discretionary activity**.
49. The exercise of discretion is limited to the following matters:
 1. *The actual and potential adverse environmental effects on the quality of water in aquifers, rivers, lakes, wetlands; and*
 2. *Any need for remediation or long-term treatment of the excavation; and*

3. *The protection of the confining layer and maintaining levels and groundwater pressures in any confined aquifer, including any alternative methods or locations for the excavation; and*
4. *The management of any exposed groundwater*
5. *Any adverse effects on Ngāi Tahu values or on sites of significance to Ngāi Tahu, including wāhi tapu and wāhi taonga.*

Canterbury Air Regional Plan

Dust-generating Activities

50. Rule 7.32 of the Canterbury Air Regional Plan (CARP) relates to the discharge of dust to air beyond the boundary of the property of origin from land development activities, unsealed surfaces or unconsolidated land. This is a permitted activity provided the conditions are met.
51. The Consultant has assessed the proposal against Rule 7.32. The buildings to be constructed are less than 3 stories in height, a dust management plan has been prepared, and by minimizing the area of un-stabilized ground, it is not anticipated that any adverse effects will be felt beyond the immediate area of works (Page 17 of C22C/54260-13).
52. I agree that the proposal can meet the conditions of Rule 7.32 and is thus a **permitted** activity under the CARP.

Summary

53. The High Court in *Affco New Zealand Ltd v Far North District Council* determined that all consents for a project should be carefully considered jointly and that they must consider if the consents are “overlapping” or are of a standalone nature.
54. In this case, I do not consider it appropriate to bundle the consents as one is for the construction phase and the other is for the operational phase of the activity. Therefore, the application for a land use permit will be assessed as a **restricted discretionary activity** and the application for a discharge permit will be assessed as a **discretionary** activity.
55. I consider that no further consents are required from the CRC for this application.

RECOMMENDATION ON PUBLIC NOTIFICATION (SECTIONS 95A, 95C & 95D)

56. Section 95A of the RMA specifies the steps the decision maker must follow to determine whether an application is to be publicly notified. These steps are addressed in the statutory order below:

Step 1: Mandatory Public Notification in Certain Circumstances

57. Mandatory public notification is not required as:
 - a) The applicant has not requested that the application is publicly notified (Section 95A(3)(a) of the RMA);
 - b) There are no outstanding or refused requests for further information (Sections 95C and 95A(3)(b) of the RMA); and
 - c) The application does not involve any exchange of recreation reserve land under Section 15AA of the Reserves Act 1977 (Section 95A(3)(c) of the RMA).

Step 2: If not Required by Step 1, Public Notification Precluded in Certain Circumstances

58. The application is not precluded from public notification as:
- a) The activity is not subject to a rule or national environmental standard (NES) which precludes public notification (Section 95A(5)(a) of the RMA); and
 - b) The application does not exclusively involve one or more controlled activities.

Step 3: If not Precluded by Step 2, Public Notification Required in Certain Circumstances

59. The application is not required to be publicly notified as the activity is not subject to any rule or a National Environmental Standard (NES) that requires public notification (Section 95A(8)(a) of the RMA).
60. The assessment in the following sub-sections addresses the adverse effects of the activities on the environment, as public notification is required if the activities will have or are likely to have adverse effects on the environment that are more than minor (Section 95A(8)(b) of the RMA).

Assessment of Adverse Effects on the Environment (Sections 95A(8)(b) and 95D of the RMA)

61. The applicant has provided an assessment of effects that may arise from this proposal on pages 19 to 28 of the AEE (C22C/54260-2). Those relevant to this application are:
- a) Construction Effects (page 25 of the AEE)
 - b) Discharge of Operational Stormwater (page 26 of the AEE)
62. I have focussed on the following effects for my audit of the proposal:

Earthworks

- a) The actual and potential adverse environmental effects on the quality of groundwater; and
- b) Any need for remediation or long-term treatment of the excavation; and
- c) The protection of the confining layer and maintaining levels and groundwater pressures in any confined aquifer, including any alternative methods or locations for the excavation; and
- d) The management of any exposed groundwater

Discharge of stormwater to land

- i) The Actual and Potential Adverse Effects on Groundwater Quality
- ii) The Actual and Potential Adverse Effects on Groundwater Infiltration (Ponding and Mounding Effects) during operation of the solar farm; and
- iii) The Actual and Potential Adverse Effects on Soil Quality and Quantity during operation of the solar farm.

Earthworks

The Actual and Potential Adverse Effects on Groundwater Quality

63. Excavations that intersect contaminants in the presence of shallow groundwater have the potential to mobilise and impact groundwater quality. Further impacts on groundwater can occur because of accidental release of contaminants directly to exposed groundwater or near the surface.
64. The highest groundwater level recorded in the vicinity of the site was 0.22m bgl, in 1993. Groundwater encountered on site during recent geotechnical investigations was between 2 and 3 m bgl.
65. The Consultant states that the maximum depth of excavations associated with the site preparation will generally be around 1m for trenches.
66. All earthworks will occur in accordance with and ESCP to ensure any potential for sedimentation and erosion effects are avoided or mitigated as much as possible.
67. Spill avoidance and management of fuelling and servicing machinery measures will be in place to avoid exposing surface and groundwater to additional contaminants.
68. Areas excavated for foundations will be backfilled and stabilised as soon as practicable
69. The Consultant, after considering the above, concludes that any adverse effects on groundwater will be less than minor and temporary.
70. Mr Fouad Alkhaier (CRC Science Team Leader – Groundwater Science) reviewed the application. He concluded that the shallow soil is of low permeability and groundwater could be encountered within shallow depths. In considering the distance to receptors along with the scale, timing and duration of the proposed excavations, there will be little effect from these activities on groundwater (file reference C22C/127412).
71. I have included a condition regarding the protocol to be followed where spills of potentially hazardous substances may occur on site.
72. As a precaution I have included a condition relating to the accidental discovery of contaminated material.
73. I agree that based on the small scale of the earthworks, the short duration of the activity, and the mitigation measures proposed to minimise potential effects, and provided the Applicant adheres to the proposed consent conditions, the overall effects of the works on the quality of groundwater will be **less than minor**.
74. I have submitted the draft conditions to the Applicant for review (file reference C22C/233737). reference). The Applicant has accepted these (file reference C22C/241441 and C22C/241449).

Any need for remediation or long-term treatment of the excavation

75. The Applicant proposes the following for management of excavations for the trenches:
 - a) Excavation will take place only during dry summer periods to minimize the chance of intercepting the water table.
 - b) Excavations will typically remain open for 1 to 3 days.
 - c) Any cuts will be filled with free-draining material to protect the groundwater.
76. Based on the above, I consider that there is no need for remediation or long-term treatment of the excavations.

The protection of the confining layer and maintaining levels and groundwater pressures in any confined aquifer, including any alternative methods or locations for the excavation

77. The site falls over a semi-confined/unconfined aquifer.
78. Given the ground water level has been measured as being on average 2-3m below ground level, this will likely still leave 1-2m between the proposed excavation base of the cable trenches and likely groundwater level. As such, the Consultant anticipates that groundwater will not be exposed during the excavations.
79. Any cuts will be filled with free-draining material to protect the groundwater. Furthermore, the earthworks will occur in accordance with an ESCP to ensure any potential for sedimentation and erosion effects are avoided or mitigated as much as possible.
80. I agree that with the proposed shallow excavation, it is likely that any effects on groundwater pressure will be less than minor. With adherence to the proposed excavation depth and adequate mitigation in the event of accidental interception of artesian flows, the overall effects of the works on groundwater pressures will be less than minor.
81. As a precaution, I have included a condition relating to accidental interception of artesian aquifers in the proposed conditions for the consent.
82. I have recommended the above in the draft conditions sent to the applicant (file reference C22C/233737). The applicant has reviewed and accepted the conditions (file reference C22C/241441 and C22C/241449).

The management of any exposed groundwater

83. Trenches will be excavated to a depth of 1 m bgl. The Geotechnical Report submitted in response to a request for additional information in terms of s92 of the RMA states that the CRC bore monitoring network indicates groundwater levels at nearby bores (M36/0432, M36/0339, M36/0448, and M36/7880; all <15 m deep) are typically 1-2 m bgl but can reach <0.5 m bgl seasonally (bores M36/0432, M36/0339, M36/0448). Thus, there is the potential that the trench excavation may, at least partially, intercept the water table where it resides within the shallow clay rich soil unit.
84. It is proposed that excavation is undertaken in the dry summer months to avoid interception of groundwater. Also, excavations will be back-filled as soon as possible to reduce the potential for exposure of groundwater.
85. I have recommended a consent condition requiring that no excavation works shall be carried out within the exposed water table during times when groundwater levels are higher than the deepest part of the excavations.
86. I consider that the proposed management of exposed groundwater will result in less than minor effects on groundwater.

