BEFORE THE SELWYN DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of a resource consent application to establish a solar array at 150 and 115 Buckleys Road, Brookside, Selwyn District
RC235464

LANDSCAPE EVIDENCE OF ANDREW WILLIAM CRAIG

For Selwyn District Council

March 2024

1.0 INTRODUCTION

1 My full name is Andrew William Craig.

2 I hold the position of Director of *Andrew Craig Landscape Architecture*. I have been in this position since 2009.

3 I hold a Bachelors of Arts degree (Canterbury University) and a post graduate diploma in landscape architecture (Lincoln University).

4 I have been practising landscape architecture since 1987. For 5 years until mid-2009 I was employed by Peter Rough Landscape Architects Ltd. Before that I was employed by the Christchurch City Council for 13 years, working in the area of environmental policy and planning. Prior to that I worked for a short time with the Department of Conservation. Most of my work since graduation and to date has involved landscape assessment and the development of landscape policy.

5 Of relevance, I have in the past, been engaged by various councils to develop landscape objectives and policy concerning rural areas in Selwyn, Waimakariri and Christchurch Districts.

6 I have been engaged by Selwyn District Council to provide landscape evidence regarding the application.

7 I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. I have complied with it in preparing this evidence and I agree to comply with it in presenting evidence at the hearing. The evidence that I give is within my area of expertise except where I state that my evidence is given in reliance on another person's evidence. I have considered all material facts know to me that might alter or detract from the opinions I express in this evidence.

2.0 SCOPE OF EVIDENCE

8 In my evidence I comment and elaborate on the visual and landscape effects prompted by the landscape assessment included as part of the Assessment

of Environmental Effects (AEE) lodged by the applicant (KeaX Limited). While I generally agree with the observations and conclusions reached in both the landscape AEE and the Council's s42A landscape report[1], I believe it is necessary to expand on those matters concerning visual, and in particular, landscape effects. In that discussion I also refer where necessary to the landscape relevant objectives and policies of both the operative District Plan (ODP) and proposed District Plan (PDP).

9 I also consider the written submissions where I focus on those concerns relating to landscape amenity effects.

10 In preparing my evidence I have read:

a. The AEE prepared by the applicant.

b. The Sections 95 and 42A landscape reports.

c. Where relevant to landscape matters, the objectives and policies in the operative and partially operative proposed Selwyn District Plans.

d. The submissions.

e. The '*Mangamaire Solar Farm Decision Report Reference'*

11 I visited the site on 6th January 2024, which also included evaluation of it from surrounding publicly accessible vantage points.

3.0 EXECUTIVE SUMMARY

12 I agree with the observations and conclusions reached in both the landscape AEE and s42A landscape report, subject to further explanation and elaboration in my evidence to follow.

[1] Prepared by Ms Bron Faulkner 31 August 2023

13 The existing environment, including District Plan expectations, informs landscape character and amenity and so in this regard the proposal is in keeping with what is expected to occur.

14 Despite the physical character of the solar array, overall generic rural character derived from low building density in proportion to open space regarding the Site and its overall setting will be maintained.

15 The site is not subject to any special landscape overlays or features such as those arising from RMA s6 matters.

16 In landscape terms, the Site and its surrounds are not exceptional in any way with regard to the rural Canterbury Plains.

17 I am satisfied that the proposed mitigation planting in combination with that existing will effectively screen the solar array from neighbours and public view, although there will initially be some views to the arrays which will diminish over time while planting matures.

18 I agree with the landscape mitigation measures proposed by the applicant and am of the opinion that they will be effective and enduring subject to implementation of the Landscape Management Plan[2].

19 The type of amenity expected of the rural environment for the Zone in which the Site is located will be maintained subject to implementation of the proposed mitigation measures.

20 Landscape and visual effects would not be contrary to both the ODP and PDP objectives and policies where they concern landscape outcomes for the Zone in which the Site is located.