Discharge of operational stormwater to land

The Actual and Potential Adverse Effects on Groundwater Quality

87. The Consultant indicated that operational stormwater will be generated from the roofs of buildings on the site, including the enclosed inverters that are located in weatherproof casings, and the panels. It will essentially be 'clean'. As such, it is considered that adverse effects resulting from the discharge of stormwater to ground will be less than minor.

88. I have included conditions in the consent limiting the activities to be undertaken onsite to those not listed in Schedule 3 of the LWRP, and limiting the discharges to only those from roofs, roads, panels and hardstands.
89. I consider that at the site, the most common “contaminant” of any stormwater will be sediment as a result of natural wind-blown dust. Other potential contaminants may include bird droppings, insect remains and pollen.
90. As such, I agree with the Consultant that the potential adverse effects on groundwater quality as a result of the stormwater discharge will be less than minor.

The Actual and Potential Adverse Effects on Groundwater Infiltration (Ponding and Mounding Effects) during operation of the solar farm; and

91. Localised changes in the flow of stormwater into land can cause unintended effects such as ponding and/or mounding. At this site, the shallow water table and clayey soils noted across much of the site may combine to result in localised ponding due to slow infiltration into the land.
92. The Stormwater Impact Assessment compiled by Tonkin and Taylor concluded that there will be very little difference in the stormwater behaviour between the pre- and post-development scenarios. The volume of rainfall falling on the site will not increase, as the site area remains unchanged. Due to the dispersed nature of the solar panel arrangement, whatever rainfall does fall on the panels and inverters will drop directly to ground in the immediate vicinity and once on ground will behave in the same manner as the pre-development condition (file reference C22C/122479).
93. Mr Peter Christensen (Storm Environmental Limited) reviewed the Stormwater Impact Assessment and was satisfied that all potential stormwater issues had been adequately addressed (file reference C22C/130382).
94. I rely on the expertise of Mr Christensen in this matter, and thus consider that any adverse effects on groundwater as a result of the addition of the solar array to the stormwater catchment would be less than minor.

The Actual and Potential Adverse Effects on Soil Quality and Quantity during operation of the solar farm.

95. Changes to the flow of stormwater on the land surface can result in the creation of erosion channels or rills at or near the site of discharge. In the case of the solar panels, sheet flow of stormwater across the panels at an escalated velocity could result in the erosion and potential loss of soil at the point where the stormwater discharges to ground.
96. The Stormwater Impact Assessment indicated there will be very little difference in the stormwater behaviour between the pre- and post-development scenarios. Due to the dispersed nature of the solar panel arrangement, whatever rainfall does fall on the panels and inverters will drop directly to ground in the immediate vicinity and once on ground will behave in the same manner as the pre-development condition.
97. Mr Matt Riddle (CRC Senior Scientist – Land Resources) has reviewed the application and provided comments on both the application and the information provided via the s92 request for information (C22C/99725 and C22C/99769). Mr Riddle noted that the soil type underneath the panels has a reasonably heavy clay topsoil, which would indicate the potential for poor water infiltration. This poor infiltration could be made worse due to installation of the panels requiring machinery that compacts the soil. This is also combined with the reduced soil surface area (from panel installation) for rainfall infiltration. Furthermore, a reduction in evapotranspiration (between 10-40%) is identified in the literature as occurring due to installation of panels at a large scale. This is due to interference with both sunlight

and wind on the soil surface by these structures. This would suggest a reduction in the ability of the soil to 'deal' with excess water from heavy rainfall events at the site, as soil moisture levels would likely be higher than under standard farming conditions.

98. The Consultant provided numerous photos of small solar arrays installed in the vicinity of the proposed site, that have been in place for up to 7 years as a response to questions posed by Mr Riddle as part of the s92 request (file reference C22C/99754). The Consultant states that these photos show how well the grass recovers 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.
99. Mr Riddle concluded that the photos supplied gave a good visual verification that there will be very little, if any, bare soil after pasture establishment around the panels. The flat topography of the site also indicates that runoff will be minimal if any at all.
100. In conjunction with the Consultant, the following condition was proposed as an adaptive condition for the monitoring and mitigation of erosion effects:
 - a) 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 must:
 - i) Implement mitigation measures including, but not limited to, the installation of a strip of gravel, mulch, geotextile or some type of splash distribution panel; and
 - ii) 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.
101. I have submitted the draft conditions to the Applicant for review (file reference C22C/233737). The Applicant has accepted these (file reference C22C/ 241441 and CRC2412449).
102. In summary, after consideration of the information provided by the Applicant and Consultant, and after receiving advice from the relevant technical specialists, I consider the potential adverse effects as a result of the earthworks and discharge of stormwater to land to be less than minor.

Step 4: Public Notification in Special Circumstances

103. If an application has not been publicly notified as a result of any of the previous steps, then the council is required to determine whether special circumstances exist that warrant it being publicly notified (Section 95A(9) of the RMA).
104. Special circumstances are those that are¹:
 - a) Exceptional, abnormal or unusual, but something less than extraordinary or unique;
 - b) Outside of the common run of applications of this nature; or

¹ *Far North DC v Te Runanga-iwi o Ngati Kahu* [2013] NZCA 221 at [36]; *Murray v Whakatane District Council* [1997] NZRMA 433; *Housiaux v Kapiti Coast District Council* (HC Wellington CIV-2003-485-2678, 19 March 2004).

- c) Circumstances which make notification desirable, notwithstanding the conclusion that the adverse effects will be no more than minor.
105. I have considered whether there are any special circumstances and conclude that there is not anything exceptional or unusual about the application, and that the proposal has nothing out of the ordinary run of things to suggest that public notification should occur.

Public Notification Conclusion

106. Having undertaken the Section 95A public notification tests, I recommended that this application be processed without public notification because it is unlikely that the activities will have adverse effects on the environment that are more than minor and there are no special circumstances which warrant the application being publicly notified.

RECOMMENDATION ON LIMITED NOTIFICATION (SECTIONS 95B, 95E – 95G)

107. If the application is not publicly notified under Section 95A, the decision maker must follow the steps set out in Section 95B to determine whether to limited notify the application. These steps are addressed in the statutory order below.

Step 1: Certain Affected Groups and Affected Persons must be Notified

108. There are no protected customary rights groups or customary marine title groups affected by the proposed activity (Section 95B(2) of the RMA).
109. It is also necessary to determine whether the proposed activity is on, or adjacent to, or may affect, land that subject of a statutory acknowledgement made under an Act specified in Schedule 11 of the RMA, and if so whether the person to whom the statutory acknowledgement is made is an affected person (Section 95B(3) of the RMA).

There are no Statutory Acknowledgement Areas in the vicinity of the applicant's property, therefore, there are no groups with protected customary rights that may be affected

Step 2: If not Required by Step 1, Limited Notification Precluded in Certain Circumstances

110. The application is not precluded from limited notification as the application is not for one or more activities that are exclusively subject to a rule or NES which preclude limited notification (Section 95B(6)(a) of the RMA).

Step 3: If not Precluded by Step 2, Certain other Affected Persons must be Notified

111. As this application is not for a boundary activity or a prescribed activity, there are no affected persons related to those types of activities (Section 95B(7)).
112. The following assessment addresses whether there are any affected persons that are required to be limited notified (Section 95B(8) of the RMA).
113. In determining whether a person is an affected person:
- a) A person is affected if adverse effects on that person are minor or more than minor (but not less than minor);
 - b) Adverse effects permitted by a rule in a plan or NES (the permitted baseline) may be disregarded; and

- c) The adverse effects on those persons who have provided their written approval must be disregarded.

Assessment of Adversely Affected Persons (Sections 95B(8) and 95E)

114. The Consultant has considered whether there are any affected persons, concluding that no persons are affected by the proposed works.
115. I agree with the AEE and conclude that there are no persons adversely affected by the proposal because the relatively short construction phase means that any effects felt by nearby landowners/occupiers can be considered **less than minor**. The longer-term effects from the operation of the solar farm potentially experienced by nearby landowners/occupiers will also be **less than minor**.

The Actual and Potential Adverse Effects on Ngāi Tahu Values or Sites of Significance to Ngāi Tahu

116. The proposed activity is located within the takiwā covered by the Mahaanui Iwi Management Plan. CRC receives advice from MKT on behalf of mana whenua for this takiwā.
117. The Consultant has stated that based on the evaluation of the Mahaanui Iwi Management Plan (IMP) it is considered that any cultural effects are anticipated to be less than minor.
118. The Consultant has further advised that through reducing onsite soil contaminants, and as a result of the management of soils and stormwater (through ESCP), it is considered that cultural effects of the proposal will be less than minor.
119. The site is not subject to any Statutory Acknowledgement Areas or Silent Files.
120. Central to the site is a Rūnanga Sensitive Area, a Wāhi Taonga Management Site (C59).
121. Advice was received from MKT regarding the potential effects of the activities on Ngāi Tahu values, relating to the site (file reference C22C/99168). The Applicant has reviewed and provided responses (file reference C22C/99169). Below is a summary of the correspondence:
- a) The Rūnanga recommended that:
 - i) The highest level of protection should be afforded to avifauna species in the area – this includes a bird survey, setback from any identified nesting sites, and works occurring outside of breeding season.
 - ii) The 10m earthworks setback from water races and drains that may contain kōwaro should be strictly adhered to.
 - iii) High importance should be placed on following the Erosion and Sediment Control Plan and Accidental Discovery Protocol.
 - iv) 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.
 - b) The Applicant has provided a response to the recommendations, and in all cases the Applicant is willing to comply with the recommendations.
122. I have consulted with the relevant rūnanga (Te Taumutu Rūnanga), and they do not consider themselves an affected person/party (file reference C22C/99186).

123. Provided the applicant adheres to the recommended conditions, I consider that the proposal is unlikely to give rise to any significant adverse effects on sites of Māori cultural significance. I also do not consider that the proposal will have significant adverse effects on water quality and thus I consider that the mauri and life supporting capacity of water is likely to be adequately protected.

The Actual and Potential Adverse Effects on the Quality and Safety of Human and Animal Drinking Water

124. Excavations that intersect contaminants in the presence of shallow groundwater have the potential to mobilise and impact groundwater quality. Further impacts on groundwater can occur because of accidental release of contaminants directly to exposed groundwater or near the surface. Any impacts on groundwater quality have the potential to impact on the quality and safety of drinking water for humans and animals.
125. The Consultant has indicated that the site of the stormwater discharge is outside of the closest community drinking water protection zone.
126. I note that most active domestic or stock watering supply wells immediately downgradient of the site are drilled to more than 10 m. The closest is M36/5372, which is 30 m from the south-eastern site boundary. It is drilled to 59 m bgl.
127. I consider that adverse effects on the quality and safety of human and animal drinking water will be less than minor.

Step 4: Further Notification in Special Circumstances

128. In addition to the findings of the previous steps, it is also necessary to determine whether special circumstances exist in relation to the application that warrants it being notified to any person not already being limited notification (excluding persons assessed under section 95E as not being affected persons).
129. Special circumstances are those that are:
- d) Exceptional, abnormal or unusual, but something less than extraordinary or unique;
 - e) Outside of the common run of applications of this nature; or
 - f) Circumstances which make limited notification to any other person desirable, notwithstanding the conclusion that no other person has been considered eligible.
130. I have considered whether there are any special circumstances and conclude that there is not anything exceptional or unusual about the application, and that there is nothing out of the ordinary that indicates that the proposal has nothing out of the ordinary run of things to suggest that limited notification is required.

Limited Notification Conclusion

131. Having undertaken the Section 95B limited notification tests, I recommended that this application be processed without limited notification because no special circumstances exist that would warrant limited notification, and no adversely affected parties were identified.

OVERALL NOTIFICATION RECOMMENDATION

132. For the above reasons I recommend that this application is decided on a non-notified basis.

RECOMMENDATION ON THE SUBSTANTIVE DECISION

133. Having determined that this application can proceed on a non-notified basis, I can now consider whether this application should be granted or refused. Prior to making a recommendation on that determination, Section 104 of the RMA specifies what must be considered when determining an application.

Consideration of Applications (Section 104)

134. Section 104(1) of the RMA outlines the matters which, subject to Part 2 of the RMA, the consent authority must have regard to in considering an application.
135. The Court of Appeal considered the application of Part 2 under section 104 in *R J Davidson Family Trust v Marlborough District Council*². That decision found it is necessary to consider Part 2 in making decisions on consent applications, where it is appropriate to do so. Whether it is "*appropriate*" depends on the planning documents in question.
136. The Court of Appeal stated that consent authorities should continue to undertake a meaningful assessment of the objectives and policies of the relevant plan. Where those documents have been prepared having regard to Part 2 of the RMA, and with policies designed to achieve clear environmental outcomes, consideration of Part 2 is not likely to be necessary as "*genuine consideration and application of relevant plan considerations may leave little room for Part 2 to influence the outcome*". The consideration of Part 2 is not prevented, but it cannot be used to justify an application that is otherwise not supported by objectives and policies.
137. In light of this judgment, Part 2 of the RMA is required to be considered when determining an application for resource consent, but the objectives and policies still hold significant weight, and in most cases (unless the plan has not been prepared in accordance with Part 2), will largely be determinative unless the consent authority has doubt as to whether the planning documents have been prepared in a manner that appropriately reflects Part 2.
138. I have therefore outlined my consideration of those matters in Section 104 and Section 105, and finally considered whether it is necessary to resort to Part 2 of the RMA in order to determine this application.

Actual and Potential Effects (Section 104(1)(a)) and Offsets/Compensation (Section 104(1)(ab))

139. Section 104(1)(a) of the RMA requires decision makers to have regard to the actual and potential effects of an activity.
140. I consider that the assessment of adverse effects undertaken for the purpose of the notification determination is also relevant to the assessment required under Section 104(1)(a). That assessment concluded that, subject to the mitigation proposed by the applicant, the adverse effects of the proposal on the environment and persons were no more than minor.
141. The definition of 'effect' in the RMA also includes "*positive effects*".
- a) The Applicant has identified the following positive effects:
 - i) The solar farm is anticipated to provide sufficient electricity to supply an average of 22,000 homes, annually.

² *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316, [2018] 3 NZLR 283.

- ii) The solar farm will assist in meeting national targets for increasing renewable energy generation.
 - iii) The site is in close proximity to high density residential areas such as Rolleston, Lincoln and Christchurch, thus reducing the need for long transmission distances.
 - iv) The site can be returned to pastoral or other uses once/if the solar farm is removed.
142. Section 104(1)(ab) of the RMA also requires the decision maker to have regard to any measure proposed by the applicant to ensure positive effects to offset or compensate for adverse effects.
143. Overall, I conclude that the adverse effects of the proposal are acceptable subject to the recommended conditions

RELEVANT STATUTORY PROVISIONS (SECTION 104(1)(B))

144. Section 104(1)(b) of the RMA requires the decision maker to have regard to the relevant provisions of the following documents:
- a) A national environmental standard;
 - b) Other regulations;
 - c) A national policy statement;
 - d) A New Zealand coastal policy statement;
 - e) A regional policy statement or proposed regional policy statement; and
 - f) A plan or proposed plan.
145. Of relevance to this application are the following documents and provisions:
- a) National Policy Statement for Freshwater Management;
 - b) National Environmental Standard for Sources of Human Drinking Water;
 - c) Canterbury Regional Policy Statement;
 - d) Canterbury Land and Water Regional Plan.