4.0 VISUAL AND LANDSCAPE EFFECTS

21 For the most part I agree with the observations, assessment and conclusions reached in the landscape AEE[3] accompanying the application. There are

[2] Landscape AEE – Section 7 Recommendations, clause 2
[3] Prepared by Boffa Miskell Limited (Amanda Anthony) 9 August 2023

however some matters that merit further discussion and elaboration. These are addressed as follows.

4.1 Visual effects and their mitigation

22 In the landscape AEE accompanying the application I note that the term 'mitigation planting' is frequently used. Principally this refers to what is essentially shelter belt type planting around the Site perimeter. This is in addition to existing planting fulfilling the same function. Its function is to visually screen the solar panels from adjoining properties and public roads. I agree that this will effectively screen the panels thereby resulting in significantly less than minor adverse visual effects. But this will only occur once planting has reached a minimum height of 3.5 metres[4] and is sufficiently spread to fully screen the arrays. Until then, there will be limited views to the arrays, although this should be immediately mitigated to some extent[5] as the applicant has indicated that planting will be implemented prior to installation of the panels. Additionally, the applicant, via the landscape AEE[6], intends planting fast growing species, some of which will be 2 metres high at time of planting. Smaller grades will supplement existing planting. Further, the proposed plants are *Cupressus ovensii* which is very fast growing – over a metre per year. Based on that rate of growth, the proposed two metre plants will reach the minimum height of 3.5 metres within two years. The small PB3 plants will take about four years. As a result, full visual screening should be achieved within two to three years.

23 Nonetheless, the promotion of mitigation planting implies there exists a potential adverse visual effect that will be more than minor and therefore demands mitigation. It is not clear to me from my reading of the AEE why this is so where it is concluded that visual effects are assessed to be *low to low moderate* prior to full establishment of 'mitigation planting' and *very low*[7] thereafter. That is to say, it appears the visual effects are considered less than minor in the absence of mitigation.

[4] Landscape AEE p6 - Proposed Site boundary planting
[5] Landscape AEE Graphic Supplement – Figure 8 visual simulation 1
[6] Landscape AEE p6 – Proposed Site boundary planting. Also see Graphic Supplement Figure 20 'Planting Tables'
[7] Landscape AEE p 22 (6.2.4 Summary of Visual Effects) & p25 (Conclusion)

24 Usually, mitigation is usually only promoted in situations where adverse effects are deemed more than minor. So that raises the question: just what is visually adverse about the proposed solar array that demands the proposed mitigation?

25 The only identified potential adverse visual effect would appear to arise from glare. The AEE incorporates a thorough analysis of this and essentially concludes that while glare will occur (in the bare earth scenario) it will effectively be avoided and mitigated by a combination of existing and proposed vegetation. The exception is the Wāhi Taonga site where effects are managed via constraints on panel backtracking. I also note in this regard that the Council has sought expertise on glare[8] which will therefore be considered in more detail by others.

26 Regarding glare, I agree that the conclusions reached in this regard are appropriate and that the management of potential glare via the proposed mitigation planting will be effective.

27 When assessing visual effects, there are essentially two aspects to consider. One concerns effects on view quality – that is, whether a proposed activity exhibits aesthetic appeal while taking into account context of the setting. For example, the acceptable aesthetic threshold for activity in an urban industrial setting will be much lower than that for activity in an Outstanding Natural Landscape.[9]

28 In this case view quality centres on the appearance of the solar panels. To aid assessment in this regard, it is fortuitous that there exists similar or the same solar panels as those proposed in proximity to the Site – see **Figure 1 photograph**. They therefore give a good indication of appearance and scale.

[8] Velden Aviation Consulting Limited – Mr Van der Velden
[9] Subject to RMA s6(b)

Figure 1 Solar panels at Buckleys Road similar to those proposed. Note the presence of grazing sheep beneath and around the panels. Also note the varying states of tilt.