National Policy Statement for Freshwater Management

146. The NPS-FM 2020 came into effect on 3 September 2020 and replaces the NPSFM 2014. The NPS-FM 2020 applies to all freshwater including groundwater and sets out objectives and policies for freshwater management; it requires freshwater quality within a freshwater management unit to be maintained at its current level (where community values are currently supported) or improved (where community values are not currently supported).
147. Te Mana o te Wai is fundamental to the NPS-FM 2020 which is a concept for fresh water that encompasses several different aspects of the integrated and holistic health and well-being of a water body. There is a hierarchy of obligation in Te Mana o te Wai that prioritises:
- a) First, the health and well-being of water bodies and freshwater ecosystems;
 - b) Second, the health needs of people (such as drinking water);
 - c) Third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

148. The Objective is reflective of the hierarchy of obligations in Te Mana o te Wai, which underpins the national direction of how freshwater is to be managed under the NPS-FM 2020.
149. Policies 1 to 15 seek to give effect to the Objective. In line with the above principles of Te Mana o Te Wai, I have considered the relevant policies in the following paragraphs.
150. **Policy 1** states: Freshwater is managed in a way that gives effect to Te Mana o te Wai;
151. I consider that giving effect to Te Mana o Te Wai means that freshwater resources are managed in a way that give effect to the priorities in the hierarchy of obligations in Te Mana o te Wai. Freshwater management must in the first instance meet the first priority in the hierarchy of obligations. If consistency with the first priority can be ensured, then the next step is to consider a proposal against the second, and then third priority.

First Priority – The health and well-being of water bodies and freshwater ecosystems:

- a) Spill avoidance and management of fuelling and servicing machinery measures will be in place to avoid exposing surface and groundwater to additional contaminants. Areas excavated for foundations will be backfilled and stabilised as soon as practicable.
- b) The measures adopted as part of the erosion and sediment control plan will also protect surface water from adverse effects.
- c) I consider the proposal aligned with the first priority of Te Mana o te Wai

Second Priority – The health needs of people:

- a) The proposed activities will not occur within a CDWPZ or upstream of any surface water bodies that provide for domestic drinking water needs. The provisions of the ESCP will also protect the health needs of workers by ensuring appropriate training and equipment is provided at all times.
- b) I consider the proposal aligned with the second priority of Te Mana o te Wai

Third Priority – The ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future:

- a) The proposal will increase the supply of electricity available in the Rolleston/Lincoln area, to meet the needs of a growing population.
 - b) I consider the proposal aligned with the third priority of Te Mana o te Wai.
152. For the reasons outlined above, I consider that the proposal meets all three parts of the hierarchy of obligations in Te Mana o te Wai.
153. I consider the following additional policies to be of relevance to the proposal:
- a) **Policy 2: Tangata whenua are actively involved in freshwater management (including decision-making processes), and Māori freshwater values are identified and provided for.** Earthworks and the discharge of stormwater are not located within a silent file area, statutory acknowledgement or sensitive area. The proposal did trigger the requirement for direct consultation with tangata whenua; and Māori freshwater values have been identified and provided for through the assessment of the Mahaanui Iwi Management Plan.

- b) **Policy 3: Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.** I have assessed the effects on surface water and groundwater including the surface waterbodies in the downstream catchment and receiving waterbodies.
 - c) **Policy 15: Communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with this National Policy Statement.** The proposed activity will enable development of the wider community by providing a stable and sustainable electricity supply to a growing population.
154. Given the above, I consider the proposal to be consistent with the relevant policies in the NPS-FM 2020.

National Environmental Standard for Sources of Human Drinking Water

155. The National Environmental Standard for Sources of Human Drinking Water (NES-SHDW) sets the requirements for protecting sources of human drinking water from becoming contaminated. The NES-SHDW requires regional councils to ensure that effects of activities on drinking water sources are considered in decision on resource consents and regional plans.
156. Under the NES-SHDW Regional Councils are required to:
- a. Decline discharge or water permits that are likely to result in community drinking water becoming unsafe for human consumption following existing treatment; and
 - b. Place conditions on relevant resource consents that require notification of drinking water suppliers if significant unintended events occur that may adversely affect sources of human drinking water.
157. I consider that the proposed activities are unlikely to adversely affect any registered drinking water supply bores.
158. Therefore, having had regard to the requirements for regional councils of the NES-SHDW, I consider the application is not inconsistent with the objectives of the NES-SHDW

Canterbury Regional Policy Statement (CRPS)

159. The CRPS provides an overview of the resource management issues in the Canterbury Region and the objectives, policies and methods to achieve integrated management of natural and physical resources. These methods include direction for provisions in district and regional plans.
160. The CRPS provides direction to the preparation and implementation of the LWRP. I consider that the provisions of the LWRP appropriately give effect to the environmental outcomes sought within the CRPS and given the above assessment of potential adverse effects, do not consider the proposal to present any exceptional or special circumstances which warrant recourse back to the CRPS.

Canterbury Land and Water Regional Plan including PC7

161. The LWRP aims to provide clear direction on how land and water are to be managed in the region.
162. The LWRP contains objectives, policies and rules as required under section 67(1) of the RMA. The objectives, policies and rules in this Plan manage land, water and

biodiversity within the region in conjunction with other non-statutory methods. They are consistent with the vision and principles in the Canterbury Water Management Strategy (CWMS).

163. This Plan operates at two levels. There is a region-wide section, which contains the objectives, policies and rules that apply across the region. There are also ten sub-region sections.
164. The sub-region sections contain policies and rules which are specific to the catchments covered by that section. The policies and rules in the sub-region sections implement the region-wide objectives in the Plan in the most appropriate way for the specific catchment or catchments covered by that section. Policies in Subregion 11 (Selwyn Te Waihora) are applicable to this application.
165. I consider the following objectives and policies to be relevant to the proposal:
- a) **Objective 3.1:** Land and water are managed as integrated natural resources to recognise and enable Ngāi Tahu culture, traditions, customary uses and relationships with land and water.
 - b) **Objective 3.5:** Land uses continue to develop and change in response to socio-economic and community demand.
 - c) **Objective 3.6:** Water is recognised as essential to all life and is respected for its intrinsic values.
 - d) **Objective 3.8:** Water quality and quantity in freshwater bodies and their catchments is managed to safeguard the life-supporting capacity of ecosystems and ecosystem processes.
 - e) **Objective 3.13:** Groundwater resources remain a sustainable source of high-quality water which is available for abstraction while supporting base flows or levels in surface water bodies, springs and wetlands and avoiding salt-water.
 - f) **Objective 3.23:** Soils are healthy and productive, and human-induced erosion and contamination are minimised.
 - g) **Policy 4.11:** Setting and attainment of catchment specific water quality and quantity outcomes and limits.
 - h) **Policy 4.14:** Ensure discharge of contaminants into or onto land where it may enter groundwater will not:
 - i) Exceed the natural capacity of the soil to treat or remove the contaminant
 - ii) Exceed the available water storage capacity of the soil
 - iii) Where i) and ii) are not practical, adhere to the guidance set out in part c of the policy.
 - i) **Policy 4.14B:** Ensure that when considering applications for discharges which may adversely affect statutory acknowledgement areas, nohoanga sites, surface waterbodies, silent file areas, culturally significant sites, Heritage New Zealand sites, any listed archaeological sites, and cultural landscapes, regard is taken of Ngāi Tahu values. In particular, those expressed within the LWRP, any iwi management plan, and any relevant district plan.
 - j) **Policy 4.17:** Stormwater run-off volumes and peak flows are managed so that they do not cause or exacerbate the risk of inundation, erosion or damage to property or infrastructure downstream or risks to human safety.

- k) **Policy 4.18:** Avoid the loss or discharge of sediment to surface water during earthworks and if this is not achievable, the best practicable option is used to minimize the release of suspended sediments.
 - l) **Policy 4.19:** Ensure the discharge of contaminants to groundwater from excavation is avoided or minimized by:
 - i) Siting, designing and managing activities to avoid groundwater contamination
 - ii) Managing and monitoring existing or closed landfills and contaminated sites to minimize contamination of groundwater
 - iii) Ensure sufficient thickness of undisturbed sediment in the confining layer to prevent entry of contaminants into the aquifer.
 - m) **Policy 11.4.1:** Manage water abstraction and discharges of contaminants within the entire Selwyn Te Waihora sub-region to avoid, remedy or mitigate adverse cumulative effects on the water quality of Te Waihora/Lake Ellesmere, rivers and shallow groundwater; and the flow of water in springs and tributaries flowing into Te Waihora/Lake Ellesmere and achieve, in combination with non-regulatory actions, the freshwater objectives and outcomes for the sub-region.
166. The Consultant considered the proposal to be consistent with the relevant objectives and policies of the LWRP for the following reasons:
- a) Whilst the scale of the earthworks is small, they will occur across a substantial area of the Site. However, the earthworks will be undertaken in a staged manner over the course of a three-year period, with the earthworks in each stage taking 3 to 4 months. The nature of the earthworks results in minimal periods where there is exposed soil and no requirement for large stockpiles of soil.
 - b) Given the groundwater surface level has been measured as being on average 2-3m below ground level, this will likely still leave 1-2m between the proposed excavation base of the cable trenches and likely groundwater level. As such, it is not anticipated that groundwater will be exposed during the excavations.
 - c) Further, all works will be well set back from site boundaries, and in turn the water races located between the road and site road boundaries. All earthworks will be appropriately managed via an Erosion and Sediment Control Plan to further ensure the protection of surface water quality and groundwater quality. It is therefore considered that the proposed work will be in accordance with the objectives and policies in the Plan in relation to earthworks.
 - d) The stormwater that will be discharged to land will be from the site office, inverters and the panels. It will essentially be clean and given that it is likely there will be more than 1m of undisturbed earth above the groundwater level, it will be filtered prior to discharging to the aquifer.
 - e) The volume of stormwater discharged is unlikely to result in inundation, erosion or damage to adjoining property or infrastructure due to the size of the Site. There is also a low risk to human safety, given the number of residential properties in the adjoining area and that the piles are slender and the panels are located between 3.02 metres and 700mm above the ground, so are unlikely to create a barrier to the flow of stormwater or result in a significant increase in stormwater on the Site.
167. Provided the applicant adheres to the proposed conditions, I consider that the proposed earthworks and stormwater discharge will not adversely affect freshwater resources, whilst enabling land use to develop and change in response to socio-

economic and community demand. Therefore, I consider that the proposal is consistent with the relevant objectives and policies in the LWRP.

168. I have considered the applicants requested duration in the context of Policy 4.11. To ensure the matters set out in the strategic policies of the LWRP continue to be met, I consider a duration of 5 years for the land use permit and 15 years for the operational phase stormwater discharge permit to be more appropriate than the 35 years applied for.
169. I note that the Applicant is not installing stormwater treatment for the site. A shorter consent duration would allow for installation of additional stormwater management measures, should they be required, which could then, if appropriate, be consented for a longer duration. The applicant has accepted a 15 year duration.

Other Relevant Matters

170. In accordance with Section 104(1)(c), the consent authority can consider any other matter relevant and reasonably necessary to determine the application.
171. I consider that other matters that the decision maker may wish to consider include:
- a) Iwi Management Plans;
 - b) The Canterbury Water Management Strategy

Iwi Management Plans

Mahaanui Iwi Management Plan

172. The proposed activity is located within the takiwā covered by the Mahaanui Iwi Management Plan. CRC receives advice from MKT on behalf of mana whenua for this takiwā.
173. The Mahaanui IMP sets out issues of significance, objectives and policies relating to the protection and enhancement of Ngāi Tahu values and natural resources.
174. The Mahaanui IMP objectives generally aim to manage water and land as interrelated resources, embracing the practice of ki uta ki tai, which recognises the connection between land, groundwater, surface water and coastal water.
175. Mr Fraser Doake (of MKT) considered the following policies in the Mahaanui Kurataiao IMP to be relevant to this proposal:
- a) **P6.1:** To require on-site solutions to stormwater management in all new urban, commercial, industrial and rural developments based on a multi-tiered approach to stormwater management:
 - i) Reducing volume entering system - implementing measures that reduce the volume of stormwater requiring treatment (e.g. rainwater collection tanks);
 - ii) Discharge to land based methods, including swales, stormwater basins, retention basins, and constructed wetponds and wetlands (environmental infrastructure), using appropriate native plant species, recognising the ability of particular species to absorb water and filter waste.
 - b) **P11.1:** To assess proposals for earthworks with particular regard to:
 - i) Potential effects on wāhi tapu and wāhi taonga, known and unknown;
 - ii) Potential effects on waterways, wetlands and waipuna;
 - iii) Potential effects on indigenous biodiversity;

- iv) Potential effects on natural landforms and features, including ridge lines;
 - v) Proposed erosion and sediment control measures; and
 - vi) Rehabilitation and remediation plans following earthworks.
- c) **P11.8:** To require the planting of indigenous vegetation as an appropriate mitigation measure for adverse impacts that may be associated with earthworks activity.
- d) **CL3.8:** To require, where a proposal is assessed by tāngata whenua as having the potential to affect wāhi tapu or wāhi taonga, one or more of the following:
- i) Low risk to sites:
 - (1) Accidental discovery protocol (ADP)
 - ii) High risk to sites:
 - (1) Cultural Impact Assessment (CIA);
 - (2) Site visit;
 - (3) Archaeological assessment, by a person nominated by the Papatipu Rūnanga;
 - (4) Cultural monitoring to oversee excavation activity, record sites or information that may be revealed, and direct tikanga for handling cultural materials;
 - (5) Inductions for contractors undertaking earthworks;
 - (6) Accidental discovery protocol agreements (ADP); and/or
 - (7) Archaeological Authority from the New Zealand Historic Places Trust.
176. Mr Doake also considered that the proposal was not inconsistent with the above policies.
177. I have recommended an Accidental Discovery Protocol as a condition of consent.
178. The Consultant considers that the proposal is consistent with the objectives and policies of the Mahaanui IMP for the following reasons:
- a) It is proposed to soften the appearance of the Site by retaining all the existing site boundary shelterbelts and landscaping, except for the shared boundary with 180 Grahams Road. Along this boundary, the existing exotic shelterbelt plantings will be removed and replaced with a 3m wide native buffer planting. For the remainder of the site boundaries, where there are gaps or the boundary planting is minimal, a 3m wide native landscape buffer or a double staggered row of exotic shelterbelt species will be planted to provide sufficient screening of the proposal. This will also contribute to the overall biodiversity of the Selwyn District.
 - b) Further, although no works are proposed within the wāhi taonga site, it is proposed to implement an Accidental Discovery Protocol on the Site to ensure that steps can be put in place if any accidental discoveries are made during construction works.
 - c) The discharge will be 'cleaner' than stormwater from hard surfaces and will not contain any sources considered offensive to Māori and of risk to mahinga kai gathering.
 - d) The application site is not located within a silent file area or a statutory acknowledgement area.

179. Given the above, and provided the applicant adheres to the recommended conditions, I consider that the proposal will not contravene the relevant policies in the Mahaanui IMP.

Canterbury Water Management Strategy

180. The Canterbury Water Management Strategy (CWMS) is a non-statutory document which provides the framework for land and water management for the region. It was developed through an extensive collaborative process and is endorsed by all councils in Canterbury. In 2005, the Canterbury Mayoral Forum took ownership of the CWMS to address the increasing water demand in the region, which was leading to problems in sourcing, storage, allocation of water and environmental effects. The desired outcome of the CWMS is:

To enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework.

181. The proposed site is located within the area managed by the Selwyn-Waihora Zone Committee.
182. The committee has generated a Zone Implementation Programmes (ZIP) for their zones. ZIPs are non-statutory documents that are being completed by each of the Zone Committees within the Canterbury region. ZIPs contain zone-specific recommendations for water management to achieve the CWMS targets.
183. Given the proposed mitigation measures and provided that the Applicant adheres to the recommended conditions, I consider that the proposal will not contravene the Selwyn-Waihora Zone Implementation Programme and will support the priority outcomes including that groundwater is safeguarded for multiple uses.

Other Section 104 Matters

184. I have also considered those other matters in Section 104 of the RMA to determine whether they affect my recommendation. I do not consider that there any other matters in Section 104 of relevance to this application:

Consideration of activities affecting drinking water supplies (Section 104G)

185. Section 104G of the RMA requires consent authorities to have regard to:
- a. *The actual or potential effect of the proposed activity on the source of a registered drinking water supply; and*
 - b. *Any risks that the proposed activity may pose, that are identified within a source water risk management plan.*
186. I have had regard to the above matters and note that there is no source for a registered drinking water supply which is likely to be affected by the proposed activity.

Matters Relevant to Certain Applications (Section 105(1))

187. In addition to the matters in Section 104(1) of the RMA, Section 105(1) also requires decision makers to have regard to the following matters for applications for that would contravene Section 15 or Section 15B of the RMA:
- a) The nature of the discharge and the sensitivity of the receiving environment to adverse effects;
 - b) The applicant's reasons for the proposed choice; and

- c) Any possible alternative methods of discharge, including discharge into any other receiving environment.
188. I have had regard to the above matters and note that the adverse effects of the discharge are minor. The Applicant has not proposed any alternatives to the discharge of operational stormwater to land. Due to the expected quality of the discharge, further treatment is not deemed necessary.