29 It is my opinion that the appearance of solar panels is not aesthetically pleasing, particularly when viewed from behind as shown in the **Figure 1 photograph** above. The aesthetic is determined by their necessarily utilitarian pragmatic appearance comprising a mix of formal unalloyed geometry, contrasting materials and rigid rectilinear visual character. Their appearance is not driven by any aesthetic considerations to the extent that, say, a dwelling would be. This is not a criticism of the design; instead, it is simply a product of their character and function. They therefore command a physical presence that en masse harbours the potential to significantly detract from view quality.

30 Countering this to some considerable extent, in this case, is the presence of large scale vegetation – namely tree groups and shelter belts – and open pasture. In my opinion therefore, it is necessary to provide in addition to this mitigation planting in order to fully screen such effects. As noted, this is what the applicant intends doing and therefore it is a measure that I consider entirely effective and therefore acceptable.

31 The other concerns view obstruction – that is, whether a proposed activity results in the obstruction of views depending on their value. In this case for example, the question is; are views to the Southern Alps and the Port Hills obscured by the proposed solar panels? Following my site visit, I determined that no such effect will occur. The reasons are that:

i) The panels are set back sufficiently from the adjoining roads so as not to obstruct views.

ii) In combination with the setback distance and at a maximum height of 3 metres the array is not sufficiently high enough to intrude views. The maximum permitted height for utilities is 12 metres.[10]

iii) The proposed-on site buildings with a maximum height of 2.6 metres, their central location within the Site and low site coverage will therefore result in minimal adverse effect on views.

iv) Because it is the closest physical feature to the vantage points adjoining the Site, the 2.65 metre high security fence will potentially intrude views from certain quarters (see Landscape AEE Graphic Supplement - visual simulations 1 & 2). In time, the fence will however be fully screened by vegetation.

v) The existing and proposed mitigation planting will obscure views in any case, which I consider acceptable given that these are a very common feature on the Canterbury Plains resulting is such effects.

vi) There are no recognised vantage points such as scenic viewing areas where there is an expectation that views are to be preserved.

vii) The Alps and Port Hills are not especially prominent features when viewed from vantage points around the Site.

viii) There are no other significant features such as historic buildings, outstanding natural features and such like that merit view protection.

32 For the above reasons I conclude that any potential adverse effects arising from view obstruction will be significantly less than minor.

[10] ODP Rule C5.2.1.1 The height of any utility building shall not exceed 12 metres; and PODP EI-REQ15 – GRUZ - 19. Any structure shall not exceed a maximum height above ground level of 12m, excluding hose drying structures associated with emergency services facilities used by Fire and Emergency New Zealand.

4.2 Landscape effects

33 Landscape effects are those arising from changes to the landscape irrespective of whether they are visible or not. I agree with the observation made in the landscape AEE that '*Landscape effects can be adverse, neutral, and positive.'*[11] Indeed the ODP recognises this where in the *Explanation and Reasons* to policy B3.4.3 states:

> *Changes in land uses do not necessarily detract from the amenity values of an area and may enhance them. Where an activity will detract from the amenity values of an area, Policy B3.4.3 requires those effects be mitigated.*

Essentially, this is evidently the mitigative approach taken by the applicant, which I agree is appropriate.

34 Landscape effects centre on the values ascribed to any one particular landscape. These values are primarily informed by the existing environment where I understand this to comprise three aspects: the environment of the moment, any unrealised consented activity and the landscape outcomes enabled by the District Plan. From this, the key question is whether the proposed solar array is in keeping with the landscape character of its setting – that is, the existing environment?