Part 2 – Purpose and Principles

189. Having had regard to those matters specified in Section 104(1)(b) of the RMA and following the guidance of Davidson (discussed above), I must consider whether it is necessary to resort to Part 2 in order to determine this application.
190. Section 5 of the RMA states that the purpose of this Act is to
- Promote the sustainable management of natural and physical resources.*
191. Section 5(2) then goes on to state that:
- In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while—*
- (a) *Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) *Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) *Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*
192. The purpose is then achieved by recognising and providing for the Matters of National Importance in Section 6, having particular regard to the Other Matters in Section 7, and by taking into account the principles of Treaty of Waitangi (Section 8).
193. I have considered the objectives and policies of the relevant documents in Section 104(1)(b) and consider they were appropriately prepared to give effect to Part 2 of the RMA. As the application is consistent with those provisions, I therefore consider that the application will achieve the purpose of the RMA as defined in Section 5.

Determination of Application

194. Having had regard to those matters specified in Section 104(1) and Section 105(1), it is then necessary to consider those matters relevant to determining the application, as determined by its status.
195. The application for a land use consent is a **restricted discretionary** activity, and the application for a discharge permit is a discretionary activity, therefore I must consider the following matters when considering whether to recommend granting or refusing the application:

Determination of Applications for Restricted Discretionary Activities (Section 104C)

196. When considering an application for a resource consent (under Section 104), a consent authority may grant or refuse the application, but in doing so must only consider those matters over which discretion is restricted in a national environmental standard, another regulation, or in its plan or a proposed plan.

197. In considering those matters in Section 104, I confirm that I have limited my regard to those matters to which discretion is restricted as detailed in the 'Legal and Planning Matters' section above.
198. Having considered those matters, the consent authority may grant or refuse the application, but may only impose conditions on the resource consent (under Section 108) for those matters over which discretion is restricted in National Environmental Standards, other regulations or in its plan or proposed plan.
199. The application for a discharge permit is a **discretionary** activity, and therefore I must consider the following matters when considering whether to recommend granting or refusing the application:

Determination of Applications for Discretionary or Non-complying Activities (Section 104B)

- 2) In accordance with Section 104B of the RMA, after considering an application for a resource consent for a **discretionary activity** or **non-complying activity**, a consent authority:
- (a) *May grant or refuse the application; and*
 - (b) *If it grants the application, may impose conditions under section 108 of the RMA.*

Restrictions on Grant of Certain Discharge Permits (Section 107)

200. Under Section 107(1) of the RMA a consent authority shall not grant a resource consent for the discharge of a contaminant into water, or onto or into land, if after reasonable mixing the discharge is likely to give rise in the receiving waters to:
- a) The production of conspicuous oil or grease films, scums, foams, floatable or suspended material:
 - b) Any conspicuous change in the colour or visual clarity:
 - c) Any emission of objectionable odour:
 - d) The rendering of fresh water unsuitable for consumption by farm animals:
 - e) Any significant adverse effects on aquatic life.
201. I consider that the discharge will not give rise to any of the effects specified in Section 107(1), and therefore the resource consent may be granted.

Recommendation

202. Having had regard to those matters in Section 104 and Section 105, and that consent is able to be granted in accordance with Sections 104B, 104C, and 107 of the RMA, I recommend granting the resource consent subject to the conditions and duration recommended below.

Conditions of Resource Consent (Section 108)

203. Section 108 of the RMA enables the consent authority to impose conditions subject to those restrictions specified in Section 108 and Section 108AA.
204. If the decision maker agrees with my recommendation to grant this application, I recommend conditions, as specified in Appendix 1 be imposed. The applicant has agreed to these conditions (file reference C22C/241441 and C22C/241449).

Duration (Section 123)

205. Section 123 of the RMA details the possible durations of resource consent. The applicant has sought a consent duration of 35 years for the both the land use and discharge consents however subsequently accepted a shorter duration of 15 years for the discharge consent and 5 years for the land use consent as discussed earlier in this report.
206. In considering an adequate consent duration, I have had regard to the following factors developed through case law that are relevant to the determination of the duration of a resource consent³:
- a) The duration of a resource consent should be decided in a manner which meets the RMA's purpose of sustainable management;
 - b) Whether adverse effects would be likely to increase or vary during the term of the consent;
 - c) Whether there is an expectation that new information regarding mitigation would become available during the term of the consent;
 - d) Whether the impact of the duration could hinder implementation of an integrated management plan (including a new plan);
 - e) That conditions may be imposed requiring adoption of the best practicable option, requiring supply of information relating to the exercise of the consent, and requiring observance of minimum standards of quality in the receiving environment;
 - f) Whether review conditions are able to control adverse effects (the extent of the review conditions proposed is also relevant bearing in mind that the power to impose them is not unlimited);
 - g) Whether the relevant plan addresses the question of the duration of a consent;
 - h) The life expectancy of the asset for which consents are sought;
 - i) Whether there was/is significant capital investment in the activity/asset; and
 - j) Whether a particular period of duration would better achieve administrative efficiency.
207. Taking the above reasonings and policy guidance into consideration, I consider a duration of 5 years is appropriate for the land use consent and 15 years is appropriate for the discharge permit.

Prepared by:



Date: 10 November 2022

Name:

Cherie-Lynn Lewis
Consents Planner

³ *Ngati Rangi Trust v Genesis Power Ltd* [2009] NZRMA 312 (CA); *Genesis Power Ltd v Manawatu-Wanganui Regional Council* (2006) 12 ELRNZ 241, [2006] NZRMA 536 (HC); *Royal Forest and Bird Protection Society of New Zealand Inc v Waikato Regional Council* [2007] NZRMA 439 (EnvC); *Curador Trust v Northland Regional Council* EnvC A069/06.

Reviewed by:  Date: 10 November 2022

Name: *Leah McEnhill*
Consents Planner

APPENDIX 1 – RECOMMENDED CONDITIONS

Resource Consent CRC223908 – s9 Earthworks over an aquifer

Applicant: KeaX

Recommended Duration: 5 years

	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: <ul style="list-style-type: none">a. The contents of this resource consent document and all associated documents; andb. Resource Consent CRCC223909 and all associated documents, andc. 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:

	<ul style="list-style-type: none"> 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	<p>The works authorised under Condition (1) must occur in accordance with an ESCP. The ESCP must:</p> <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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	<p>The ESCP shall:</p> <ul style="list-style-type: none"> 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 details of best practicable options to be applied to mitigate 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	<ul style="list-style-type: none"> 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

	<p>the requirements under Condition (9)(b)(ii), and the conditions of this resource consent.</p> <p>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.</p>
12	<p>The ESCP may be amended at any time. Any amendments shall be:</p> <p>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</p> <p>b. For the purpose of applying best practicable measures to mitigate [dust and]sediment transport off-site;</p> <p>c. Consistent with the conditions of this resource consent; and</p> <p>d. Submitted in writing to the Canterbury Regional Council, Attention: Regional Leader Compliance Monitoring, prior to any amendment being implemented.</p>
13	<p>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.</p>
14	<p>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.</p>
	During Works
15	<p>All practicable measures must be taken to:</p> <p>a. Minimise soil disturbance and prevent soil erosion;</p> <p>b. Avoid placing excavated material in a position where it may enter:</p> <p>i. Any neighbouring site, public road or the water race along Hanmer Road.</p>
	Accidental Discovery of Contaminants
16	<p>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:</p>

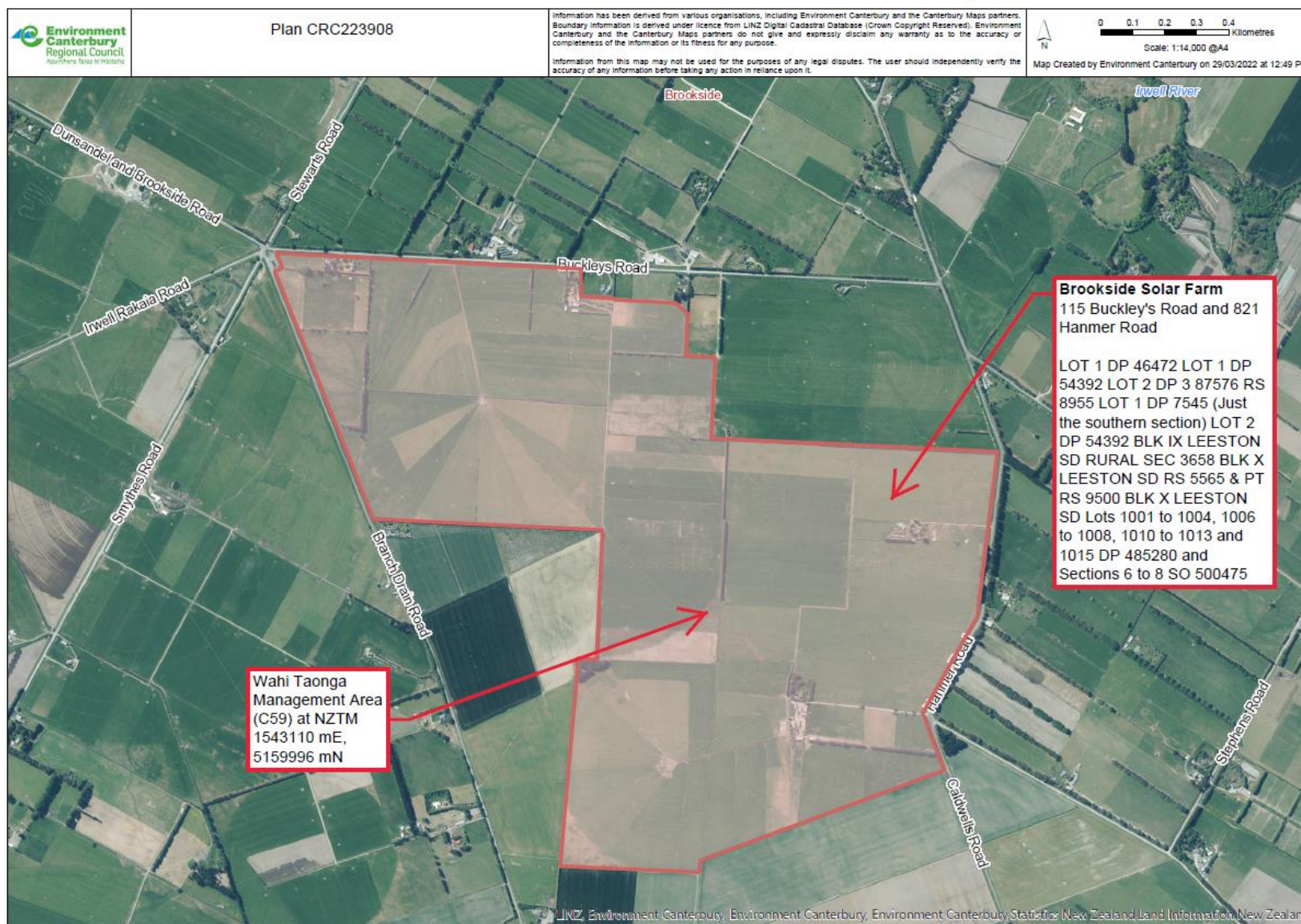
	<ul style="list-style-type: none"> a. Earthworks within ten metres of the encountered contaminants must cease immediately; b. All practicable steps must be taken to prevent the contaminated material becoming entrained in stormwater. Immediate steps must include, where practicable: <ul style="list-style-type: none"> i. Diverting any stormwater runoff from surrounding areas away from the contaminated material; and i. Minimising the exposure of the contaminated material, including covering the contaminants with an impervious cover; b. Notification of the Canterbury Regional Council, Attention: Contaminated Sites Manager and Regional Leader – Compliance Monitoring, within 24 hours of the discovery; c. 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; d. 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	<p>All practicable measures must be taken to avoid spills of fuel or any other hazardous substances within the site. These measures must include:</p> <ul style="list-style-type: none"> a. Refuelling of machinery and vehicles must not occur within 20 metres of: <ul style="list-style-type: none"> 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.

	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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	<p>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:</p> <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 i. Inserting a vertical pipe in the aquifer interception point (if practicable) and provide for a secure seal against the pipe

	<p>to enable the stabilisation of the artesian flow in the pipe, and to determine the above ground water level to assess any further measures.</p> <p>d. The temporary artesian flow beyond the excavation must be controlled and mitigated with appropriate erosion and sediment control measures;</p> <p>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</p> <p>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.</p>
	Accidental Discovery of Archaeological Material
20	<p>In the event of any discovery of archaeological material the consent holder must immediately:</p> <ol style="list-style-type: none"> Cease earthmoving operations in the affected area and mark off the affected area; and Advise the Canterbury Regional Council of the disturbance; and Advise Heritage New Zealand Pouhere Taonga (HNZPT) of the disturbance. <p>Advice Note: <i>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.</i></p> <p>Advice Note: <i>This condition may be in addition to any agreements that are in place between the consent holder and the Papatipu Rūnanga. (Cultural Site Accidental Discovery Protocol).</i></p> <p>Advice Note: <i>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 Māori 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/kōiwi 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</i></p>

	<i>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.</i>
21	<p>a. If accidentally discovered material is suspected to be Kōiwi Tangata (human bones), taonga (treasured artefacts) or a Māori archaeological site:</p> <ul style="list-style-type: none"> i. The consent holder must immediately advise the office of the Kaitiaki Rūnanga (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 Rūnanga and HNZPT. <p>b. If the archaeological material is determined to be Kōiwi Tangata (human bones) by a qualified archaeologist, the consent holder must:</p> <ul style="list-style-type: none"> i. Immediately advise the New Zealand Police of the disturbance; ii. Consult with the Kaitiaki Rūnanga 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 kōiwi in accordance with both statutory obligations under the HNZPT Act 2014 and tikanga, as guided by the Kaitiaki Rūnanga. <p>c. Works in the site area must not recommence until authorised by the Kaitiaki Rūnanga, HNZPT (and the NZ Police in the case of kōiwi) and any other authority with statutory responsibility, to ensure that all statutory and cultural requirements have been met.</p>
22	If accidentally discovered material is not suspected or confirmed to be Kōiwi Tangata (human bones), taonga (treasured artefacts) or a Māori 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	<p>Within two weeks of the completion of each stage of works authorised by this resource consent:</p> <ul style="list-style-type: none"> 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	<p>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:</p> <ul style="list-style-type: none"> 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	<p>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.</p> <p><i>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.</i></p>