35 I note that in the landscape AEE it is also concluded that *'Any anticipated effects on the landscape character would be very localised.*'[12] It is my opinion that, in general, landscape effects arising from any activity are wider than that. In that regard, the extent of the landscape in which the proposed activity is located needs to be identified. In my opinion, this comprises the entire rural Canterbury Plains. That is, it is a landscape whose common features incorporate widespread productive rural activity most of which comprises farming of one sort or another. Other rural activities are also reasonably common such as horticulture, viticulture, forestry, quarrying and intensive

[11] Landscape AEE p12
[12] Landscape AEE p13

farming. Infrastructure and large scale processing is present as well. In addition to roads, rail and transmission lines, irrigation canals / races and reservoirs are common too. Processing activities include, for example, dairy factories and sawmills. The PDP also lists typical rural activity where it states:

> *Rural landscapes include rural production activities, including plantation forestry, mineral extraction, farming (including research farming and associated facilities) and associated structures and buildings as well as rural support services and rural industry.*[13]

36 Land cover vegetation is almost entirely exotic, most of which is devoted to productivity. As a product of the flat topography of the Plains, vegetation patterns arising from rural production is largely geometrically formal in its layout. It is evident that this is so for the Site and the receiving environment. The proposed mitigation planting will be in keeping with existing vegetation patterns and as such I consider it an acceptable landscape effect.

37 Overall, the rural Plains are significantly modified due to human activity. Nonetheless, vegetation is prominent and despite being exotic, it exhibits a certain degree of naturalness. This, in combination with the predominance of open space, is what gives the Plains its amenity values. In the Explanation and Reasons to ODP Policy B 3.4.3 rural amenity is derived from (where relevant), '*…for example*, *rolling hills, meandering streams, and fields with animals and crops, which are all typical rural scenes*.' And in the PDP (Part 3) the General Rural Zone (GRUZ) overview states:

> *Generally, character and amenity within the General Rural Zone is characterised by a landscape dominated by openness and vegetation, and with significant visual separation between neighbouring residential buildings.*

38 Natural features such as lakes (Ellesmere), rivers (Rakaia, Waimakariri, Selwyn for example) and the coast also contribute significantly to amenity.

[13] PDP Part 3 - GRUZ Overview

None of these natural features will be affected by the proposal. As a result, ODP *Policy B2.2.5(a)* will be achieved where it states:

> *Avoid siting utility structures or buildings on hilltops in the margins of lakes or rivers or in areas identified as outstanding natural features and landscapes, sites with special cultural values:* will be achieved.

Similarly, PDP policy *EI-P2* will also be achieved in this regard where it states:

> *Minimise the adverse effects of important infrastructure, and renewable electricity generation on the physical and natural environment by:*
>
> *3. limiting the presence and effects of development within Outstanding Natural Landscapes, Visual Amenity Landscapes, areas of significant indigenous vegetation and habitats of indigenous fauna, sites of historic heritage and site and areas of significance to Māori …'*

39 Regarding the reference to Māori in the above cited policy, there is a potentially affected Wāhi Taonga site. I understand this matter will be addressed by others.

40 From this I conclude that the Site is located in a setting that is typical of the rural Canterbury Plains landscape. Or to put it another way, it is not exceptional in any way in as much it does not harbour features or combination thereof that are particularly unique or distinctive. Consequently, in landscape terms there is nothing special or particular about the Site and its immediate setting that would rule out the proposed activity.

41 Regarding consented activity the same or similar to that applied for, I am not aware of any in the immediate vicinity of the Site. I do know[14] that a number of large scale solar arrays are proposed and consented elsewhere on the Canterbury Plains. Smaller arrays servicing individual farms are also evident, with two sets being visible from Buckleys Road. While a relatively new activity

[14] Examples include, and there may be others: Far North Solar Farm, Waipara – 200ha / Lauriston (Rakaia west) 90ha / Kowhai Park – Christchurch Airport 300ha / HES Aotearoa / Lodestar Dunsandel (consented) – 100ha / Mt Somers – 35ha and Clandeboye

in Canterbury, they are nonetheless an activity that contributes to the amalgam of diverse activities informing character of the rural Plains landscape.

42 The preceding discussion also triggers consideration of cumulative effects, allied to which is the matter of precedence. I am aware that the latter only concerns activity which may undermine the integrity of the District Plan and in this case the rural Objectives and Policies. Nonetheless, solar farms within rural Canterbury are currently few and far between – so much so that there will be no adverse cumulative landscape effect arising from the KeaX Limited proposal. In any event cumulative effects will be confined to the constraints of solar farms which I understand need to be located very close to an existing electricity grid and transmission network. It is therefore very unlikely that solar farms will cumulatively overwhelm the rural Plains anytime in the future. Consequently, the overall vegetative rural open character of the Plains will be maintained. The proposal will certainly not erode this to the extent prevailing landscape character will be unacceptably jeopardized.

43 Turning to the question of whether those key contributing rural landscape factors of vegetation prominence and openness will be maintained should the proposal be implemented. I understand that pasture will remain extant in presence of the solar panels and that this will be grazed. The **Figure 1 photograph** illustrates this effect. From this I am confident that vegetation as pasture, will be sufficiently maintained so as to meet that particular outcome expected by the relevant District Plan provisions. This is not withstanding the fact that it will not be visible due to the screening effects of the proposed mitigation planting.

44 In this regard also, it is noted that the proposed activity is not irrevocable. This is compared to buildings which are generally permanent. That is to say, the solar array harbours the potential for removal thereby enabling restoration of land based productivity. Arising from this is the notion that rural environments are inherently unstable where significant land use changes occur in response to economic drivers. For example, over the last few decades, we have witnessed in rural Canterbury the conversion of forestry and dry land sheep and beef farming to dairy along with its attendant dairy processing plants. Similarly, viticulture has become prominent north of Amberley. In this regard I

also note that the ODP (Rural Volume) recognises change, including diversification and the adoption of new technology and practices, as being characteristic of the rural environment where it states:

> *They* (people carrying out farming and other business activities) *also perceive the rural area as a business area and expect to be able to carry out existing activities; adopt new technology and practices; and to diversify activities as markets change.*[15]

45 The contributing factor is that of openness. Regarding this, the landscape AEE concludes: *"The principal* (sic) *elements of the proposal that will give rise to landscape effects are: - A change from an open, rural landscape to one containing energy infrastructure and solar arrays'*[16]*.* Implicit in this statement is that the quality of rural openness will be diminished at the very least, supported by the qualification that; '*The expanse of open space will be reduced to areas between solar panels.'*[17]

46 This is a more difficult concept to address. Firstly, 'openness' is not defined in the District Plans. Instead, delivery rests on management of building density[18] in the rural zones, and in particular for dwellings. As a general rule, rural buildings are surrounded by space whereas urban buildings surround space.

47 Dictionary definitions include:

- *the state of not being surrounded or covered (*Britannica Dictionary)
- *the quality of not being covered with buildings or trees* (Oxford Languages)
- *the quality of not being enclosed* (Longman)

The key prerequisites appear to be, with the Canterbury rural Plains in mind, an environment free of 'cover' and 'enclosure'. The standards governing building density would appear to address the matter of 'cover'. A consequence is land is free of buildings thereby enabling the presence of

[15] ODP Section B3.4 Quality of the Environment – Issues – Amenity Values / Rural Character
[16] Landscape AEE p12
[17] Landscape AEE p13
[18] Via standards governing minimum site size, site coverage, setbacks, height and such like.

vegetation, irrespective of whether it is trees or pasture. That is to say, vegetation will be the predominant feature of the rural Plains. The proposed solar panels will preclude larger growing vegetation such as trees and shrubs, but evidently not pasture. The latter infiltrates the proposed solar array and as such maintains a certain degree of openness.

48 Enclosure is a little more difficult to adduce. Much of the rural Canterbury Plains are characterised by the presence of numerous shelter belts enclosing paddocks. Their presence precludes or obstruct views both into and across the paddocks. So, in this sense, it would appear that shelter belts have the effect of negating openness and obstructing or intruding views. The only counterpoint is the fact that most people would understand and appreciate the presence of open space beyond the shelterbelts, even though it may not be directly visible. This therefore constitutes a landscape effect.

49 Nonetheless, as the proposal includes shelter belt type planting around the entire Site perimeter, those travelling the adjoining roads[19] will likely perceive the Site interior as comprising open space devoted, somewhat erroneously, to pastural or cropping activity. Fleeting glances via the security gates may dispel that notion, but apart from that, there is nothing outwardly signalling the presence of the solar arrays. Perception of the solar arrays will therefore largely reside within the realm of prior knowledge rather than what is outwardly expressed by the structure itself.

50 Forestry also precludes openness, and yet are regarded as typically rural. It does however fulfil the prerequisite domination of vegetation[20], a factor which contributes significantly to rural amenity. That is, the relative naturalness of forestry compared to built activity is favourable to the delivery of rural character and the amenity derived from it. Additionally, open pasture and crop land tends to surround forestry rather than the converse. As a result, open pasture / crop land occupies a much greater proportion of the rural Canterbury Plains. The same applies to solar arrays generally. In a rural setting they are

[19] Buckleys and Branch Drain roads
[20] PDP GRUZ – P1 Maintain or enhance rural character and amenity values of rural areas by:
1 – retaining a low overall building density, and predominance of vegetation cover.

surrounded by open space as opposed to surrounding open space. This would apply in this case.

51 So, while the solar array will diminish openness by virtue of the land it covers, the sense of openness perceived by the public is not going to be particularly noticeable. This comes down to a combination of the following factors.

52 One is that the array structure is not particularly high. And so, in the vertical dimension little in the way of skyline intrusion will occur, such as that which may result from the presence of buildings. This will have the effect of conveying a sense of openness over and above the array when viewed from nearby vantage points.

53 The second reason is that the Site is entirely surrounded by rural open space dedicated to pastoral and / or cropping activity. The presence of the solar array will have negligible effect on this. Or to put it another way, there will be no spillover effects on the landscape character and amenity of the receiving environment.

54 The third reason is that the solar array is going to be surrounded by and fully screened by shelter belt type planting. While this represents enclosure that results in diminished openness, I consider this to be entirely acceptable given that it is a very common feature within the rural Canterbury Plains.

55 In summary, there will be a significant landscape effect arising from the solar array. The open pastureland character of the Site will transform to one dominated by the physical character of the solar panels. I do acknowledge however, that the Site will maintain pastural activity and as such is infiltrated by a certain degree of green open space. The combination of electricity generation and pastural farming is not entirely foreign to New Zealand's rural environment, as this is commonly the case with regard to wind farms.

56 I also note that the PDP '*Energy and Infrastructure'* objectives and policies set out to, as EI-P9 states: *'Provide for renewable electricity generation and renewable electricity generation activities across the District, while having particular regard to:'* and then goes on to list largely technical matters,

including consideration for location.[21] What this indicates is that the District contemplates the presence of renewable electricity generation across all zones, including the rural. It appears therefore, that the presence of solar arrays is an expected feature in the landscape of the District's rural environment, subject to PDP policy EI -P2.3 preference to avoid, if at all possible, sensitive landscapes such as ONLs / ONFs and VALs[22]. That is to say, they are and will be one component of many contributing to the variable landscape character of the existing environment.

57 While accepting this, the PDP also indicates it has a preference for such activity to be located in certain areas. In this regard, Policy EI-P2.1 states: *encouraging the co-location of structures and facilities where efficient and practicable.* Ideally in landscape terms, co-location would be preferable with activities of a similar ilk such as large scale processing plants (dairy for example), quarries, other forms of electricity generation and even on the outskirts of settlements. But as mentioned, I acknowledge that the location of solar arrays is largely dictated by the need to be close major transmission lines, and as is the case here, a substation.

58 The policies (EI -P2.3) also seek to limit the presence and effects of such activity within ONLs,[23] and VALs in addition to areas of significant indigenous flora and fauna, plus heritage sites and those significant to Māori. Apart from the Wāhi Taonga site, the Site avoids all of the others just listed.

59 Policy EI - P2.2 also wants the location, design and operation of renewable electricity activity to minimise the (adverse) effects on '*…the amenity values of the surrounding environment*….' This matter has been canvassed in the foregoing discussion with reference to the landscape AEE provided by the applicant. Based on this, I am satisfied that the amenity values of the surrounding environment will be appropriately and acceptably managed and therefore minimised. Indeed, there will be very little perceptible change to surrounding amenity as the array will be fully screened and is essentially inert.

[21] EI-P9 sub-policy item 4
[22] ONL – Outstanding Natural Landscapes, ONF – Outstanding Natural Features, VAL – Visual Amenity Landscape

60 So, while the solar array will result in a significant landscape effect, it is not necessarily a more than minor adverse effect. As noted in the landscape AEE, landscape effects can be either positive, negative or neutral. There will be some negative or adverse effect in as much that open pasture will be dominated by the physical presence of solar array infrastructure. This is bearing in mind that the pasture will remain. But for the most part, the landscape effects while significant, will be neutral for the reasons addressed in the preceding discussion. That is to say, the location and extent of the proposed array more or less aligns with what is expected to occur within the existing environment which is characterised by a fairly wide range of various activities. Further, with regard to landscape effects only, the Site is largely optimal in that it avoids and nor is it close to more sensitive landscapes such as ONLs, VALs, waterbodies and waterways and areas of indigenous vegetation. In my opinion the Site and the proposed activity within will result in acceptable landscape effects.

5.0 THE SUBMISSIONS

61 Of the eight submissions received[24], five express concerns over amenity effects. Principally these include the decrease in rural amenity, glare and the change from rural to industrial landscape character.

62 The matters of rural amenity and glare adverse effects have been addressed in the preceding discussion, where I have reached the conclusion that these will be less than minor. The only amenity matter raised by some submitters not addressed in the landscape AEE or by myself is that of noise, where it is claimed this will exceed the WHO[25] standards. In preparing my evidence I have read the Decision regarding 'Energy Bay Limited' application[26] where in addition to consideration of landscape effects, noise was discussed with input from experts. From this it appears that unattenuated noise could adversely affect amenity, but apart from this it is not a matter I can address as it is outside my area of expertise. Further, I understand that a noise assessment has been undertaken by the applicant and that this has been peer reviewed

[24] seven opposed, one support
[25] WHO – World Health Organisation
[26] Before Tararua District Council RC202.2022.136.1 (appended to SDC application documents labelled '*Mangamaire Solar Farm Decision Report Reference'*)

by a Council appointed expert[27]. I note that the one submission in support (Pitcairn Farm Limited who I understand is the current Site owner) claims that, *'Also, rural character will not be affected, due to not being able to see, smell or hear the panels, once established.'*

63 A number of submitters[28] are concerned the character of the Site will go from rural to industrial. In my opinion, the term 'industrial' refers to any activity from which income is derived. In the rural environment for example, we often refer to the dairy industry, wool industry, cropping industry, beef and sheep industry, forestry industry, wine growing industry and so on. Other rural based industries include tourism and recreation (ski field, fishing etc) and indeed cottage industry. Electricity generation industry (hydro dams, wind farms and solar farms) tend also to be rural based industries. It follows therefore, that any component that contributes to any one of those industries is necessarily 'industrial'.

64 So, it is my opinion that what is meant here is that the predominantly natural components of rural activity – namely vegetation and open space – will be supplanted by an activity that is predominantly physical in character, and therefore apparently unnatural. I note that a similar conclusion is reached in the s42A landscape report where it is concluded that; '*In my view the solar structures will dominate the site and bring a predominantly built character to it with consequent effects of at least Moderate (adverse).'* [29] Further on in the s42A report the following observation and conclusion is made:

> *The proposal will reduce the rural character of the Site through the removal of internal shelterbelts and the addition of built structures on most of the Site. While sheep will continue to graze under the solar structures the character of the Site, in my opinion will change to a predominantly built character.*

I agree with these conclusions and as a result the proposed solar array will have an adverse effect on rural amenity, which is largely derived from the relative predominance of natural character, even if it is devoted to the

[27] Marshall Day Acoustics Limited – Mr Farren
[28] Haurere Farms Limited, Clark Casey, Donna and David Kewish
[29] Landscape s42A report – p5

artificialities of production. I think it fair to say that the solar array will not maintain or enhance amenity – but will instead diminish or subtract from it.

65 Having said that, I understand that under the RMA regime, a certain degree of adverse effects arising from activity such as the solar arrays can be entertained. This is provided the adverse effects, even though they may be more than minor, are either avoided, mitigated or remedied to a point where they are rendered less than minor. In my opinion this will be achievable based on what the applicant intends doing in order to minimise potential adverse landscape and visual effects while taking into account what can reasonably expected to occur within the existing environment.

66 The final landscape relevant matter raised in submissions concerns the proposed mitigation planting. Submitter Te Taumutu Rununga (Raymond Henderson) expresses a preference for native plants instead of the exotics proposed by the applicant. Regarding that visual screening is the primary purpose of the planting, I am neutral regarding species so long as the effect is readily achieved in a relatively short time. The exotic species proposed by the applicant are fast growing and will therefore achieve early screening, whereas native plant species tend to be slower. Consequently, screening will take longer. I do acknowledge however, that native plant species, especially if the mix is reasonably diverse, would better provide for fauna both indigenous and exotic. Additionally, a native plant mix would look more natural compared to a mono-cultural exotic regime. So, in these terms a diverse native plant mix would result in a better landscape outcome, while the proposed exotics will more efficiently achieving desired mitigation – that is, visual screening.

6.0 CONCLUSION

67 Context is the key to the assessment of effects on the landscape. And in my consideration of this solar array proposal, the focus is on the existing environment as of the moment and with regard to what is reasonably expected to occur within via the relevant District Plan provisions.

68 It is evident from the District Plans (ODP and PDP) that land use on the rural plains is diverse and primarily given to productivity of one sort or another. The ODP acknowledges this and in its explanation and reasons to Objective

B3.4.2 observes that, firstly this Objective: '…*recognises the Rural zone as an area where a variety of activities take place,* and then lists among them *'A variety of business activities'*. It goes on to state:

69 This diversity may increase in the future if farming and other business activities continue to diversify; and District Plans do not require activities in the rural area to be associated with primary production.

70 It is clear from this that the ODP, and indeed the PDP, recognise that the rural area will not necessarily restrict activity to primary production, and that as a result that landscape character will therefore appear diverse. The proposed solar farm will not be out of keeping with this anticipated outcome.

71 The PDP specifically contemplates electricity generation as one such activity, and does so without specifying any particular type such as wind farms, hydro, solar or coal fired methods. From this, it appears that the presence of attendant structures are expected to occur in the rural environment and in so doing contribute to its landscape character and the amenity arising from it.

72 Another contextual matter centres on the Site and whether or not, in landscape terms, it is special in any way. In my opinion, it is not. It is not a setting that is particularly distinguishable from any other similar location within the rural plains. Additionally, the Site avoids sensitive settings such as those exhibiting high natural character and amenity.

73 It is my opinion that there will be a significant landscape effect resulting from the large scale introduction of a physical structure into an environment that currently rests more toward the natural end of the modification spectrum. But as described, such effects are not unexpected (by the District Plan) and is consistent with the predominantly productive character of the rural Canterbury plains. In associative landscape terms, this means that people would not be surprised to appreciate the presence of such activity as that proposed in this particular setting.

74 Overall, I conclude that adverse landscape effects will therefore be minor.

75 Regarding visual effects, I am satisfied that the proposed mitigation planting in combination with that existing will effectively screen the activity from both neighbouring residences and adjoining roads. Further, the solar array will not adversely affect views to significant landscape features. Consequently, visual effects will be less than minor.

Andrew Craig *Landscape Architect*

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