Resource Consent CRC223909 – Discharge of stormwater to land

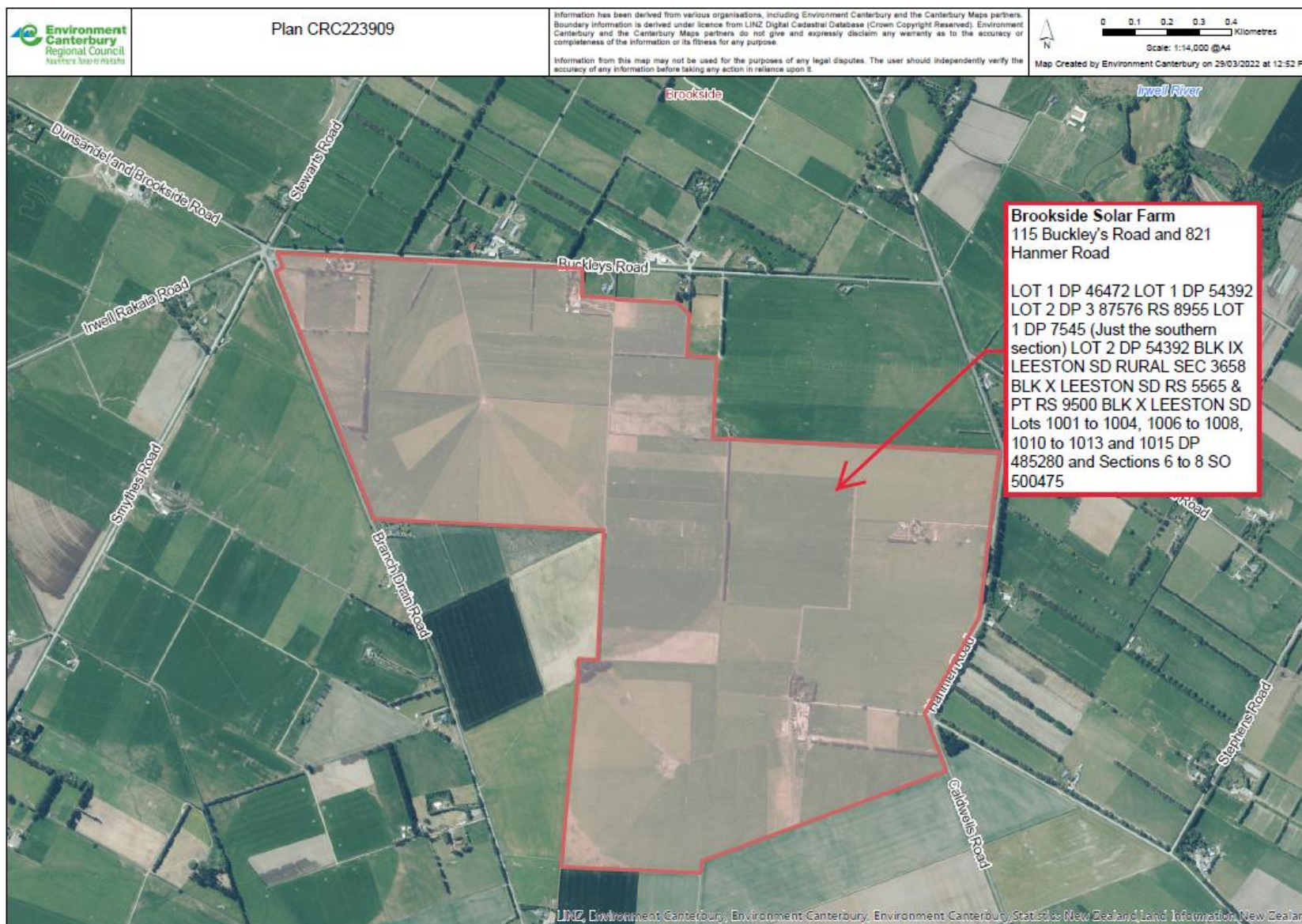
Applicant: KeaX Limited

Recommended Duration: 15 years

	Limits
1	<p>The discharge shall be only stormwater generated from:</p> <ul style="list-style-type: none"> a. Solar array panels, b. Roofs, c. Roads, hardstand areas, and impervious areas <p>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.</p>
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	<p>Unless treatment is provided, the discharge of roof stormwater shall not arise from:</p> <ul style="list-style-type: none"> 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	<p>The land shall be maintained by:</p> <ul style="list-style-type: none"> a. Inspecting the pasture at least once every three months in the first two years, thereafter every six months. b. Removing any visible debris or litter within five working days of the inspection. c. Repairing any scour or erosion within ten working days of the inspection.
7	<p>The land shall be:</p> <ul style="list-style-type: none"> a. Maintained so that vegetation or grass is in a healthy and uniform state with the exception of seasonal browning off

	<ul style="list-style-type: none"> 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.
	<p>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:</p> <ul style="list-style-type: none"> 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.
	Recording and Reporting
8	<p>By the end of each year the consent holder shall provide the Canterbury Regional Council, Regional Leader – Monitoring and Compliance at Canterbury Regional Council with a monitoring report for the preceding 12 month period. This report shall include:</p> <ul style="list-style-type: none"> a. All monitoring results required by the conditions of this consent; b. Comments on any adverse effects from the discharge and the actions taken to remedy or mitigate these effects; c. Recommended changes to the monitoring programme (if applicable).
	Spills
9	<p>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:</p> <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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;

	<ul style="list-style-type: none"> 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	<p>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:</p> <ul style="list-style-type: none"> 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	<p>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:</p> <ul style="list-style-type: none"> 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	<p>If this consent is not exercised before 19 December 2027 it shall lapse in accordance with section 125 of the Resource Management Act 1991.</p> <p>Advice Note: <i>'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.</i></p>



Canterbury Land and Water Regional Plan

Schedule 3 Hazardous Industries and Activities

A. Chemical manufacture, application and bulk storage

1. Agrichemicals including commercial premises used by spray contractors for filling, storing or washing out tanks for agrichemical application
2. Chemical manufacture, formulation or bulk storage
2. Commercial analytical laboratory sites
3. Corrosives including formulation or bulk storage
4. Dry-cleaning plants including dry-cleaning premises or the bulk storage of dry-cleaning solvents
5. Fertiliser manufacture or bulk storage
6. Gasworks including the manufacture of gas from coal or oil feedstocks
7. Livestock dip or spray race operations
8. Paint manufacture or formulation (excluding retail paint stores)
9. Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds
10. Pest control including the premises of commercial pest control operators or any authorities that carry out pest control where bulk storage or preparation of pesticide occurs, including preparation of poisoned baits or filling or washing of tanks for pesticide application
11. Pesticide manufacture (including animal poisons, insecticides, fungicides or herbicides) including the commercial manufacturing, blending, mixing or formulating of pesticides
12. Petroleum or petrochemical industries including a petroleum depot, terminal, blending plant or refinery, or facilities for recovery, reprocessing or recycling petroleum-based materials, or bulk storage of petroleum or petrochemicals above or below ground
13. Pharmaceutical manufacture including the commercial manufacture, blending, mixing or formulation of pharmaceuticals, including animal remedies or the manufacturing of illicit drugs with the potential for environmental discharges
14. Printing including commercial printing using metal type, inks, dyes, or solvents (excluding photocopy shops)
15. Skin or wool processing including a tannery or fellmongery, or any other commercial facility for hide curing, drying, scouring or finishing or storing wool or leather products
16. Storage tanks or drums for fuel, chemicals or liquid waste
17. Wood treatment or preservation including the commercial use of anti-sapstain chemicals during milling, or bulk storage of treated timber outside

B. Electrical and electronic works, power generation and transmission

1. Batteries including the commercial assembling, disassembling, manufacturing or recycling of batteries (but excluding retail battery stores)
2. Electrical transformers including the manufacturing, repairing or disposing of electrical transformers or other heavy electrical equipment
3. Electronics including the commercial manufacturing, reconditioning or recycling of computers, televisions and other electronic devices
4. Power stations, substations or switchyards

C. Explosives and ordinances production, storage and use

1. Explosive or ordinance production, maintenance, dismantling, disposal, bulk storage or re-packaging
2. Gun clubs or rifle ranges, including clay targets clubs that use lead munitions outdoors
3. Training areas set aside exclusively or primarily for the detonation of explosive ammunition

D. Metal extraction, refining and reprocessing, storage and use

1. Abrasive blasting including abrasive blast cleaning (excluding cleaning carried out in fully enclosed booths) or the disposal of abrasive blasting material
2. Foundry operations including the commercial production of metal products by injecting or pouring molten metal into moulds
3. Metal treatment or coating including polishing, anodising, galvanising, pickling, electroplating, or heat treatment or finishing using cyanide compounds
4. Metalliferous ore processing including the chemical or physical extraction of metals, including smelting, refining, fusing or refining metals
5. Engineering workshops with metal fabrication

E. Mineral extraction, refining and reprocessing, storage and use

1. Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition
2. Asphalt or bitumen manufacture or bulk storage (excluding single-use sites used by a mobile asphalt plant)
3. Cement or lime manufacture using a kiln including the storage of wastes from the manufacturing process
4. Commercial concrete manufacture or commercial cement storage
5. Coal or coke yards
6. Hydrocarbon exploration or production including well sites or flare pits
7. Mining industries (excluding gravel extraction) including exposure of faces or release of groundwater containing hazardous contaminants, or the storage of hazardous wastes including waste dumps or dam tailings

F. Vehicle refuelling, service and repair

1. Airports including fuel storage, workshops, washdown areas, or fire practice areas
2. Brake lining manufacturers, repairers or recyclers
3. Engine reconditioning workshops
4. Motor vehicle workshops
5. Port activities including dry docks or marine vessel maintenance facilities
6. Railway yards including goods-handling yards, workshops, refuelling facilities or maintenance areas
7. Service stations including retail or commercial refuelling facilities
8. Transport depots or yards including areas used for refuelling or the bulk storage of hazardous substances

G. Cemeteries and waste recycling, treatment and disposal

1. Cemeteries
2. Drum or tank reconditioning or recycling

Canterbury Land and Water Regional Plan

3. Landfill sites
 4. Scrap yards including automotive dismantling, wrecking or scrap metal yards
 5. Waste disposal to land (excluding where biosolids have been used as soil conditioners)
 6. Waste recycling or waste or wastewater treatment
- H. Any land that has been subject to the migration of hazardous substances from adjacent land in sufficient quantity that it could be a risk to human health or the environment.
- I. Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment.