COUNCIL ASSESSMENT REPORT

| Panel Reference | PPSWES-24 | |
|--|--|--|
| DA Number | DA 423/2019(1) | |
| LGA | Orange City Council | |
| Proposed Development | Electricity Generating Works (Solar Farm) | |
| Street Address | 643 Mitchell Highway (Molong Road) Orange, NSW 2800 | |
| Applicant/Owner | Ms Liza Yeum (applicant), Mr Antonio Ruggiero & Mrs Enrichetta Ruggiero (owners) | |
| Date of DA lodgement | 16/12/2019 | |
| Number of Submissions | 93 (over two rounds of exhibition – 80 in first round, 13 in second round) | |
| Recommendation | That the Western Regional Planning Panel consent to development application DA 423/2019(1) for <i>Electricity Generating Works (solar farm)</i> at Lot 200 DP 1194585 – 643 Mitchell Highway, Orange pursuant to the attached Notice of Approval. | |
| Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011 | Private Infrastructure and community facilities over \$5 million | |
| List of all relevant | Orange Local Environmental Plan 2011 | |
| s4.15(1)(a) matters | Orange Development Control Plan 2004 | |
| List all documents submitted with this report for the Panel's consideration | Final Assessment Report Final Notice of Determination (and recommended conditions of consent) Agency Submissions Public Submissions | |
| Report prepared by | Andrew Crump – Senior Town Planner, Orange City Council | |
| | | |

| Summary of s4.15 matters | |
|---|----------------|
| Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive | Yes |
| Summary of the assessment report? | |
| Legislative clauses requiring consent authority satisfaction | |
| Have relevant clauses in all applicable environmental planning instruments where the consent | Yes |
| authority must be satisfied about a particular matter been listed, and relevant recommendations | |
| summarized, in the Executive Summary of the assessment report? | |
| e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP | |
| Clause 4.6 Exceptions to development standards | |
| If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been | Not Applicable |
| received, has it been attached to the assessment report? | |
| Special Infrastructure Contributions | |
| Does the DA require Special Infrastructure Contributions conditions (S7.24)? | Not Applicable |
| Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require | |
| specific Special Infrastructure Contributions (SIC) conditions | |
| Conditions | |
| Have draft conditions been provided to the applicant for comment? | Yes |
| Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, | |
| notwithstanding Council's recommendation, be provided to the applicant to enable any comments to | |

be considered as part of the assessment report

| 2020/ | | |
|----------------|---|--|
| REPORT TO | WESTERN REGIOI TO BE CONFIRME | N PLANNING PANEL D |
| FROM | SENIOR PLANNER | R (CRUMP) |
| DATE | 20 OCTOBER 2020 | 0 |
| ON | DEVELOPMENT A 643 MITCHELL HI ELECTRICITY GEN | PPLICATION GHWAY ORANGE ERATING WORKS (SOLAR FARM) |
| | | PR26437 - IC19/27274 |
| Application Lo | odged | 16 December 2019 |
| Development | Application No | DA 423/2019(1) |
| Plan No/s | | Plans by itp Renewables Drawing no: ORA2B-G-040 Rev 1; ORA2B-G-210 Rev 2; ORA2B-G-211 Rev 2; ORA2B-C-120 Rev 1; ORA2B-C-120 Rev 2; ORA2B-C-430 Rev 1; ORA2B-C-530 Rev 1; ORA2B-C-610 Rev 2; ORA2B-C-620 Rev 1; ORA2B-C-710 Rev 2; ORA2B-C-710 Rev 2; ORA2B-E-341 Rev 1; ORA2B-E-411 Rev 2; ORA2B-E-430 Rev 1; ORA2B-E-530 Rev 1; (14 sheets) |
| Applicant | | ITP Development PTY LTD PO Box 6127 OCONNOR ACT 2602 |
| Owner/s | | Mr A and Mrs EB Ruggiero 13 Moulder Street ORANGE NSW 2800 |
| Land Descript | ion | Lot 200 DP 1194585 - 643 Mitchell Highway ORANGE |
| Proposed Lane | d Use | Electricity Generating Works (solar farm) |
| Value of Prop | osed Development | \$8,965,861.00 (exc. GST) |
| | | |

| Provisions of LEP 2011 (amended) | Zone RU1 Primary Production |
|-------------------------------------|--|
| Details of Advertisement of Project | Advertised on two separate occasions |
| | Advertised in the Central Western Daily on Thursday, 6 February 2020 and neighbouring properties notified. Exhibition closed on Friday, 6 March 2020. |
| | Advertised a second time on Saturday, 29 August 2020. Exhibition closed Monday 28 September 2020. |
| Recommendation | Approval |

EXECUTIVE SUMMARY

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|-------------------------------|---|
| Application lodged | 16 December 2019 |
| Applicant/s | ITP Development PTY LTD |
| Owner/s | Mr A and Mrs EB Ruggiero |
| Land description | Lot 200 DP 1194585 - 643 Mitchell Highway, Orange |
| Proposed land use | Electricity Generating Works (solar farm) |
| Value of proposed development | \$8,965,861.00 (exc. GST) |

The consent of the Western Region Planning Panel is sought for the construction and operation of an electricity generating works comprising a 5MW solar energy facility (solar farm hereafter). The development is proposed on a 78.2ha rural zoned property known as 643 Mitchell Highway (legally described as Lot 200 DP 1194585). Refer to below locality plan.



Figure 1 - locality plan (subject land shown blue)

Project Summary:

| Aspect | Description | |
|--------------------------|--|--|
| Project Summary | The development involves the following: | |
| | • 5 MW capacity (6.46 MWp DC) solar system. | |
| | 12,180 solar modules, installed in 140 rows, approximately 103m in length, 2m wide and 6.25m wide aisles between panels. | |
| | Solar modules will have single axis tracking, meaning the panels will track the sun (east to west) throughout the day. | |
| | Panels will have a maximum height of 2.6m (fully tilted) at 60 degrees from the horizontal. | |
| | Two skid mounted 3.0MW inverters. | |
| | Battery storage via a 5MWh Battery Energy Storage System. | |
| | Security fencing will be 2.3m chain wire with three rows of barbwire. | |
| | Demolition of ancillary farming structures. | |
| | Removal of a Eucalyptus tree. | |
| | New access off the Mitchell Highway. | |
| Electricity Authority | Essential Energy | |
| Site Area | 78.2ha | |
| Development footprint | 10.8ha (13.8% of total site) | |
| (fenced Area) | | |
| Site Access | Via Mitchell Highway which is a classified road. The nearest | |
| | intersection to the proposed access point is the intersection | |
| | with Thompson Road and the Highway approximately 300m to | |
| | the east of the proposed access. | |
| Operational Life | Indefinitely (but realistically 35 years based on expected life of | |
| Construction Dhose | panels). | |
| construction Phase | Friday | |
| Employment | 50 personnel during construction and 2 staff when operational | |
| Canital Investment Value | | |
| Capital Investment Value | \$8,965,861.00 (exc. GST) | |

Project Summary (cont)

The development is depicted diagrammatically below.



Figure 2: excerpt of site plan/general arrangement plan

Engagement

The development is categorised as Nominated Integrated Development given the approval requirements for works within the vicinity of a defined water course (Broken Shaft Creek) which requires a 28 Day exhibition period. The development was exhibited for the requisite period commencing 7 February 2020.

During this period, Council was contacted by three immediately adjoining land holders to discuss the development. At this time Council staff extended an offer to meet these landholders at their properties to better understand the impacts the development presented. This occurred on Tuesday, 25 February 2020. Photos were taken and are used in the below visual impact assessment.

At the conclusion of the exhibition period a total of 80 submissions were received, 59 objections and 21 in support of the project.

The submissions were furnished to the applicant accompanied by a request to provide a detailed response to the matters raised. Out of this request, the applicant elected to make the following amendments:

- Reduction in total fenced area from 11.5ha down to 10.8ha.
- Number of solar panels reduced from 14,337 to 12, 180.
- Rows of solar panels have been moved away from the western boundary by approximately 40m. As a result, the panels extend further south by approximately 55m.
- The Battery Energy Storage System (BESS station) and inverters have been relocated to the eastern side of the facility.
- The amount of landscaping offered has increased.
- The location of the access moved further west.

Engagement (cont)

These changes constitute a material amendment to the application and as such re-exhibition was required. Following this, a further 13 submissions were received. The submissions have been considered by Council staff. A summary matrix of key themes is provided as an appendix to this report and the key themes are addressed in detail within the report.

Assessment

A detailed assessment of all relevant matters is provided below. The central matters identified out of the below assessment relate to the suitability of the site for the proposed development - primarily relating to the development's effect on future housing supply under Council's housing strategy; and the visual impacts - primarily from nearby residential receivers. Other matters such as the adequacy of the proposed landscaping, the removal of a large mature eucalypt tree, construction noise and traffic impacts are also addressed in detail.

Summary

The proposed development is permissible with the consent of the Western Region Planning Panel pursuant to clause 34 of State Environmental Planning Policy (Infrastructure). The proposed development is not inconsistent with the relevant aims, objectives and provisions of Orange LEP 2011 (as amended) and Orange Development Control Plan 2004.

The subject land is identified as a future residential area in Council's long term housing strategy; the forward projections indicate that the land will not be required within the next 15-20 year timescale. Beyond this period however; it is expected that those parts of the site that are unencumbered/more easily serviced, will be required within the 20-25 year timescale. Based on the comments in the submitted SoEE, the development is likely to impact on the supply of residential land within the life-cycle of the development.

That being said, the rapid growth of renewable energy technologies adds another complexity to this equation. It is near impossible to predict whether this project will remain commercially viable past the 20 year mark; or whether technology advances between now and 2040 will mean that current solar technologies have advanced to the point where technologies contemplated in this application are redundant, or replaced with much more efficient technology where the same throughput of electricity can be generated using much less land area.

With this in mind, the panel may feel it prudent to impose a condition limiting the capacity of the development to not more than 5MW (AC). Doing so would: firstly, ensure that as efficiencies improve the scale of the of the development does not exceed any thresholds for designated development (30MW threshold); and secondly, it would serve to reduce the size of the facility over time, which would assist in reducing the amount of sterilised land occupied by the development which could potentially coincide with the residential progression to the north-west.

A section 4.15 assessment of the development indicates that the development results in unsatisfactory visual impacts in the locality; some of which cannot be entirely ameliorated even once landscaping has reached maturity. Moreover, it is acknowledged that extensive conditions of consent are required to ensure that the development is within acceptable levels. Given these two factors, it would open for the Panel to consider these impacts unacceptable; and thence refuse the development.

Attached is a draft Notice of Approval outlining a range of conditions considered appropriate to ensure that the development proceeds in an acceptable manner.

FINANCIAL IMPLICATIONS

Nil

POLICY/GOVERNANCE IMPLICATIONS

Nil

RECOMMENDATION

That the Western Regional Planning Panel consent to development application DA 423/2019(1) for *Electricity Generating Works (solar farm)* at Lot 200 DP 1194585 – 643 Mitchell Highway, Orange pursuant to the attached Notice of Approval.

THE APPLICATION

The Western Region Planning Panel's consent is sought to construct and operate a 5MW solar farm on land described as Lot 200 DP 1194585, known as 643 Mitchell Highway, Orange. The development is depicted in the Figure 3 below.



Figure 3: excerpt of site plan/general arrangement plan

The development is described in the summary table below.

Development Summary

| Aspect | Description | |
|--|--|--|
| Project Summary | The development involves the following: | |
| | • 5 MW capacity (6.46 MWp DC) solar system. | |
| | 12,180 solar modules, installed in 140 rows, approximately 103m in length, 2m wide and 6.25m wide aisles between panels. | |
| | Solar modules will have single axis tracking, meaning the panels will track the sun (east to west) throughout the day. | |
| | Panels will have a maximum height of 2.6m (fully tilted) at 60 degrees from the horizontal. | |
| | Two skid mounted 3.0MW inverters. | |
| | Battery storage via a 5MWh Battery Energy Storage System. | |
| | Security fencing will be 2.3m chain wire with three rows of barbwire. | |
| | Demolition of ancillary farming structures. | |
| | Removal of a Eucalyptus tree. | |
| | New access off the Mitchell Highway. | |
| Electricity Authority | Essential Energy | |
| Site Area | 78.2ha | |
| Development footprint (fenced Area) | 10.8ha (13.8% of total site) | |
| Site Access | Via Mitchell Highway which is a classified road. The nearest | |
| | intersection to the proposed access point is the intersection | |
| | with Thompson Road and the Highway approximately 300m to | |
| | the east of the proposed access. | |
| Operational Life | panels). | |
| Construction Phase | Three months. Construction Hours: 7am to 4pm Monday to | |
| | Friday. | |
| Employment | 50 personnel during construction and 2 staff when operational | |
| Capital Investment Value | \$8,965,861.00 (exc. GST) | |

BACKGROUND

ITP Renewables lodged a development application for a solar farm on the land the subject of this application in November 2019. Under that application, access to the proposed facility relied on the adjoining right-of-way at 641 Mitchell Highway.

There was significant works required within the right-of-way to enable vehicles to enter the site, and as such the adjoining land was required to be included in the application as the land to which the application relates.

Background (cont)

Council staff met with the owner of the adjoining land, and during those discussions it became apparent that owner's consent from the adjoining owner was unlikely to be provided, and as such Council staff rejected the application.

In rejecting the application a number of anomalies/errata within the submitted material were highlighted to the applicant, including inconsistencies.

A subsequent application was lodged on 16 December 2019, which is the application currently before the Panel. The application when lodged selected an access point approximately 100m west of the adjoining land's access point and the intersection with Thompson Road.

The application was identified as an integrated development under the *Roads Act*. Council staff have obligations once an application is made for an integrated development to ensure all necessary approvals are obtained.

Council staff conversed with the NRAR and the Department of Primary Industries – Fisheries. The outcome of those discussions identified that approval was required under the *Water Management Act*, but not under the *Fisheries Management Act*. The application was amended accordingly.

During the assessment period TfNSW provided Council with an additional information request which alerted the applicant to the road upgrade requirements of the proposed access point, and also intimated the likely costs associated with the upgrade works and requested the works be fully costed as part of the overall CIV of the development.

The applicant reviewed their options relating to the access point and decided to pursue an alternative access point further west of the initially proposed access point. The revised access point is approximately 300m west of the Thomson Road intersection.

At the same time Council furnished redacted submissions to the applicant and requested a response to submissions. In responding to the submissions, the applicant elected to amend the application in an attempt to ameliorate some of the submitters' concerns. These primarily related to visual impacts likely to be experienced by residential receivers to the west.

The following amendments were made pursuant to clause 55 of the EP&A Regulations:

- Reduction in total fenced area from 11.5ha down to 10.8ha.
- Number of solar panels reduced from 14,337 to 12, 180.
- Rows of solar panels have been moved away from the western boundary by approximately 40m. As a result, the panels extend further south by approximately 55m.
- The Battery Energy Storage System (BESS station) and inverters have been relocated to the eastern side of the facility.
- The amount of landscaping offered has increased.

Council staff accepted the amended design and subsequently the application was re-exhibited.

STRATEGIC CONTEXT - Future Land Use

The subject land is located in the north-western corner of the Orange LGA. The land and neighbouring properties have historically been used for agricultural purposes, primarily grazing; and land zonings have historically reflected this, with rural zoning affecting the land since the inception of the modern planning system.

In 2004 Council commenced preparations of a long-term residential planning strategy, known as the Sustainable Settlement Strategy (SSS) 2004, the purpose of which was to guide future land-use planning decisions involving land on the fringe of the City's urban area.

A review of the SSS occurred in 2010.

The subject land is identified in the original SSS as Land Unit 4 – Broken Shaft Creek Valley as a long term development option for residential land. This was reaffirmed as part of the 2010 review (refer Figure 4 below).



Figure 4: excerpt from Sustainable Settlement Strategy Review (2010) (subject property identified by red star)

The updated SSS in regards to LU-4 recommends that:

This area should be a holding area in the event that urban development in the Broken Shaft Creek valley (LU-4 and LU-5) is required. This is only likely beyond the life of this strategy. Building siting and subdivision controls should be implemented which allow urban residential development to displace rural residential development when Council decides that Broken Shaft Creek valley should be developed for urban purposes.

The SSS also suggests that development in the Broken Shaft Creek Valley would necessitate a new waste water treatment plant in the vicinity to service potential new urban development areas west, northwest and southwest of the Ploughmans Creek Valley (ie Land Units Lu-4 to LU-9).

Strategic Context - Future Land Use (cont)

Council staff have recently commenced preparations of a new housing strategy. The community/landholders were invited to register their interest in participating in the strategy earlier this year. The strategy has not been finalised at this point and thus has not been formally exhibited. However, it is expected that the subject land will remain a candidate site for future housing in the new housing strategy.

Council's Strategic Planner has advised that based on forward projections, it is not anticipated that this particular parcel will be required for residential housing stock within the 15-20 year timescale. Beyond this however, it is likely to be required.

Impacts on Supply

The development footprint being 10.8ha, and factoring in a reasonable curtilage of around the same area, equates to approximately 20ha that is potentially sterilised by this development. Currently approximately 230 houses are required annually within the Orange LGA. By 2040 this is expected to increase to approximately 300 houses annually. Based on 10 houses/ha this development equates to around 200 houses or 66% of an annual supply of housing.

Advice from Council's Technical Services Division indicates that future development within the Broken Shaft Creek Valley will require a major pumping station for sewer - noting that the previously envisaged second sewerage treatment plant will not be required. Moreover, a large amount of the subject land is constrained given topography and the presence of defined water courses and Broken Shaft Creek. Additionally, it is noted that progression of the residential areas to the northwest of the city will logically occur by extension from the existing urban areas. As such, the subject land is likely to be one of the last properties to be redeveloped for residential purposes as part of existing strategies.

It is noted that the development footprint relates to the land that is least encumbered, and as such the development site would relate to the area identified for residential housing.

With the above in mind, the Panel could consider imposing a restricted life span on the consent of a period not more than 30 or 35 years.

The condition should have flexibility in it to allow for an extension of time should the demand for housing happen slower than expected (ie the consent could be modified to allow another 3, 5 or 10 years for example).

Such a condition gives Council and the community some certainty that the development would not unreasonably fetter the land from being redeveloped for residential housing beyond that period if required. Should the applicant feel aggrieved by such a condition, it is noted that the condition is simply a consequence of proposing a development of this type in this location.

A condition is attached limiting the life of the development to a period of 35 years.

Notwithstanding the above, the development is permissible in the RU1 zone under State Environmental Planning Policy (Infrastructure). It would not be reasonable to refuse the development on the grounds that the subject land is located in a possible future residential area.

Local Strategic Planning Statement (LSPS)

Council recently adopted the LSPS. The LSPS acts as a link between the strategic priorities identified at a regional or district level, and the finer-grained planning at a local level expressed in Council's Local Environmental Plan and Development Control Plans to ensure consistency in strategic planning approaches. The listed priorities are not hierarchical.

The development is not inconsistent with the LSPS. The development is consistent with priorities 15 and 16 which are:

- Manage energy, water and waste efficiently to ensure a sustainable urban environment; and
- Adapt to the impacts of hazards and climate change respectively.

The housing related priorities are addressed above via the SSS and housing strategy.

BLAYNEY CABONNE ORANGE (BCO) - Subregional Rural and Industrial Lands Strategy

The BCO – Subregional Rural and Industrial Lands Strategy (Sub-regional Strategy hereafter) relates to the LGAs of Blayney and Cabonne Shires and Orange City councils, and provides a long term strategic planning framework for rural and industrial land within the three LGAs.

A revised subregional strategy has been the subject of public consultation in the Blayney and Cabonne LGAs, and at the time of preparing this report is on exhibition in the Orange LGA.

The draft subregional strategy is relevant in the assessment of this application for two reasons. Firstly it endeavours to preserve land to the west of Pinnacle Road in the Towac area for agricultural uses. Part of this area is identified as future residential land is the SSS. This will have the effect of other land within the SSS being developed sooner, ie. land within the Broken Shaft Creek Valley area.

Secondly, there is a section specifically related to solar farms at Appendix D. The draft sub-regional strategy identifies that solar farms in rural areas can lead to the loss of prime agricultural land. It also highlights the possibility of impacts on adjoining land-uses, particularly residential land-uses and the broader impacts on the rural landscape character and amenity as the keys issues in the consideration of solar farms.

The draft Sub-regional Strategy recommends a policy framework including the preparation of DCP controls to provide more certainty in the community and for developers alike. The framework would ultimately be used on the site selection process to ensure that only the most appropriate land is identified for solar farm projects. This would include ensuring that low value agricultural land is used, that the site is in proximity to electricity infrastructure for grid connections, and also the NSW Government's Large Scale Solar Energy Guidelines are enshrined in the DCP to ensure that greater consistency and certainty is achieved.

The draft Sub-regional Strategy also recommends that a mechanism be introduced in the planning framework to explicitly prohibit medium and large¹ solar farms from being permissible in the rural landscape of Mt Canobolas.

¹ The draft subregional strategy does not define numerically what a medium or large scale solar farms are.

As this strategy is in draft form, it has not progressed to the point where DCP controls have been contemplated. Notwithstanding this, the applicant submits that the Large Scale Solar Energy Guidelines (whilst not applying to this development) have been used to guide the site selection and preparation of the development application; and Council staff have used the guidelines to also guide the assessment of the application.

The following assessment indicates that the development is not inconsistent with either; the current Sub-regional Strategy, or the draft strategy that is currently on exhibition with Orange City Council.

Central West and Orana Regional Plan

The Central West and Orana Regional Plan sets a long term vision for the Central West and Orana area. The regional plan specifically seeks to increase the amount of renewable energy being produced in the Central West and Orana (direction 9).

As such, the proposed development is considered to be consistent with the Regional Plan.

There are no other strategic plans or policies applicable to this development.

MATTERS FOR CONSIDERATION

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Objects of the Act

The objects of this Act are as follows-

- (a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,
- (b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,
- (c) to promote the orderly and economic use and development of land,
- (d) to promote the delivery and maintenance of affordable housing,
- (e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,
- (f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),
- (g) to promote good design and amenity of the built environment,
- (h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,
- (i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,
- *(j)* to provide increased opportunity for community participation in environmental planning and assessment.

Matters for Consideration (cont)

The development is not fundamentally inconsistent with the objects of the Act, save for objects (c) and (g) which are dealt with separately below. In this regard the development;

- provides for an ecologically sustainable development through the use of renewables;
- does not impact upon any threatened species, nor does it significantly impact upon the habitat of threatened species or impact upon any endangered ecological communities;
- is not expected to impact any important cultural heritage sites within the locality;
- is required to be considered by the WRPP; and
- community participation has occurred consistent with the Regulations and Council's Community Participation Plan.

In respect of object (c), the development has the potential to fetter the orderly development of land in this location within the expected life-cycle of the development (35-37 years). However, the impact on supply of housing is likely to be limited to 2/3 of one year's supply of housing.

In respect of object (g), the development will alter the rural landscape from what is currently experienced. However, as described below in the detailed assessment of visual impacts, the changes to the amenity of the location are within acceptable limits.

Section 1.7 - Application of Part 7 of the *Biodiversity Conservation Act 2016* and Part 7A of the *Fisheries Management Act 1994*

Section 1.7 of the EP&A Act identifies that Part 7 of the Biodiversity Conservation Act 2016 (BC Act) and Part 7A of the Fisheries Management Act 1994 have effect in connection with terrestrial and aquatic environments.

There are four triggers known to insert a development into the Biodiversity Offset Scheme (ie the need for a BDAR to be submitted with a DA):

- <u>Trigger 1</u>: development occurs in land mapped on the Biodiversity Values Map (OEH) (clause 7.1 of BC Regulation 2017);
- <u>Trigger 2</u>: development involves clearing/disturbance of native vegetation above a certain area threshold (clauses 7.1 and 7.2 of BC Regulation 2017); or
- <u>Trigger 3</u>: development is otherwise likely to significantly affect threatened species (clauses 7.2 and 7.3 of BC Act 2016).

The fourth trigger (development proposed to occur in an Area of Outstanding Biodiversity Value (clause 7.2 of BC Act 2016) is generally not applicable to the Orange LGA; as no such areas are known to occur in the LGA. No further comments will be made against the fourth trigger.

<u>Trigger 1</u>

The subject land is partly mapped on the biodiversity values mapping. The mapped area relates only to Broken Shaft Creek. Notwithstanding the presence of a mapped portion of the land; the works proposed are well separated from the mapped area, and as such the development does not activate this trigger.

Section 1.7 - Application of Part 7 of the *Biodiversity Conservation Act 2016* and Part 7A of the *Fisheries Management Act 1994* (cont)

Trigger 2

The land has a minimum lot size of 100ha; accordingly, the applicable threshold is one hectare. It is noted that the development requires the removal of one isolated remnant native eucalypt and, since the amended access point, two exotic deciduous trees within the areas of the stock yards. The proposed clearing (one native tree and two deciduous trees) is well below the applicable clearing threshold, and accordingly this trigger is not activated.

It should be noted that Council staff have provided options for the Panel in dealing with the removal of the subject eucalypt tree.

<u>Trigger 3</u>

With regard to the third trigger, the test for determining whether proposed development is otherwise likely to significantly affect threatened species is listed in the *BC Act 2016*, under s7.3:

- (a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,
- (b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:
 - (i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or
 - (ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,
- (c) in relation to the habitat of a threatened species or ecological community:
 - (i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and
 - (ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and
 - (iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,
- (d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),
- (e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.

Section 1.7 - Application of Part 7 of the *Biodiversity Conservation Act 2016* and Part 7A of the *Fisheries Management Act 1994* (cont)

<u>Trigger 3</u> (cont)

In respect of the above, the development is not likely to significantly affect any endangered ecological communities, threatened species or habitat due to the following:

- The land is zoned RU1 Primary Production.
- The land has an extensive history of being used for grazing purposes; and on the development side of Broken Shaft Creek the land is largely cleared and highly disturbed, save for a small and relatively isolated stand of native vegetation on the north-eastern side of Broken Shaft Creek and two isolated native trees in the north-eastern corner of the site (noting that one of these isolated trees is proposed to be removed).
- The development footprint is well separated from the small area of mapped high biodiversity sensitivity located in the north-western corner of the site.
- The development is reasonably separated from the mapped area of high value biodiversity land, being the creek line.
- There are no known occurrences of any vulnerable listed fauna within the site according to the NSW OEH BioAtlas database.
- There are no endangered ecological communities within the development footprint or within the vicinity of the development footprint.
- The land provides little potential for habitat other than the native trees noted above and the creek system.

The removal of a large and healthy, albeit isolated eucalypt is unfortunate. Council staff are of the view that a better design, a design sympathetic to the tree's continued existence, could have seen the retention of the tree; and this could have been achieved whilst at the same time overcoming the competing interests, such as the overshadowing of the panels caused by the tree and topographic constraints.

However, the applicant is insistent that retention of the tree would not be possible. In this regard the applicant submits the following:

The project will require the removal of a single eucalypt tree at the south-eastern corner of the array. While our preference would have been to design the project in a way that the tree could remain, unfortunately this will not be possible. ITP proposes to offset the removal of this tree by planting 500 trees around the perimeter of the solar farm. We propose to plant a mix of native Hakea, Melaleuca, Leptospernum, Acacia, depending on local availability.

We have explored numerous options to avoid removing the large tree. The tree currently creates a large area of shading to the east, west and south of its location. Each tracking row is over 100m long, and whole lengths of trackers will need to be removed to accommodate the tree. We explored moving some panels to the west, however, this would require additional trees to be removed. It would also result in the solar farm moving closer to neighbours to the west of the proposed solar farm. Unfortunately, given the topography limitations of the site, we have been unable to accommodate this tree into the development.

Section 1.7 - Application of Part 7 of the *Biodiversity Conservation Act 2016* and Part 7A of the *Fisheries Management Act 1994* (cont)

<u>Trigger 3</u> (cont)

Council's Manager City Presentation has indicated strong objection to the loss of the subject eucalypt, indicating that the tree is in sound health and condition; it is estimated to be 150-plus years of age and has considerably more life expectancy. Moreover, the loss of such a tree for a project with an estimated life-cycle of 25-35 years is unacceptable.

Whilst the loss of the tree is unfortunate (particularly noting the ethos of the development being ecologically sustainable development and a positive for the environment generally), the loss of an isolated mature eucalypt in a highly disturbed grazing paddock is unlikely to give rise to unacceptable impacts on the biodiversity of the area. Moreover, the tree is unlikely to be retained at the point in time this land is developed for residential purposes, acknowledging that this is not likely to occur for at least 20-plus years.

Options available to the Panel are:

- 1 Consider the impact of the loss of the tree unacceptable and thus a reason to not support the development; or
- 2 Require amendments the application to retain the subject tree. It is noted that doing so would result in approximately 12 rows of solar modules being deleted or relocated within the site (not accounting for overshadow impacts), and the consequence of relocating will mean the development creeps closer to neighbours; or
- 3 Allow the tree to be felled; but so as to preserve some positives gains to the biodiversity and habitat value of the area it is recommended that a condition be imposed that requires the tree to be felled in large 6m or greater sections, and those sections be placed in the stand of native trees to the west of the development footprint so as to improve habitat for ground dwelling fauna within the site. The objectives of this condition are not considered a means of off-setting an impact, but rather best practice and an attempt to retain value in the tree once it is removed; or
- 4 Allow the tree to be felled unconditionally.

It is recommended that option 3 be adopted. A condition to this effect is imposed on the draft Notice of Approval.

Section 4.15 – EVALUATION

Section 4.15 of the *Environmental Planning and Assessment Act 1979* requires Council to consider various matters, of which those pertaining to the application are listed below.

PROVISIONS OF ANY ENVIRONMENTAL PLANNING INSTRUMENT s4.15(1)(a)(i)

Orange Local Environmental Plan 2011

Part 1 - Preliminary

Clause 1.2 - Aims of Plan

The broad aims of the LEP are set out under subclause 2. Those relevant to the application are as follows:

- (a) to encourage development which complements and enhances the unique character of Orange as a major regional centre boasting a diverse economy and offering an attractive regional lifestyle,
- (b) to provide for a range of development opportunities that contribute to the social, economic and environmental resources of Orange in a way that allows present and future generations to meet their needs by implementing the principles for ecologically sustainable development,
- (c) to conserve and enhance the water resources on which Orange depends, particularly water supply catchments,
- (d) to manage rural land as an environmental resource that provides economic and social benefits for Orange,

The application is considered to be consistent with aims (a), (b), (c) and (d) listed above.

The development is not considered inconsistent with aims (e) and (f), but additional commentary is warranted. To this end the following is noted:

- (e) to provide a range of housing choices in planned urban and rural locations to meet population growth,
- (f) to recognise and manage valued environmental heritage, landscape and scenic features of Orange.

In respect of aim (e) above, the development being located on land identified in Council's Sustainable Settlement Strategy review (2010) as a long term residential development option has the potential to sterilise this area from being rezoned for residential purposes in the long term.

In respect of (f) above, as detailed below, the development will alter the landscape character of the area from what is currently experienced. The development will be exposed to views from the Mitchell Highway, being an important entrance in to the City, as well as from residential receivers in elevated positions in relatively close proximity to the development.

Clause 1.6 - Consent Authority

This clause establishes that, subject to the Act, Council is the consent authority for applications made under the LEP.

Notwithstanding the above clause, as detailed below under the heading State Environmental Planning Policy (State and Regional Development) 2011, the development is declared regionally significant, and as such the Western Regional Planning Panel is the consent authority pursuant to section 4.5(b) of the Act. Any reference to Council as the consent authority shall be taken to mean the Western Region Planning Panel (WRPP hereafter).

Clause 1.7 - Mapping

The subject site is identified on the LEP maps in the following manner:

| Land Zoning Map: | Land zoned RU1 – Primary Production |
|----------------------------------|---|
| Lot Size Map: | Minimum Lot Size 100ha |
| Heritage Map: | Not a heritage item or conservation area |
| Height of Buildings Map: | No building height limit |
| Floor Space Ratio Map: | No floor space limit |
| Terrestrial Biodiversity Map: | High biodiversity sensitivity on the site |
| Groundwater Vulnerability Map: | Groundwater vulnerable |
| Drinking Water Catchment Map: | Not within the drinking water catchment |
| Watercourse Map: | Not within or affecting a defined watercourse* |
| Urban Release Area Map: | Not within an urban release area |
| Obstacle Limitation Surface Map: | No restriction on building siting or construction |
| Additional Permitted Uses Map: | No additional permitted use applies |
| Flood Planning Map: | Not within a flood planning area |

*a defined water course traverses the land, being Broken Shaft Creek; however, the development footprint is well-separated from the defined watercourse.

Those matters that are of relevance are addressed in detail in the body of this report.

Clause 1.9A - Suspension of Covenants, Agreements and Instruments

This clause provides that covenants, agreements and other instruments which seek to restrict the carrying out of development do not apply with the following exceptions.

- (a) to a covenant imposed by the Council or that the Council requires to be imposed, or
- (b) to any relevant instrument under Section 13.4 of the Crown Land Management Act 2016, or
- (c) to any conservation agreement under the National Parks and Wildlife Act 1974, or
- (d) to any Trust agreement under the Nature Conservation Trust Act 2001, or
- (e) to any property vegetation plan under the Native Vegetation Act 2003, or
- (f) to any biobanking agreement under Part 7A of the Threatened Species Conservation Act 1995, or
- (g) to any planning agreement under Subdivision 2 of Division 7.1 of the Environmental Planning and Assessment Act 1979.

Council staff are not aware of the title of the subject property being affected by any of the above.

Part 2 - Permitted or Prohibited Development

Clause 2.1 - Land Use Zones and Clause 2.3 - Zone Objectives and Land Use Table

The subject site is located within the RU1 Primary Production Zone. The proposed development is characterised as Electricity Generating Works under OLEP 2011.

Electricity Generating Works means:

a building or place used for the purpose of—

- (a) making or generating electricity, or
- (b) electricity storage.

The land-use table for the RU1 zone includes land-uses that are permissible with and without consent. Anything not listed in those two categories defaults to being impermissible. It is noted that electricity generating works are not expressly listed in either of the two permissible categories. Accordingly, the development is not permissible under the LEP.

Notwithstanding the above noted impermissibility, the LEP references (via a note under clause 2.1) a number of applicable environmental planning instruments, and expressly lists State Environmental Planning Policy (Infrastructure) 2007 and acknowledges that electricity generating works are regulated by the SEPP (Infrastructure)².

Clause 2.3 of LEP 2011 references the Objectives for each zone in LEP 2011. The objectives for land zoned RU1 – Primary Production are as follows:

1 - Objectives of the RU1 Primary Production Zone

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To promote the unique agricultural character of Orange and facilitate a variety of tourist and visitor accommodation land uses that are compatible with agriculture.
- To ensure that development along the Southern Link Road has an alternative access.

The development is not fundamentally inconsistent with the above objects, specifically the following is noted:

- In respect of objective 1, the development will occupy approximately 13.8% of the site, with the balance of the land remaining available for primary production as grazing land. It is noted that there are opportunities for grazing within the development footprint to continue via sheep grazing during operation.
- In respect of objective 2, the development will not discourage diversity of primary industry production on the balance of land outside of the development footprint.

1 - Objectives of the RU1 Primary Production Zone (cont)

- In respect of objective 3, the development will not unreasonably fragment agricultural land, nor will the development alienate the land for agricultural purposes. It is noted that the applicant has submitted that sheep grazing within the development site is possible as means of continuing the agricultural use of the land, as well as a means of weed suppression. Such practices are known to occur on similar facilities within the Central West.
- In respect of objective 4, the immediately surrounding land is all zoned RU1 Primary Production. The nearest non-RU1 zoned land is the land in Murphy Lane to the south of the development and Ammerdown Estate to the east. These two areas are well separated from the development site, and as such the development is not likely to result in any land-uses conflicts.

This objective relates more to the interface of zone boundaries where agricultural practices such as spray-drift could impact a residential area.

There are no such interfaces with respect to this land.

- In respect of objective 5, the development would not prevent tourist and visitor accommodation from co-existing on the site. The development footprint of 10.8ha will result in 86% of the site remaining available as a working farm, meaning that farm stay accommodation, for instance, could be contemplated in the future.
- In respect of objective 6, this objective is not relevant to the application.

Clause 2.7 - Demolition Requires Development Consent

The proposal involves demolition of ancillary farm buildings and structures, and the applicant is seeking the consent of the WRPP. The demolition works proposed will have no significant impact on adjoining lands, streetscape or public realm. Conditions requiring the demolition works to be in accordance with the relevant Australian Standard are recommended to be imposed.

Part 3 - Exempt and Complying Development

The application is not exempt or complying development.

Part 4 - Principal Development Standards

Clause 4.1 - Minimum Subdivision Lot Size

This clause requires the subdivision of land to be equal to or greater than the size nominated for the land under the Minimum Lot Size Map.

The land comprises a 100ha minimum lot size.

Up until recently, any lease of land for an extended period of time (typically five years or greater) triggered a requirement for subdivision under the *Conveyancing Act 1919*.

The Office of the Registrar General recently advised that the lease of land for the purposes of a solar farm will be a lease of premises, thereby not constitute a 'current plan' within the meaning of section 7A of the *Conveyancing Act 1919*; thence, subdivision consent under section 23G of the *Conveyancing Act 1919* is not required.

Relevantly, subdivision consent is not required for this application and the minimum lot size provisions are not relevant to the assessment.

Part 6 - Urban Release Area

Not relevant to the application. The subject site is not located in an Urban Release Area.

Part 7 - Additional Local Provisions

7.1 - Earthworks

This clause establishes a range of matters that must be considered prior to granting development consent for any application involving earthworks, such as:

- (a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality of the development
- (b) the effect of the development on the likely future use or redevelopment of the land
- (c) the quality of the fill or the soil to be excavated, or both
- (d) the effect of the development on the existing and likely amenity of adjoining properties
- (e) the source of any fill material and the destination of any excavated material
- (f) the likelihood of disturbing relics
- (g) the proximity to and potential for adverse impacts on any waterway, drinking water catchment or environmentally sensitive area
- (h) any measures proposed to minimise or mitigate the impacts referred to in paragraph (g).

The earthworks proposed in the application involve general site preparation and construction of the internal access road.

The extent of disruption to the drainage of the site is considered to be minor given the size of the parcel and will not detrimentally affect adjoining properties or receiving waterways, noting the stringent requirement from the Natural Resource Access Regulator in regards to soil and erosion control.

The extent of the earthworks will not materially affect the potential future use or redevelopment of the site that may occur at the end of the proposed development's lifespan.

The site is not known to be contaminated. Notwithstanding this, standard precautionary conditions are imposed that manage the process in the event contaminated material is encountered. Additionally, conditions are imposed requiring the use of verified clean fill only. Excavated materials are to be reused onsite as far as possible and conditions are imposed to require that surplus materials will disposed of to an appropriate destination.

The earthworks will be appropriately supported onsite and the change in ground level is not substantial in the context of a large rural parcel. Therefore the effect on the amenity of adjoining properties as a result of proposed earthworks is considered to be minor.

The site is not known to contain any Aboriginal, European or archaeological relics as confirmed by an AHIMS search. Previous known uses of the site do not suggest that any relics are likely to be uncovered. However, standard precautionary conditions are imposed to ensure that should site works uncover a potential relic or artefact, works will be halted to enable proper investigation by relevant authorities and the proponent required to seek relevant permits to either destroy or relocate the findings.

The site is in proximity to a number of water courses including Broken Shaft Creek which is identified as a sensitive waterway, and as such conditions are imposed to require a sediment control plan, including silt traps and other protective measures, to ensure that loose dirt and sediment does not escape the boundaries of the development site.

This clause seeks to maintain terrestrial biodiversity and requires that consent must not be issued unless the application demonstrates whether or not the proposal:

- (a) is likely to have any adverse impact on the condition, ecological value and significance of the fauna and flora on the land
- (b) is likely to have any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna
- (c) has any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and
- (d) is likely to have any adverse impact on the habitat elements providing connectivity on the land.

Additionally this clause prevents consent being granted unless the consent authority is satisfied that:

- (a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or
- (b) if that impact cannot be reasonably avoided the development is designed, sited and will be managed to minimise that impact, or
- (c) if that impact cannot be minimised the development will be managed to mitigate that impact.

It is noted that an area High Biodiversity Sensitivity" land occurs within the subject land in the far north-western corner of the site (refer Figure 5 below)



Figure 5 - the development site's proximity to the mapped biodiversity area (source: Golder 2019)

The subject site was inspected on a number of occasions, most recently on 10 October 2020, and it was confirmed that the development site is well separated from the mapped high biodiversity land.

The proposed development of the site is located clear of the sensitive area. Additionally, the proposed vehicular access to the development is clear of the sensitive areas.

It is also noted that the tree to be removed is not within an area of mapped high biodiversity land.

7.4 - Terrestrial Biodiversity (cont)

In this regard the proposal has been designed to site the solar modules, fencing, ancillary structures and their access in a manner that seeks to avoid adverse consequences. Management of the proposal can be conditioned to further protect the environmental functions and values of the land.

Accordingly, the proposal is unlikely to fragment, diminish or disturb the biodiversity structure, ecological functions or composition of the land and does not reduce habitat connectivity with adjoining sensitive areas.

7.5 - Riparian Land and Watercourses

This clause seeks to preserve both water quality and riparian ecological health. The clause applies to land identified as a "Sensitive Waterway" on the Watercourse Map. The subject land contains such a waterway and therefore the Consent Authority must consider whether or not the proposal:

- (a) is likely to have any adverse impact on the following:
 - (i) the water quality and flows within a watercourse
 - (ii) aquatic and riparian species, habitats and ecosystems of the watercourse
 - (iii) the stability of the bed and banks of the watercourse
 - (iv) the free passage of fish and other aquatic organisms within or along the watercourse
 - (v) any future rehabilitation of the watercourse and its riparian areas, and
- (b) is likely to increase water extraction from the watercourse.

Additionally, consent may not be granted until the Consent Authority is satisfied that:

- (a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or
- (b) if that impact cannot be reasonably avoided the development is designed, sited and will be managed to minimise that impact, or
- (c) if that impact cannot be minimised the development will be managed to mitigate that impact.

While the subject site does contain a sensitive waterway, the proposal has been designed to site the solar modules and ancillary structures in excess of 100m from the waterway.



Figure 6: the development site's proximity to the sensitive waterway (source: Golder 2019)

7.5 - Riparian Land and Watercourses (cont)

During construction there is possibility that stormwater run-off would be impacted by loose soil, sediment and the like. To ensure that Broken Shaft Creek is not impacted and to ensure water quality is maintained, soil erosion and sediment control measures are required to be installed prior to works commencing. Additionally, a Construction Environmental Management Plan is required to be prepared and implemented for the duration of the construction period. Relevant conditions are recommended.

During the operational phase the development is not expected to give rise to any undesirable water quality impacts. Stormwater will fall on the panels (if not in a vertical position) and then onto the ground and likely permeate into the soil. In large rain events the level of run-off is not expected to be any greater than pre-development levels. The arrangement of panels on slim pylons will not overly impede the flow of water into the water courses and creek systems.

Water quality is not expected to reduce as a result of the development with the implementation of the above referenced recommended conditions of consent.

7.6 - Groundwater Vulnerability

This clause seeks to protect hydrological functions of groundwater systems and protect resources from both depletion and contamination. Orange has a high water table and large areas of the LGA, including the subject site, are identified with "Groundwater Vulnerability" on the Groundwater Vulnerability Map. This requires that the Consent Authority consider:

- (a) whether or not the development (including any onsite storage or disposal of solid or liquid waste and chemicals) is likely to cause any groundwater contamination or have any adverse effect on groundwater dependent ecosystems, and
- (b) the cumulative impact (including the impact on nearby groundwater extraction for potable water supply or stock water supply) of the development and any other existing development on groundwater.

Furthermore consent may not be granted unless the Consent Authority is satisfied that:

- (a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or
- (b) if that impact cannot be reasonably avoided the development is designed, sited and will be managed to minimise that impact,
- (c) if that impact cannot be minimised the development will be managed to mitigate that impact.

The proposal is not anticipated to involve the discharge of toxic or noxious substances and is therefore unlikely to contaminate the groundwater or related ecosystems. The proposal does not involve extraction of groundwater and will therefore not contribute to groundwater depletion. The design and siting of the proposal avoids impacts on groundwater and is therefore considered acceptable.

Clause 7.11 - Essential Services

Clause 7.11 applies and states:

Development consent must not be granted to development unless the consent authority is satisfied that any of the following services that are essential for the proposed development are available or that adequate arrangements have been made to make them available when required:

- (a) the supply of water,
- (b) the supply of electricity,
- (c) the disposal and management of sewage,
- (d) storm water drainage or on-site conservation,
- (e) suitable road access.

In consideration of this clause, all utility services are available to the land and adequate for the proposal. In particular, it is noted that an 11kv power line is located close to the boundary of the adjoining land to the east. Relevant easements apply in relation to the electricity line.

STATE ENVIRONMENTAL PLANNING POLICIES (SEPPs)

The following SEPPs apply to the land:

- State Environmental Planning Policy (Affordable Rental Housing)
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- State Environmental Planning Policy (Concurrences) 2018
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
- State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007
- State Environmental Planning Policy (Primary Production and Rural Development) 2019
- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy No 21—Caravan Parks
- State Environmental Planning Policy No 33—Hazardous and Offensive Development
- State Environmental Planning Policy No 36—Manufactured Home Estates
- State Environmental Planning Policy No 50—Canal Estate Development
- State Environmental Planning Policy No 55—Remediation of Land
- State Environmental Planning Policy No 64—Advertising and Signage
- State Environmental Planning Policy No 65—Design Quality of Residential Apartment

Those SEPPs that are of relevance to the assessment of this development application are addressed separately below (shown in bold text above).

State Environmental Planning Policy (State and Regional Development) 2011 is applicable to the development, the SEPP categorises development of a certain type and or value as state or regional development.

Relevantly, pursuant to clause 5 within schedule 7; the development is categorised a private infrastructure and community facility over \$5 million (electricity generating works are explicitly listed), and as such is regionally significant.

Pursuant to section 4.5(b) of the EP&A Act, the consent authority for regional development is the Western Region Planning Panel.

State Environmental Planning Policy (Infrastructure)

State Environmental Planning Policy (Infrastructure) is applicable to the development. The SEPP provides the mechanism of permissibility in the RU1 Primary Production zone by virtue of clause 34 (1)(b) which states:

34 Development permitted with consent

- (1) Development for the purpose of electricity generating works may be carried out by any person with consent on the following land—
 - (b) in any other case—any land in a prescribed rural, industrial or special use zone.

The RU1 Primary Production zone is one of the listed prescribed rural, industrial or special use zones.

The SEPP (Infrastructure) states that:

if there is an inconsistency between this Policy and any other environmental planning instrument, whether made before or after the commencement of this Policy, this Policy prevails to the extent of the inconsistency.

Given the permissibility inconsistency, this SEPP prevails over the LEP provisions.

The SEPP also provides mandatory consultation with certain public authorities under certain circumstances. In this case, consultation with the electricity supply authority is required along with TfNSW. The following provides commentary of the engagement with those authorities.

Clause 45 obligates Council to consult with the electricity supply authority where development occurs near electricity infrastructure. Given the very nature of the development and the requirement to connect with the electricity grid, Essential Energy was consulted as part of the assessment.

Essential Energy provided comment indicating no objection to the development provided the following requirements were imposed:

- 1. If the proposed development changes, there may be potential safety risks and it is recommended that Essential Energy is consulted for further comment.
- 2. Any existing encumbrances in favour of Essential Energy (or its predecessors) noted on the title of the above property should be complied with.

- 3. Essential Energy has existing 11kV overhead powerlines located on the Private Road street frontage of the property. Any proposed fencing or landscaping located near the existing overhead powerlines must comply with the latest industry guideline currently known as ISSC 20 Guideline for the Management of Activities within Electricity Easements and Close to Infrastructure.
- 4. Prior to demolition of the existing shed, any service line must be disconnected. Refer to Essential Energy's Contestable Works team for requirements via email contestableworks@essentialenergy.com.au.
- 5. Satisfactory arrangements are to be made with Essential Energy for the provision of power with respect to all improvements that will form part of the development. It is the Applicant's responsibility to make the appropriate application with Essential Energy for the supply of electricity to the development, which may include the payment of fees and contributions. Refer to Essential Energy's Contestable Works team for requirements via email contestableworks@essentialenergy.com.au.
- 6. Satisfactory arrangements are to be made with Essential Energy with respect to the proposed solar farm, which will form part of the development. It is the Applicant's responsibility to enter into the required Connection Agreement/s and any other requirements with Essential Energy for the development, which may include the payment of fees and contributions. Refer Essential Energy's Network Connections team for requirements via email networkconnections@essentialenergy.com.au.
- 7. In addition, Essential Energy's records indicate there is electricity infrastructure located within the property and within close proximity to the property. Any activities within these locations must be undertaken in accordance with ISSC 20 Guideline for the Management of Activities within Electricity Easements and Close to Infrastructure. Approval may be required from Essential Energy should activities within the property encroach on the electricity infrastructure.
- 8. Prior to carrying out any works, a "Dial Before You Dig" enquiry should be undertaken in accordance with the requirements of Part 5E (Protection of Underground Electricity Power Lines) of the Electricity Supply Act 1995 (NSW).
- 9. Given there is electricity infrastructure in the area, it is the responsibility of the person/s completing any works around powerlines to understand their safety responsibilities. SafeWork NSW (www.safework.nsw.gov.au) has publications that provide guidance when working close to electricity infrastructure. These include the Code of Practice Work near Overhead Power Lines and Code of Practice Work near Underground Assets.

The above matters have been incorporated into the consent.

Clause 101 deals with development with frontage to a classified road and obligates the Consent Authority to consider certain matters, namely;

- 2) The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that—
 - (a) where practicable and safe, vehicular access to the land is provided by a road other than the classified road, and
 - (b) the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of—
 - (i) the design of the vehicular access to the land, or
 - (ii) the emission of smoke or dust from the development, or
 - (iii) the nature, volume or frequency of vehicles using the classified road to gain access to the land, and
 - (c) the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.

In respect of (a) above, as noted above under the heading "Background", when the applicant initially lodged a development application for a solar farm on this land with Council, it was reliant on the adjoining driveway – noting that the dwelling on the land the subject of this application has a legal right-of-way to traverse the adjoining driveway. The development, if reliant on the right-of-way, would have required extensive works within the right-of-way; and as such that land would need to have formed part of the development application as the land to which the application relates and owner's consent would be required.

The applicant at the time the first application was rejected by staff contacted the adjoining owners to enquire if owner's consent would be granted. It was not. As such, Council would not be in a position to insist on the adjoining right-of-way being used as it is a private road on private land, and third party consent was not able to be obtained.

The Panel can be satisfied that an alternate means of access is not practicable.

In respect of (b), the development is not expected to jeopardise the safety, efficiency and ongoing operations of the Mitchell Highway due to the following:

- TfNSW have provided its concurrence for the proposed access with specific conditions of the type and design of the access treatment.
- Council's Technical Services Division has not indicated any objections to the proposed access.
- The development will not emit smoke.
- Dust may become airborne and escape the boundary during construction. To mitigate this a specific condition is attached that requires dust suppression measures to be implemented. Additionally, a CEMP is also recommended as a condition of consent that will, inter alia, contain dust suppression measures and a complaints register.

- The development is likely to generate the following average per day traffic volumes during construction:
 - 9 B-Double deliveries (average of 1 B-Double movement per hour)
 - 80 light vehicles (40 arrivals and 40 departures).

These traffic volumes are considered modest and the highway can easily cater for such traffic upon the satisfactory completion of the required access.

- During the operational phase, traffic associated with the development reduces to maintenance crews consisting of 2-3 personnel on a quarterly basis.
- Not listed within clause 101 as a consideration but worth mentioning, a glare and glint assessment has been submitted in support of the development which demonstrates that the facility will not create any unreasonable level of glare and glint. Refer below for additional commentary.

The Panel can be satisfied that the development is not likely to impact upon the ongoing operations of the Mitchell Highway.

Clause 104 relates to categories of development classed as traffic generating development; and where a development is categorised as such, consultation with TfNSW must be undertaken.

TfNSW provided Council with advice indicating no objections to the development, particularly the traffic considerations relating to the highway; subject to the below conditions being met:

- Prior to the commencement of any onsite construction work, the following site access improvements are to be constructed at the proposed intersection with the Mitchell Highway (State HW7) to the satisfaction of Council as the roads authority and TfNSW:
 - a bitumen-sealed rural Basic Left turn treatment (BAL) in accordance with Figure 8.2 of Austroads Guide to Road Design Part 4A,
 - a bitumen-sealed rural Basic Right turn treatment (BAR) in accordance with Figure A28 of Austroads Guide to Road Design Part 4, AND
 - upgrade of the site access driveway in conformance with Figure 7.4 of Austroads Guide to Road Design Part 4, but with the gate or grid set back at least 30m from the edge of the highway, and a bitumen seal extending from the road edge to the gate,

(Copies of those diagrams are enclosed) with all works also to be in accordance with relevant TfNSW Supplements to Austroads.

- The intersection works are to be designed and constructed for the posted speed limit at this location and be able to accommodate up to 26m B-Doubles and Performance Based Standards (PBS) Level 2B truck combinations nominally 30m in length.
- Truck warning signs (W5-22 Size B) with distance plates (W8-5 Size B) under are to be installed 300m in advance of the site access in both directions on the Mitchell Highway, and are to be removed after completion of construction. Provide details of proposed signage and locations for TfNSW concurrence as part of the road works design review.

- Details of any ancillary works are to be provided including (but not limited to) line marking, intersection and road name signage, drainage transitions, batter slopes, vegetation removal, services relocation, and road reserve widening acquisition.
- Safe Intersection Sight Distance (SISD) requirements as outlined in Austroads Guide to Road Design Part 4A and relevant TfNSW Supplements to Austroads is to be provided and maintained in both directions at the site access intersection.
- The developer will be required to undertake private financing and construction of works on a State classified road in which TfNSW has a statutory interest. A formal agreement in the form of a Works Authorisation Deed (WAD) is required between the developer and TfNSW prior to works commencing.
- A Road Occupancy Licence (ROL) is required prior to any works commencing within three (3) metres of the travel lanes of a State classified road, or work that has potential to impact traffic flow such as the use of traffic control devices or signage to protect workers. Please contact 1300 656 371 for further information regarding a ROL. A Traffic Control Plan prepared by a TfNSW accredited person is to be submitted as part of the ROL application.
- Prior to the commencement of construction works a Traffic Management Plan (TMP) including Driver Code of Conduct is to be submitted to and concurrence obtained from Transport for NSW. The preparation of the TMP will require consultation with Transport for NSW, Orange City Council, principal contractor(s) and relevant stakeholders. The requirements of the TMP and Driver Code of Conduct are to cover the matters referred to within the TMP Annexure (attached).
- The TMP is to include management controls to ensure the specified maximum hourly light vehicle movements (32 to/from east of site and 8 to/from west of site) and maximum 9 daily heavy vehicle arrivals (18 movements), as approved under this consent, are not exceeded.
- The TMP is to be reviewed and updated in response to any changes in operating conditions. A copy of the TMP and Driver Code of Conduct is to be provided to contractors and employees as a part of the site induction and a copy is to be made available to Transport for NSW with each major update.
- At all times during construction and operation of the development, movements between the highway and the site shall be in a forwards-only direction, and all vehicle parking or storage of materials shall be contained within the site boundary unless otherwise agreed to in writing by Council as the roads authority and Transport for NSW.
- The panel tracking hubs and all screening vegetation as approved under this consent shall be maintained in good condition for the life of the development, including prompt repair or replacement of any breakdowns or losses that occur, to ensure the development operates in accordance with the consent.

Council staff agree with the conditions and accordingly they have been incorporated into the consent.

State Environmental Planning Policy 55 - Remediation of Land

State Environmental Planning Policy 55 - *Remediation of Land* (SEPP 55) is applicable. Pursuant to Clause 7 *Contamination and remediation to be considered in determining development application*:

- (1) A consent authority must not consent to the carrying out of any development on land unless:
 - (a) it has considered whether the land is contaminated, and
 - (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and
 - (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

The land has a long history of being used for grazing purposes, and as such the land is not expected to be contaminated beyond typical farming practices such as herbicide spraying and pasture improvements.

It is noted that the access point will necessitate the demolition of ancillary farm buildings and cattle yards. Also, a small farm building further within the site is also proposed to be demolished. Observations of the structures did not indicate the presence of any sheep dips, fuel storage, drum storage, bare soils, oil staining or the like.

In any event, as is Council's standard procedure an unexpected finds protocol condition is recommended to be imposed. The protocol would be activated in the unlikely event that contamination is encountered during the construction phase of the development.

Finally, it is worth noting that the use of the land as a solar farm is not a sensitive use such as a use referred to in subclause 7(4) (ie a change to residential use and the construction method of driven pillions will limit the extent of ground disturbance).

The development is considered satisfactory with regards to the above SEPP.

State Environmental Planning Policy 33 – Hazardous and Offensive Development

The development involves the installation of a BESS station. The batteries are lithium-ion which is a class 9 – corrosive dangerous good. The development also involves the storage of petrol, being a class 3 – flammable liquid, and pesticides being class 6.1 toxic substances on the Australian Dangerous Good Register.

As such, Council staff requested that the applicant carry out screening threshold analysis.

The analysis concludes that the development does not exceed any applicable threshold, and as such the development is not potentially hazardous.

Despite this, the applicant has offered a number of safeguards and mitigation measures that should be implemented as part of the development. The measures relate to fire safety measures for the BESS Station and appropriate storage and bunding of fuel and pesticides. These measures are recommended as conditions of consent.

The development is considered satisfactory with regards to SEPP 33.

PROVISIONS OF ANY DRAFT ENVIRONMENTAL PLANNING INSTRUMENT THAT HAS BEEN PLACED ON EXHIBITION 4.15(1)(a)(ii)

From 31 January to13 April 2018 the Department of Planning and Environment publically exhibited an Explanation of Intended Effect (EIE) and Draft Planning Guidelines for the proposed Remediation of Land SEPP, which will repeal and replace State Environmental Planning Policy 55 – Remediation of Land (SEPP 55). Of particular note, the Draft Planning Guidelines state:

"In undertaking an initial evaluation, a planning authority should consider whether there is any known or potential contamination on nearby or neighbouring properties, or in nearby groundwater, and whether that contamination needs to be considered in the assessment and decision making process."

"If the planning authority knows that contamination of nearby land is present but has not yet been investigated, it may require further information from the applicant to demonstrate that the contamination on nearby land will not adversely affect the subject land having regard to the proposed use." (Proposed Remediation of Lands SEPP - Draft Planning Guidelines, Page 10).

Council records do not indicate that any adjoining land is contaminated. As such the draft SEPP does not apply to the assessment of this application.

Amendment 24 of Orange LEP 2011 is a house keeping amendment which deals with a broad range of relatively minor changes to the LEP. The amendment was placed on public exhibition earlier in the year. It noted, however, that there are no aspects of the amendment that are explicitly relevant to the assessment of this application.

DESIGNATED DEVELOPMENT

Electricity generating stations are a type of designated development where: (c) more than 30 megawatts of electrical power from other energy sources (including coal, gas, wind, biomaterial or solar powered generators, hydroelectric stations on existing dams or cogeneration) is generated.

This development has an electricity generating capacity of not more than 5MW. Accordingly, the development is below the thresholds for designated development.

To ensure this remains the case and to ensure throughput is not increased over time as inefficiency improves with technology advances, a condition is imposed that restricts the facility to not more than 5MW. It is understood there are constraints with the grid capacity that would prevent a greater generation in any event. The applicant is agreeable to such a condition.

INTEGRATED DEVELOPMENT

Application has been made pursuant to Section 4.46 of the EP&A Act as an integrated development. The following approvals are required:

- Controlled Activity Approval pursuant to Section 90 of the *Water Management Act* (Natural Recourses Access Regulator (NRAR)).
- Concurrence pursuant to Section 138(2) of the *Road Act* –TfNSW (approval body).

The NRAR have issued General Terms of Approval which are attached to the consent.

TfNSW has issued its concurrence with conditions which have been incorporated into the consent.

PROVISIONS OF ANY DEVELOPMENT CONTROL PLAN s4.15(1)(a)(iii)

Development Control Plan 2004

Development Control Plan 2004 ("DCP 2004") applies to the subject property. Chapters of the DCP relevant to the proposed use and development include:

- Chapter 0 Transitional Provisions;
- Chapter 2 Natural Resource Management;
- Chapter 3 General Considerations;
- Chapter 4 Special Environmental Considerations;
- Chapter 5 General Considerations for Zones and Development;
- Chapter 10 Special Uses and Road Zones;
- Chapter 15 Car Parking.

Chapter 0 - Transitional Provisions

Section 0.2 - General Translation of Zones

Section 0.2 provides that any reference to a zone under Orange Local Environmental Plan 2000 is to be a reference to the corresponding zones in the zone conversion table.

The table identifies that the RU1 Primary Production corresponds with the 1a General Farming zone.

Section 0.4-11 - Interim Planning Outcomes - Transport Routes

Section 0.4-11 identifies that development alongside roads that convey a high volume of traffic needs to be appropriately designed and managed to ensure that the safe and efficient operation of the local road network is not compromised; and that the visual treatment of development alongside arterial and other important roads plays a significant role in the impression that residents and visitors have of the area.

Specific objectives for transport routes include:

- To ensure the continued safe and efficient operation of arterial and other important road corridors.
- To alleviate traffic flows on high volume routes whenever feasible.
- To promote a high level of urban design on land exposed to significant volume of traffic, cyclists and pedestrians.

The proposed development is not antipathetic to the first two objective stated above. The two objectives are similar to the objectives under the clause 101 considerations under the SEPP (Infrastructure) and have been addressed above.

The third objective relates more to an urban environment and the resultant built form of a development. Notwithstanding, the proposed development will be visually exposed to motorists primarily from two vantage points namely:

- 1 Motorists heading in a westerly direction travelling down Ammerdown hill will get a view of the solar farm to the northwest, and
- 2 Motorists heading in an easterly direction will get a view of the solar farm to the southwest after coming around the sweeping bend after the Griffin Road intersection. This view when travelling at 100km/h will only be for a short period, and given the amendments to the design, the extent of the solar farm that is actually able to be viewed is a small fraction of the overall facility.

Section 0.4-11 - Interim Planning Outcomes - Transport Routes (cont)

Whilst the facility will be exposed to view by motorists, the extent of what will actually be visible, how it will be viewed and (for motorists heading in a westerly direction) the separation distance from the point where it is visible, results in a development that is, on balance, acceptable in relation to the amenity of the area for road users.

In addition to the above, the development's exposure to view by road users is further ameliorated through the use of landscape screening. Conditions are recommended that require advanced plants as part of the landscaping screening for the areas where the development will be visible from the Highway.

Also, in relation to the security fence, it is recommended that the fence be primarily constructed from black powder coated elements (noting that the barb can be uncoated steel wire). The rationale for this condition is to achieve a more visually recessive fence in the landscape.

The development is considered satisfactory with regards to the above objectives.

Specific planning outcomes for transport routes include:

- The development provides a high standard of visual appeal to motorists, cyclists and pedestrians as well as adjoining property owners.
- The visual appearance of the development, including any signage, lighting or other ancillary element, must not generate a distraction to motorists.
- Any signage must not be animated whether by movement or flashing lights.
- Where land has more than one street frontage the street with the lower volume of traffic is to provide the principal access to the development, subject to safety considerations.
- Where access is provided onto an arterial road, distributor road or major collector road, the access point must have appropriate safe sight distances for the prevailing speed limit and clear and unimpeded entrance/exit signage must be displayed.
- Where on-site customer parking is provided that is not immediately visible from a public road clear and unimpeded directional signage must be displayed.
- Where the proposal is residential, or another noise sensitive form, appropriate noise mitigation measures to limit the development from traffic noise must be demonstrated.

In relation to the above planning outcomes, the first outcome is addressed above under the objectives of this section of the DCP. In respect of the second outcome, the development has the potential to cause a glare and glint impact upon road users. The applicant has submitted a glare and glint assessment in support of the development which concludes that the development will not give rise to any unacceptable impacts as a result of glare and glint. On the issue of glare and glint, it is noted that the purpose of the solar panels is to absorb solar irradiation, and any level of reflection would be considered an inefficiency in the solar panels' ability to generate electricity.

This is further supported by the fact that the Large-Scale Solar Energy Guidelines do not identify glare and glint impacts as a necessary consideration. This is reflected in the state significant development assessment reports that have been reviewed by Council staff as part of the assessment process for this application.
Section 0.4-11 - Interim Planning Outcomes - Transport Routes (cont)

Further to the above planning outcome in relation to distraction of motorists, relevant conditions are recommended in relation to outdoor lighting being consistent with the relevant Australian Standard. Additionally, ancillary components such as the inverter station, switchboards and BESS have been relocated to the eastern side of the development (from the original proposal which had them located on the western side of the development), and as a consequence of the relocation, they could be viewed from the highway. However, the structures are sited well back from the front boundary, meaning they will not cause distraction. It is also important to note that TfNSW has not raised any objections in relation to the development in terms of safety of road users.

The third planning outcome is not relevant to the assessment of this application.

In respect of the fourth planning outcome, this is addressed above under the clause 101 consideration within the SEPP (Infrastructure).

In respect of the fifth planning outcome, this has been considered by TfNSW and no objections have been raised in relation to sight distances, although specific conditions are attached in relation to sight distances.

In respect of the last two listed planning outcomes, these are not relevant to the assessment of this application.

Based on the foregoing, the development is considered satisfactory with regards to the planning outcomes for transport routes.

Chapter 2 - Natural Resource Management

Section 2.1 - Water Quality

Section 2.1 - Water Quality identifies that development that concentrates, redirects flows, increases flow rates or disturbs land in close proximity to creeks, has the potential to affect waterways with associated erosion, sedimentation and release of nutrients, which combine to affect downstream water quality. Section 2.1 also identifies that development involving groundwater extraction and/or onsite wastewater disposal is deemed to have the potential to affect groundwater resources.

Specific planning outcomes for stormwater quality include:

- Development is carried out in a manner that does not contribute to downstream erosion or sedimentation of waterways.
- Development complies with the Water and Soil Erosion Control requirements of the Development and Subdivision Code.
- On-site detention is carried out in accordance with the Development and Subdivision Code for all developments comprising buildings with a site coverage greater than 50m² or where site coverage exceeds the "percentage impervious" level listed in the Code applicable to that development.
- Where on-site detention is not appropriate, contributions are made towards retarding basins and/or GPTs and associated drainage under the Contributions Plan that applies to the land.
- Development in the vicinity of a natural watercourse is positioned away from the waterway and includes measures to minimise the impact of the development on the waterway such as the establishment of Creekside buffer zones and planting of native trees in a manner that enhances stream bank stability.

Section 2.1 - Water Quality (cont)

Specific planning outcomes for groundwater quality include:

- Development applications for development (excluding dwelling houses) that proposes to extract groundwater or involve on-site wastewater disposal identify potential risks to, and management of, groundwater resources.
- Development is carried out in a manner that does not adversely affect groundwater resources.
- Development considered by Council to have the potential to significantly affect groundwater quality incorporates a monitoring program and provides test results for NATA accredited laboratory to Council for review and for inclusion in the City SoE Reports.
- Development that requires or proposes the use of groundwater demonstrates that the groundwater extraction will meet the requirements of DLWC, where necessary

Stormwater Quality

Stormwater considerations are addressed above under the heading "Stormwater Management" under the LEP considerations. Additionally, it is noted that the General Terms of Approval issued by the Natural Resource Access Regulator (NRAR) provide detailed conditions in relation erosion and sediment controls.

The development is considered satisfactory with regards to stormwater quality.

Groundwater Quality

Groundwater quality issues have previously been addressed under "Clause 7.6 - Groundwater Vulnerability". In relation to groundwater quality, the submitted material indicates that:

- Dangerous goods to be stored on the site would be maintained in appropriately designed and managed devices to ensure that any spill is contained; and
- No extraction of groundwater is proposed.

Given that the proposed development is not anticipated to involve the discharge of toxic or noxious substances, it is considered unlikely to contaminate the groundwater or related ecosystems³. Similarly, the proposed development is not anticipated to involve the extraction of groundwater, and therefore would not contribute to groundwater depletion.

In addition, it is recommended a condition of consent that details showing compliance with the Australian Standard AS 1940-2004 are required prior to the issue of a Construction Certificate.

Based on the information provided within the submitted material and the recommended conditions of consent, it is considered that the planning outcomes relating to water quality would be met.

³ Refer below for commentary on toxicity of solar panels.

Section 2.2 - Soil Resource Management

Section 2.2 - Soil Resources identifies that soil characteristics influence land use and development capability, and the suitability for building footings, onsite waste disposal, road engineering and drainage.

Specific planning outcomes for soil resource management include:

- Development complies with the Water and Soil Erosion Control requirements of the Development and Subdivision Code.
- Sites affected by soil degradation are restored in accordance with management strategies to be submitted with development proposals.
- Agricultural practices apply conservation farming techniques particularly within the water supply catchments and in areas susceptible to significant erosion hazard.
- A geotechnical investigation is carried out by a NATA-accredited laboratory that identifies and classifies all new residential lots for dwelling houses in accordance with AS 2870-1996 Residential Slabs and Footings Construction.
- A geotechnical investigation is undertaken that determines the suitability of land for on-site disposal of sewage effluent in accordance with Environmental and Health Protection Guidelines: On-site Sewage management for Single Households where appropriate.
- Non-agricultural activities in rural areas are carried out on less -productive soils.

In relation to the above, it is noted that relevant conditions of consent are recommended in relation to soil and erosion control. No significant areas of soil degradation were identified on-site during numerous site visits by staff. During the most recent inspection on Friday, 10 October 2020, it was observed that the development site had extensive improved pasture cover and some areas of invasive weeds.

The third, fourth and fifth planning outcomes are not relevant to the proposal. It is noted that a geotechnical site classification will be required for the engineering design for the solar module supports.

In relation to the last planning outcome, it is noted that the area is not identified as biophysical strategic agricultural land, and additionally the Office of Environment and Heritage Land and Soil Capability Assessment mapping classes the subject land as Class 4 Moderate Capability Land which means:

Land has moderate to high limitations for high-impact land uses. Will restrict land management options for regular high-impact land uses such as cropping, high-intensity grazing and horticulture. These limitations can only be managed by specialised management practices with a high level of knowledge, expertise, inputs, investment and technology.

Notwithstanding the above, as observed during a recent site inspection the land is considered at the lower end of the moderate to high limitations scale. The land in its current conditions after good rain appears to be highly productive for the purposes of extensive grazing.

That being said as noted above, there is the possibility to continue the agricultural use of the land even within the fenced development site.

The development is considered satisfactory with regards to the above.

Section 2.3 - Vegetation and Section 2.4 - Flora, Fauna and Biodiversity

Section 2.3 - Vegetation and Section 2.4 – Flora, Fauna and Biodiversity identify that the natural environment of the Orange LGA has been heavily modified as a consequence of land clearing for various uses, including agriculture, plantation forests, mining and urban development; and that clearing of native vegetation has significantly affected native habitats.

Specific planning outcomes for vegetation and flora, fauna and biodiversity include:

Vegetation

- Compliance with the Native Vegetation Conservation Act 1997.
- Development is designed and constructed in a way that minimises the impact on existing vegetation.
- Particular attention is given to the effect of rural or urban residential release development on existing vegetation and scenic areas.
- Development applications indicate on plans the location of all significant trees affected by or in the vicinity of development.
- Applications demonstrate to Council's satisfaction that all practical measures have been made to retain trees that contribute to and embellish the Orange landscape

Flora, Fauna and Biodiversity

- Where there is a likely impact of development on native habitats, that impact is addressed in the development application.
- A Species Impact Statement is prepared for development that is likely to significantly affect habitats of threatened species. The statement is submitted with a development application and indicates how threatened species will be managed with the development.
- Development affecting all or part of significant water bodies or remnant woodland areas with the potential to comprise habitats of threatened species incorporates the protection and conservation of these areas where deemed reasonable by Council.
- Threatened species, populations and ecological communities are managed in conjunction with development in accordance with the Threatened Species Conservation Act.

Vegetation, flora, fauna and biodiversity have previously been addressed under "Section 1.7 - Application of Part 7 of the *Biodiversity Conservation Act 2016* and Part 7A of the *Fisheries Management Act 1994*" and "Section 7.4 - Terrestrial Biodiversity".

The development is considered satisfactory with regards to flora, fauna and biodiversity.

Chapter 3 - General Considerations

Section 3.1 - Cumulative Impacts

Section 3.1 - Cumulative Impacts identifies that Council will consider not only the direct impacts of a particular development but also whether the development, when carried out in conjunction with other development in the locality, has a more significant environmental impact.

Specific planning outcomes regarding cumulative impact include:

- Applications for development demonstrate how the development relates to the character and use of land in the vicinity;
- The introduction of new development into a locality maintains environmental impacts within existing or community-accepted levels.
- Water conservation measures are implemented.

Cumulative impacts of the proposed solar farm are addressed under the heading "Likely Impacts of the Development".

Chapter 4 - Special Environmental Considerations

Section 4.1 identifies that onsite sewage management systems are required for development in rural areas, including rural residential development; and that onsite management of wastewater requires that effluent be managed entirely within the subject land.

Specific planning outcomes for sewage disposal include:

- Development within the urban area of Orange as defined above is connected to sewerage facilities or arrangements to the satisfaction of Council have been made for the provision of sewerage services prior to occupation.
- Where sewerage services are not provided, on-site disposal of effluent is designed and implemented in accordance with the relevant guidelines for on-site sewage management systems.
- Suitable areas for on-site disposal of effluent are defined prior to:
 - o issue of a construction certificate for a building; or
 - o issue of a subdivision certificate for new lots.
- Lots to be created by subdivision for residential purposes indicate an envelope defining an area suitable for on-site disposal of effluent that has been subject to geotechnical assessment.
- Rural or rural residential-zoned land is served by on-site sewage management systems unless the land is traversed by sewer mains with adequate planned capacity.

In relation to the above, the land is not connected to Council's reticulated sewer and water networks. However, the applicant has indicated that portable sanitary facilities will be used during the construction phase of the development and water will be carted to the site in portable tanks or carts.

The development is considered satisfactory with regards to the above.

Section 4.4 - Contaminated Land

Section 4.4 - Contaminated Land identifies that contaminated land can pose a risk to human health and the environment. Contaminants can be released into waterways and humans exposed when contaminated land is disturbed as a consequence of development.

The DCP sets the following planning outcomes with regard to contaminated land:

- Land subject to development is clear from contamination.
- Development complies with the Contaminated Land Management Act 1997.
- Applications for development consent on land used or likely to have been previously used for uses in the table below include contamination assessment and where necessary a proposed remediation strategy to make the site suitable for the proposed use.
- An independent site audit at the applicant's cost is carried out to assess the information provided with an application where Council considers that:
 - Information may be incorrect or incomplete;
 - It needs to verify that the information adheres to appropriate standards, procedures guidelines; or
 - The type or level of contamination requires an independent technical review.

Land contamination has previously been addressed under "State Environmental Planning Policy 55 - Remediation of Land".

Chapter 5 - Special Environmental Considerations

Section 5.3 - Advertised Development

Section 5.3 – directs one to Council's Community Participation Plan for guidance on advertised and neighbour notified development. It is noted that Electricity Generating Works are not listed as a type of development that is either advertised or notified development.

Notwithstanding this, the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000* identify that nominated integrated development must be advertised for a period of 28 days. Accordingly, the development application was advertised on Thursday 6 February 2020. The exhibition period commended Friday, 7 February 2020 and concluded Friday, 6 March 2020.

Following the exhibition period the submissions received were redacted and furnished to the applicant with a request to prepare a response addressing the matters raised. As a result of this process and in response to the submissions, the applicant amended the application by reducing the number of solar modules, thereby reducing the overall footprint of the development. Additionally, the setback of the development from the west was increased by approximately 40m. As a consequence of the amended design the development extended further south within the site.

Council staff accepted the amended design pursuant to clause 55 of the EP&A Regulation. The amendments were considered to amount to a material change to the original proposal, and as such the development was re-advertised and re-exhibited. The development was re-advertised on Saturday 29 August 2020. The exhibition period commenced Monday, 31 August 2020 and concluded Monday 28 September 2020.

Submissions received during the advertising period are addressed in this report under "Any Submissions Made in Accordance with the Act s79c(1)(d)".

Chapter 10 - Special Uses and Road Zones

Section 10.3 - Development Along Major Transport Routes

Visual Impact - Rural Areas

Section 10.3 identifies that main roads leading to and from the urban area of Orange pass through a rural landscape, and that development involving the erection of structures or works on land within a rural area has the potential to alter the rural character of the area. The DCP identifies that rural development visible from major roads will need to demonstrate that:

- It is sited in a way that minimises its visual impact when viewed from the main road;
- Its external materials and colour schemes minimise its visual impact through the effective use of natural or neutral colours;
- It incorporates landscaping that effectively reduces the development's visual impact on the road. For development that significantly disturbs the landscape character because of the area of disturbance (such as extractive industries or mines) or the number or type of structures (such as transport terminals, depots or rural industries), the landscaping is to screen the development from the highway.

The DCP sets out the following relevant planning outcomes with regard to development near major roads:

- Development on land fronting and visible from a major road or distributor road provides for quality design on the highway and/or distributor road through landscaping, building setbacks, façade design, external colours and materials and siting.
- Commercial buildings adjoining a distributor road are setback from the property boundary by at least 10m.
- Lighting and signage visible from a distributor road is not animated and is designed so as not to distract motorists beyond glance recognition.

These planning outcomes are considered below under the likely impacts section of the report. It noted that the second planning outcome is not relevant to the assessment of this application as the development does not involve the construction of a commercial building.

Relevant conditions are attached in relation to controlling light spill.

Chapter 15 - Car Parking

Section 15.4 - Parking Requirement

Section 15.4 identifies the requirements for off-street car parking spaces.

Section 15.4 does not nominate a minimum car parking rate for a solar farm or any other similar land use. Similarly, a secondary resource often used by Council staff, the *Roads and Maritime Service Guide to Traffic Generating Development*, does not address a minimum car parking rate for a solar farm or any other similar land use either. In such circumstances a professionally prepared car parking report is to be provided.

A traffic impact assessment report was submitted in support of the development which provides commentary on parking generation for the development. The report indicates that a bus service will be provided to transport construction personnel to the site to reduce traffic disturbance; but there will also be provision made for temporary parking of 40 light vehicles during the construction phase of the development. The temporary car parking area is appropriately sited within the site so as to allow ingress and egress in a forward gear.

A separate laydown area for equipment brought to the site via B-Doubles is also provided within the site and is separate to the temporary car parking for light vehicles.

The development is considered satisfactory with regards to onsite car parking.

PROVISIONS PRESCRIBED BY THE REGULATIONS s4.15(1)(a)(iv)

Demolition of a Building (clause 92)

The proposal involves the demolition of ancillary farming structures. A condition is attached requiring the demolition to be carried out in accordance with *Australian Standard AS2601 - 2001: The Demolition of Structures* and the requirements of Safe Work NSW.

Fire Safety Considerations (clause 93)

The proposal does not involve a change of building use for an existing building.

Buildings to be Upgraded (clause 94)

The proposal does not involve the rebuilding, alteration, enlargement or extension of an existing building.

BASIX Commitments (clause 97A)

BASIX is not applicable to the proposed development.

THE LIKELY IMPACTS OF THE DEVELOPMENT s4.15(1)(b)

Context and Setting

The subject land is a 78.2ha rural parcel. The land is irregularly shaped. The topography of the land comprises undulating land that falls to the creek line that traverses the site. The land is mostly cleared, save for two separate isolated eucalypts, a stand of native trees to the west of the site and area of native trees located in the north-western corner of the site. Existing improvements on the land comprise a two storey dwelling, cattle yards and three small rural outbuildings.

The adjoining land is all zoned for rural purposes. The majority of surrounding properties are elevated in relation to the subject land and a number of properties will have the opportunity to view the subject development.

The development will modify the visual appearance of the landscape and it will alter the character of the broader locality.

Visual Impacts and Landscape Character

The likely impacts upon existing views, vistas, and the impact upon the general landscape character of the locality are central to the assessment of this application; and critical in determining the appropriateness and suitability of the proposed development in the locality.

Quantifying such impacts is challenging. Unlike other matters typical of a planning assessment such as overshadowing or height of a building which are numerical based; determining the level of impact likely as a result of this development requires one to undertake a qualitative exercise.

TfNSW has prepared a practice note titled "Guideline for Landscape Character and Visual Impact Assessment". The document has been prepared to guide the preparation of landscape character and visual impact assessment for road and maritime works. Whilst the document relates to road infrastructure, it is widely accepted as a useful resource for the purpose of carrying out visual impacts and landscape character assessments generally.

The guidelines differentiate between landscape impact assessment (which is the assessment of impact on the aggregate of an area's built, natural and cultural character or sense of place) and visual impact assessment (which is the assessment of impact on views).

Landscape character assessment helps determine the overall impact of a project on an area's character and sense of place (what people think and feel about a place and how society values it, whether or not they are physically present at it).

Visual impact assessment helps define the day to day visual effects of a project on people's views (what people see at a place, when they are there).

The two assessments should be clear and discrete as it is likely the design responses and mitigation measures to address landscape character impact will be different to those for visual impact.

The measure of impact is carried based on a combination of sensitivity and magnitude.

Sensitivity - refers to the qualities of an area, the number and type of receivers and how sensitive the existing character of the setting is to the proposed nature of change. For example a pristine natural environment is likely to be more sensitive to a change of the nature of a four lane motorway than a built up industrial area. The design quality of the proposed development does not make the area less sensitive to change but instead affects the magnitude of the impact as described following.

Magnitude - refers to the physical scale of the project, how distant it is and the contrast it presents to the existing condition. For example a large interchange would have a very different impact on landscape character than a localised road widening in the same area. A more distant bridge would have a lesser magnitude than one nearer to residents. A vegetated embankment facing a parkland would have less contrast than a retaining wall in the same location. Magnitude will also need to consider cumulative impact, which is a consideration of the result of the incremental impact of the proposal when added to other past, current and known likely future activity.

Visual Impacts and Landscape Character (cont)

Once the above metrics are established for a particular place or vantage point, they then feed into an evaluation matrix to determine the level of impact - which ranges from Negligible up to High as shown below.

| | | Magnitude | | | |
|-------------|------------|---------------|---------------|--------------|------------|
| | | High | Moderate | Low | Negligible |
| Sensitivity | High | High | High-Moderate | Moderate | Negligible |
| | Moderate | High-Moderate | Moderate | Moderate-low | Negligible |
| | Low | Moderate | Moderate-low | Low | Negligible |
| | Negligible | Negligible | Negligible | Negligible | Negligible |

Figure 7 Landscape character and visual impact rating matrix.

The material submitted in support of the proposal provides a visual impact assessment relying on the methodology of the above referenced document and is summarised below.

5.10.4 Assessment of impacts on landscape character

The landscape to the north-west of Orange is one that has been modified by human activity associated with the agricultural industry. It is characterised by a mix of farming, rural uses and arterial roads. The magnitude of the project and impact on landscape character is considered to be moderate for private property and public roads.

The sensitivity of the private property to landscape change is low to moderate given the existing modified landscape which is predominantly agricultural, distance separation from most residences and topography. The sensitivity would decrease with distance so that visibility of the solar farm to dwellings and other structures beyond 2 kilometres would be negligible. The overall impact on landscape character in relation to private property is assessed to range from moderate to negligible.

The sensitivity of public places such as the Mitchell Highway to landscape change would be high in close proximity to a new development, however, distance separation and topography mitigates that sensitivity and in this case it is assessed to be moderate. The works would be visible to motorists travelling along the Mitchell Highway eastbound on approach from the bottom of the hill looking towards the site, and potentially glimpses of the solar farm from Thompson Road to the north and the private access road. There are also distant views towards the site from Griffin Road although roadside vegetation and landscaping on private properties would provide effective screening. The overall impact on landscape character in relation to the public domain is assessed to range from high-moderate to moderate.

A 2km radius visual catchment was used and it is noted that:

this area is the same as that considered in the glare and glint analysis. The greater the distance from the development site the less clear is the view of the solar farm. The ability to distinguish the type of land use and the actual composition of materials diminishes with distance.



Visual Impacts and Landscape Character (cont)

Figure 12: The visual catchment. Source: SIX Maps

Figure 7: 2km radius visual catchment

The site itself is cleared and there are no existing structures or vegetation in the development area that would screen the site. However, the undulating slope of the land and the road cutting along the northern boundary provides interference with direct views over the property from most directions.

There are 36 dwellings within 2 kilometres of the development site that are shown on SIX Maps imagery dated August 2013. Three public roads and the private access road are also within the 2 kilometre catchment. There are four dwellings within a 500 metre radius of the development area ranging from the nearest (OP1) which is the residence on the development site to 330 metres to the north (OP8) from the nearest point of the development area.

The separation distances from each dwelling to the nearest point of the development area are given in Table 6. The distance has been measured using SIX Maps as a straight-line from the nearest point of a residence to the approximate centre of the solar array.

Whilst it is acknowledged that the array may be visible from unoccupied parts of a property, it is considered that the view from a dwelling is more critical than from yards and paddocks. Regardless of the distance, the visual assessment takes into account the sensitivity of the viewpoint to the development and ranks impacts according to the matrix given above in Table 4.

The SoEE concludes the following:

The landscape to the north-west of Orange is one that has been modified by human activity associated with the agricultural industry. It is characterised by a mix of farming, rural uses and arterial roads. The impact of the proposed Orange Community Renewable Energy Park on landscape character has been assessed to range from moderate to negligible for private property and from high-moderate to moderate for the public domain. This is moderate based on a ranking of the magnitude of works and sensitivity to change in landscape character.

Visual Impacts and Landscape Character (cont)

The visual impact of the proposed works is assessed to range from negligible to highmoderate for the viewpoints identified in this assessment – being 36 dwellings and four roads. The solar farm would be partly visible to dwellings in close proximity to the immediate south of the development site and to a viewpoint elevated to the west. Distance separation and proposed screening along the boundaries of the array would assist to mitigate the impact to these viewpoints. Roadside vegetation and the sloping and undulating topography of the land would serve to minimize visual impacts to most viewpoints.

Vegetation screening is recommended along the full extent of the northern, eastern and western sides of the array and part of the southern boundary (to the furthest south) to mitigate any visual impact to viewpoints. Vegetation should comprise native species endemic to the locality as described as suitable species in Orange DCP 2004 that would grow to a height of a maximum of 2.5 metres.

In response to the above summarised visual impact assessment, it is noted that several properties that are considered to be impacted in some way by the proposed development were not considered as part of the visual impact assessment, most notably properties identified in Figure 8 below as P3 and P15. P3 is an immediately adjoining neighbour and P15 is a relatively new house constructed in the last three years, and it would appear this house was not present in the information relied upon by the applicant's planning consultant. These two properties are analysed in detail below.

There are also identified anomalies in terms of distances from the development to nearby properties. For example residence 6 (P10 in Figure 8 below) is noted in table 6 within the SoEE as being 670m east, when in actual fact residence 6 is approximately 460m from the eastern edge of the facility. Residence 5 in the SoEE (P8 in Figure 8 below) is noted as being 780m from the development site when in actual fact it is approximately 440m from the southern edge of the development.

The visual assessment carried out as part of the application fails to assess the visual impact associated with visual catchment of vehicles heading in a westerly direction coming down Ammerdown Hill.

Council staff also note the following in response to the above assessment: the rural landscape is not considered highly modified, but rather a quintessential representation of a high quality rural landscape; and accordingly, the level of sensitivity could not reasonably be regarded as low to moderate, but rather moderate or even high.

Based on the above, the only conclusion that can be drawn from the provided visual impacts assessment is that it is inadequate, incomplete and reliant on false assumptions. Given this criticism it is not considered sufficient to rely on and incumbent on Council staff to carry out their own assessment of the visual impacts.

Assessment of Visual Impact by Council Staff

The closest and/or most impacted properties have been identified below.



Figure 8: analysis of properties closest and/or most exposed to view the development

From the above diagram certain properties can be immediately excluded as having low to negligible impacts based on topography alone. In other words, the landforms between the development site and the following properties acts to shield the development from view, being those properties identified in the above diagram as P2, P4, P6, P7 and P14 (P14 represent two properties which are located very close to each other - both of which can be excluded for the above reasons). Further properties can be excluded as having low to negligible impacts due to a combination of screening vegetation and topography, namely properties P12 and P13. This leaves properties 1, 3, 5, 8, 9, 10, 11, and 15 as being the properties most exposed to view the development, and accordingly Council staff assessment concentrates on these properties.

It is noted that there are other properties within a 2km radius of the development that are in the visual catchment of the proposal, and thus would be able to see the development; however, it considered reasonable that properties further separated from the development over and above those identified above would experience impacts that are within acceptable levels. It is an accepted principle when assessing visual impact that one's sensitivity to the change in landscape is reduced as distance increases.

Separately, the development will be visible from the highway by road users identified as A and B shown in Figure 9 above which relate to:

- A Motorists heading in a westerly direction travelling down Ammerdown hill will get a view of the solar farm to the northwest, and
- B Motorists heading in an easterly direction will get a view of the solar farm to the southwest after coming around the sweeping bend after the Griffin Road intersection. This view when travelling at 100km/h will only be for a short period, and given the amendments to the design, the extent of the solar farm that is actually able to be viewed is a small fraction of the overall facility.

Property 1 (P1)

P1 adjoins the development site and is one of the closest properties to the development. Its elevation is similar but slightly higher than the development site at the western extent of the solar farm, thereby exposure to view the development is greater. The dwelling and rear yard on P1 is approximately 725m from the western edge of the development. There is minimal existing vegetation between the two points.



Figure 9: view from development site (western edge of development footprint) towards P1

The dwelling located on P1 is primarily orientated to the east, and as such orientates directly with the proposed solar farm. It is also noted that the view back to the east from the subject property will be in line with the orientation of the solar panels, which will have the effect of the solar modules appearing as a solid element.



Figure 10: view from P1 back verandah - showing approximate extent of solar farm (shown as a solid red shape⁴)

As can be observed from the above image, views from P1 are from an elevated position and will be largely unobstructed by existing vegetation, save for the stand of eucalypts in the centre of the image.

⁴ The above image has been prepared by Council staff and is intended as an approximate representation of the development as viewed from property 1 for illustrative purposes only.

Property 1 (P1) (cont)

Given the elevated vantage point, coupled with the way the subject land rises to the east; screening along the western flank of the solar farm will shield approximately less than 50% of the development.

Additional screening would need to be provided in the foreground approximately in line with the existing stand of trees to completely screen the development. Such screening would need mature heights much greater than 2.5m, and as such would only practically be achieved by the provision of trees. The timeframe for a tree to reach semi-maturity, would realistically be close to the end of the life-cycle of the development, and as such would prove futile in providing any meaningful screening in the short term.

As such, the Panel would need to be satisfied that the enhanced landscape scheme as required by condition of consent (as discussed in detail below under theme 14 of the submissions considerations), coupled with the separation distances of approximately 725m is sufficient to ameliorate the visual impacts likely to be experienced by P1, and thus be satisfied that the identified impacts are acceptable.

RMS score: high-moderate Impact.

Property 3 (P3)

P3 also shares a common boundary with the subject land in the far north-western corner. The dwelling located on P3 is approximately 1.1km away from the western flank of the development.

P3 is more elevated than P1 and thus its exposure to view is greater than P1. However, P3 is further separated and existing vegetation does serve to partially screen the development; or at least provide a filter to partly screen the development. Although, as observed in the below image there are substantial gaps in the vegetation which results in a large proportion of the development exposed to views from the rear of the dwelling on P3.



Figure 11: view of solar farm from back verandah of P3 (shown as a solid red shape⁵).

RMS Score: moderate impact

⁵ The above image has been prepared by Council staff and is intended as an approximate representation of the development as viewed from property 3 for illustrative purposes only.

Property 5 (P5)

P5 is a commercial vineyard and cellar door. The cellar door sits at an elevation of 820m, which means its elevated above the solar site. As such it would experience views from an elevated position, however the cellar door is approximately 1.55km from the western edge of the solar farm.



Figure 12: P5 shown from within the development site

Council staff are of the view that the separation distance, despite the elevated vantage point, will mean that the visual impacts experienced by P5 are within acceptable levels.

RMS score: low impact

Property 8 (P8)

P8 is an immediately adjoining neighbour, and is the property that includes the adjoining right-of-way mentioned above. The subject land is a large 300-plus acre rural parcel. There are numerous elevated vantage points within the holding.

The solar farm will be visible for much of the driveway, however existing vegetation and proposed screening vegetation will serve to sufficiently screen the development over time.

The dwelling on the land is approximately 440m from the southern edge of the solar farm.

The dwelling on P8 sits at 780m, and as such is elevated above the solar farm site. Screening vegetation will not sufficiently screen the development from view. Notwithstanding this, fortuitously, the owners of P8 have planted a substantial garden around their property which will serve to filter out some of the development when viewed from the dwelling on the land.

Property 8 (P8) (cont)



Figure 13: view of solar farm from P8 northern boundary (shown as a solid red shape⁶)

Whilst this is considered to serve as a means of screening the development, as established by the Court, landscaping on an adjoining land is not sufficient to screen the development. The burden of mitigating the visual impacts of the development should be borne by the applicant and not the adjoining owner experiencing the impact.

The panel would need to be satisfied that the owners of P8 are not impacted to the extent necessary to render the development unacceptable.

RMS Score: high-moderate impact

⁶ The above image has been prepared by Council staff and is intended as an approximate representation of the development as viewed from property 8 for illustrative purposes only. The image was provided by the owner.

Property 9 (P9)

P9 is located on the eastern side of the right-of-way on the adjoining land. The dwelling is positioned to the southeast of the solar farm. The dwelling located on the land is slightly elevated above the development site and is located approximately 180m from the south-eastern corner of the solar farm.

Despite the elevated position and proximity to the development, the existing vegetation would serve to filter the development when viewed; and additionally it is also noted that the dwelling at P9 is orientated to the northeast (ie orientated away from the development as shown in Figure 14 below).



Figure 14: dwelling on P9 showing orientation of dwelling and direction towards solar farm

RMS Score: moderate impact

Property 10 (P10)

P10 is located on the northern side of the highway and north-east of the development site. The dwelling on P10 is at a similar elevation to the development site and located approximately 450m from the north-eastern corner of the development site.



Figure 15: view of solar from P10 (shown as a solid red shape⁷)

⁷ The above image has been supplied by the owner as part of their submission and has been used to show the approximate extent of the solar farm as viewed from their property. The image is intended as an approximate representation of the development as viewed from property 10 for illustrative purposes only.

Property 10 (P10) (cont)

As can be observed in the above photograph, the solar farm will be exposed to view from P10; however the image provided above was supplied by the owner so it is not entirely clear where the image is taken from on the subject land.

The facility will be visible from P10, however the presence of the power line and the highway reduces the quality of the views. The proposed vegetation screen will screen a small proportion of the development site.

The development would pass the test established in *Tenacity Consulting v Warringah Council* [2004].

RMS score: high-moderate impact

Property 11 (P11)

P11 is almost directly opposite the proposed access to the development. The dwelling on P11 sits at approximately 748m, which is below the development site. The dwelling is approximately 150m from the northern edge of the solar farm.

The topography and existing vegetation coupled with the road corridor will result in acceptable visual impacts.

Property 15 (P15)

P15 sits in an elevated position (788m) on the northern side of the highway. The dwelling on the land is approximately 675m from the northern edge of the development. This dwelling was not identified in the submitted visual impact assessment.



Figure 16: images provided by owner of P15

The above images have been provided by the owner as part of their submission.

Property 15 (P15) (cont)

Whist the solar farm will be visible from the dwelling on P15, the existing vegetation will filter the solar farm, and the landscape when viewed as a whole will only have a have proportion of change. The hills in the background (being Mt Canobolas) will remain unobstructed.

In applying the principles of *Tenacity Consulting v Warringah Council* [2004] the impacts caused by the development and experienced by the owners of P15 would be within acceptable levels.

RMS score: high-moderate impact

Planning Principles

As observed in the submissions received objecting to the development, there is a large amount of conjecture and criticism of the way in which the visual assessment in the SoEE was conducted.

The visual assessment needs to be reasonable, balanced and objective. The locations from which vantage points are taken also need to be reasonable.

Council staff have carried out an assessment of visual impact from dwellings rather than every possible vantage point from within the adjoining rural parcels. The decision to apply the assessment of the impact from dwellings is guided by the Land and Environment Court Planning Principle for views (*Tenacity Consulting v Warringah Council [2004]*).

The principle involves consideration of the development in a 4 step process, namely; the first step is the assessment of views to be affected. The second step is to consider from what part of the property the views are obtained. The third step is to assess the extent of the impact. The fourth step is to assess the reasonableness of the proposal that is causing the impact.

Based on the above principle, consideration of impacts have been assessed from the primary living spaces of the properties concerned.

Relying on the above planning principle for view sharing⁸, the development is considered acceptable when viewed from all the identified properties. The development will not unreasonably diminish the current views experienced by the above property owners.

Summary

The foregoing assessment clearly demonstrates that the development will alter the existing landscape and will change the views of a number of nearby properties. Three properties have been identified as having a high-moderate impact using the above referenced RMS guidelines.

It is also evidenced in the above assessment that for a number of properties the extent of landscaping proposed by the applicant will do little to mitigate the full extent of the identified impacts.

Notwithstanding the above, on balance, whilst the development will give rise to visual impacts, when considering the individual characteristics of the subject properties and applying the principles of the Court, the level of impact of the development is considered to remain within acceptable limits.

⁸ Planning Principle for views – general principles *Tenacity Consulting v Warringah Council* [2004] NSWLEC 140 at 25-29

Impact Upon Highway Users

Vantage Point A

Highway users will be able to observe the development heading in a western direction as they head down Ammerdown Hill, which is a long straight section of road. The views will be observed to the northwest.

The development will be a considerable distance from drivers and is broken/filtered by existing landforms and vegetation.

The views are not considered overly objectionable and will not detrimentally be impacted by the development.

Highway users will also be able to observe the development square on to the development near the proposed access point. Photomontages have been supplied of this view point (first image is with new landscaping and second is shown as it would appear with mature landscaping).



Impact Upon Highway Users (cont)

Vantage Point A (cont)



This view will only be brief when travelling at 100km/h and is also not considered objectionable. Mature screening will all but screen the development from view.

Vantage Point B

Highway users heading towards town will be able to view the north-western corner of the solar farm as it rolls down the small hill adjacent to the road. The SoEE is accompanied by photomontages of this view point as shown below (first image is with new landscaping and second is shown as it would appear with mature landscaping)



Impact Upon Highway Users (cont) Vantage Point B (cont)



The development will cause a significant change to this view point, however, mature landscaping (once reached) will serve to suitably screen the development.

The views of highway users will be alerted by the development, however the foregoing assessment concludes that the development will be appropriately screened once landscaping reaches maturity (acknowledging that this will not occur for a number of years). Conditions are attached with respect to requiring mature plantings along the northern boundary.

The development is considered acceptable with regards to viewpoints A and B as observed by highway users.

Agricultural Viability

The development will not unreasonably diminish the land's ability to be used for agricultural purposes. The development footprint occupies approximately 13.8% of the subject land, and as such there remains a reasonable area available to continue agricultural uses of the land. Moreover, there are also opportunities (as indicated by the applicant) to allow sheep grazing to continue once the development is operational.

The development is considered satisfactory with regards to the land's continued ability to contribute to the agricultural industry within the Orange LGA.

It is noted that to ensure that the ongoing use of the land for agricultural purposes continues, a condition is attached requiring that the cattle yards are either replaced or relocated in a suitable location with suitable heavy vehicle access outside of the development footprint.

Traffic Impacts

The development is not expected to generate any adverse traffic impacts; either during construction or during the operational phase of the development.

Construction Phase

Based on the submitted Traffic Assessment Report (amended), traffic volumes during construction are anticipated to be 8 heavy vehicle deliveries per day (16 movements) and up to 50 construction personnel.

It should be noted that heavy vehicle movements are more likely to be 9 deliveries daily (18 daily movements) simply based on a five day working week (as indicated in the traffic assessment report) and purported maximum of 45 deliveries per week. In any event, whether it be 8 or 9 movements per day, the development is not likely to impact upon the safe operations of the highway. This has been clarified with TfNSW, and they have agreed to allow 9 B-Double movements Monday to Friday so as to avoid the need for weekend work.

TfNSW has stipulated certain site access improvements as being required to be undertaken prior to any construction works taking place on site, namely:

- a bitumen-sealed rural Basic Left turn treatment (BAL) in accordance with Figure 8.2 of Austroads Guide to Road Design Part 4A,
- a bitumen-sealed rural Basic Right turn treatment (BAR) in accordance with Figure A28 of Austroads Guide to Road Design Part 4, AND
- upgrade of the site access driveway in conformance with Figure 7.4 of Austroads Guide to Road Design Part 4, but with the gate or grid set back at least 30m from the edge of the highway, and a bitumen seal extending from the road edge to the gate,

(Copies of those diagrams are enclosed) with all works also to be in accordance with relevant TfNSW Supplements to Austroads.

In addition to site access improvements; TfNSW has required a Traffic Management Plan (TMP) to be prepared for the development (including a driver code of conduct) which is required to include the following matters as a minimum:

The Traffic Management Plan (TMP) and Driver Code of Conduct is to outline measures to manage traffic related issues associated with all phases of the development (e.g. deliveries, construction, operation, maintenance, decommissioning), any construction or excavated materials, machinery and personnel involved. The TMP is to detail the potential impacts associated with the development, the measures to be implemented, and the procedures to monitor and ensure compliance. The TMP is to address (but not be limited to):

- a. Specific commitments for the provision and use of buses and car-pooling during construction to limit peak hourly traffic in accordance with the approved Statement of Environmental Effects (SoEE) and conditions of consent. Plans and measures to manage the impacts of personal vehicle parking at pickup points (e.g. in towns) are to be detailed.
- c. Details of origin, destination, quantity, size and frequency of vehicle movements associated with the development including those accessing and egressing the site.
- d. Timings and staging of construction and operation of the development.

Traffic Impacts (cont)

Construction Phase (cont)

- e. Existing and projected background traffic, peak hour volumes and types and their interaction with projected development related traffic.
- f. Loads, weights, lengths and number of movements of haulage and construction related vehicles including Over Size Over Mass (OSOM) loads.
- g. The management and coordination of construction and staff vehicle movements to the site and measures to limit disruption to other motorists, including special OSOM management measures.
- h. Scheduling of haulage vehicle movements to occur outside of daily commuter peak periods, local special event times, school bus (both in rural and town areas) and school zone operating hours.
- *j.* Scheduling of heavy vehicle movements to minimise convoy or platoon lengths.
- *k.* Consideration to minimise the route length for road transport, particularly for OSOM loads.
- *I.* Any OSOM will be the subject of separate permits through the National Heavy Vehicle Regulator.
- m. Mitigation of local climate conditions that may affect road safety for vehicles used during construction, operation and decommissioning of the facility (e.g. scheduling during daylight hours, or outside of fog, wet weather, ice or snow).
- *n. Transport of hazardous materials in accordance with the relevant transport codes.*
- o. Specific mitigation measures along the approved transport routes. Road and intersection improvement works are to be completed prior to the commencement of on-site construction unless specifically approved otherwise in the conditions of consent.
- *p.* Consultation and engagement with affected stakeholders, including regulatory authorities, landowners, businesses, bus operators and so forth.
- q. Policies and procedures for addressing concerns raised by the community on project related matters.
- *r.* Dust suppression and mitigation measures on public roads and within the site boundaries.
- s. Toolbox meetings to facilitate continuous improvement initiatives and incident awareness.
- t. Truckloads are to be covered at all times when being transported, to minimise dust and loss of material onto roads which may form a traffic hazard.
- u. Measures to ensure responsible fatigue management and discourage driving under the influence of alcohol and/or drugs, dangers of mobile phone use and driving to the conditions, and adherence to posted speed limits.

For the avoidance of doubt, the above text is derived from a *pro forma* document prepared by TfNSW and items b. and i. were explicitly excluded from the subject condition required by TfNSW.

Traffic Impacts (cont)

Construction Phase (cont)

In addition to the above, TfNSW has required that the TMP include management controls to ensure the specified maximum hourly light vehicle movements (32 to/from east of site and 8 to/from west of site) and maximum 9 daily heavy vehicle arrivals (18 movements), as approved under this consent, are not exceeded.

Advanced warning signage of trucks turning are also required to be installed during the construction phase of the development.

Other technical and administrative requirements such a road occupancy licence and Works Authorisation Deed are required by TfNSW.

The light vehicle car park and the temporary laydown area are positioned within the site so as to allow ingress and egress in a forward gear. This is also a requirement of TfNSW and is attached as a condition of consent.

Operational Phase

The traffic associated with the ongoing operation of the development is expected to be limited to 2 to 3 staff for maintenance and cleaning occurring on a quarterly basis. It is acknowledged that periodic repairs of faults or the like would require technicians outside of the above predicted levels. This would not give rise to any adverse traffic impacts in the locality.

Based on the foregoing assessment, the development is considered satisfactory with regards to traffic impacts.

Environmental Impacts

The development is not anticipated to result in any adverse environmental impacts in terms of endangered ecological communities, threatened species or habitat as described above.

The development will have positive environmental impacts through the provision of renewable energy.

Noise Impacts

Noise generation from the development will occur during the construction phase. Noise generating activities during construction relate to the use of plant, machinery and equipment. Typically such activities would involve plant and machinery used for the construction of the internal access road, earthworks involving trenching for cabling and piling of panel supports using a hydraulic piling rig.

During the operational phase of the development noise generation is attributed to the solar tracking motors on the solar modules, operation of the inverters (2 x 3MW) and a 5MW transformer.

An acoustic assessment has been submitted in support of the proposal. The acoustic report endeavours to:

- review the construction activities likely to generate noise,
- identify the closest and/or potentially the most effected receivers,
- establish existing noise levels to determine project-specific construction Noise Management Levels (NMLs) and operation noise criteria,

Noise Impacts (cont)

- undertake 3D modelling of the development to predict noise levels,
- provide comparisons of predicted noise levels against relevant construction NMLs and operational criteria,
- assess the potential noise impacts associated with construction and operational aspects of the development, and
- provide feasible and reasonable noise mitigation and management measures, and monitoring options, where NMLs or operational criteria may be exceeded.

The following figure shows the identified sensitive receivers.



Figure 17: identified sensitive receivers (source: MAC Noise Assessment)

Noise Assessment

Construction Phase

The noise assessment did not carry out background noise modelling, and as such the minimum applicable Rating Background Levels of 35 dBA for Daytime Period and 30 dBA for evening and night time periods were adopted.

Predicted noise levels were then extrapolated using computer modelling of the project.

The Results indicate that Noise Management Levels (dB $LA_{eq}(15min)$) will be exceeded at sensitive receivers⁹ R02, R03, R04, R06, R07, R08, R09 and R10. Residential receivers R02 and R09 will experience the highest noise exceedance of 8dBA above NMLs.

The noise assessment notes that the noise levels exceed NMLs when construction activities are at their nearest point to receivers.

⁹ R01 relates to the existing dwelling within the development site and as such is excluded from the results.

Noise Assessment (cont)

Construction Phase (cont)

The report recommends a suite of noise mitigation measures including:

- a construction noise management protocol to minimise noise emissions, manage out of hours (minor) works to be inaudible, and to respond to potential concerns from the community;
- where possible use localised mobile screens or construction hoarding around plant to act as barriers between construction works and receivers, particularly where equipment is near the site boundary and/or a residential receiver including areas in constant or regular use (eg unloading and laydown areas);
- operating plant in a conservative manner (no over-revving), shutdown when not in use, and be parked/started at farthest point from relevant assessment locations;
- selection of the quietest suitable machinery available for each activity;
- avoidance of noisy plant/machinery working simultaneously where practicable;
- minimise impact noise wherever possible;
- utilise a broadband reverse alarm in lieu of the traditional high frequency type reverse alarm;
- provide toolbox meetings, training and education to drivers and contractors visiting the site during construction so they are aware of the location of noise sensitive receivers and to be cognisant of any noise generating activities;
- signage is to be placed at the front entrance advising truck drivers of their requirement to minimise noise both on and off-site; and
- utilise project related community consultation forums to notify residences within close proximity of the site with project progress, proposed/upcoming potentially noise generating works, its duration and nature and complaint procedure.

A construction schedule has also been provided in support of the development which provides a breakdown of construction activities and expected timeframes. It is noted that the piling (being the highest noise generating activity) is only to occur over a three week period.

Council's Environmental Health Officer has reviewed the proposed development and the accompanying material and advises of no objections to the development in terms of construction noise provided that the above measures become obligations on the beneficiary of the consent to adhere to during the entire construction phase of the development.

In arriving at this position the following is noted:

- The construction times will be limited to the day time period (7am to 4pm) as indicated in the supporting material accompanying the application.
- No weekend construction is envisaged by the applicant as indicated in the supporting material accompanying the application.
- The construction period is limited a 12 week programme (subject to variables) and thus is not an ongoing or long term impact.
- Piling activities are expected to occur only over a three week period.
- The above mitigation will assist in ensuring that the development is acceptable from a noise impact perspective during construction of the development.

Noise Assessment (cont)

Operational Phase

The noise assessment adopts the night time Project Nosie Trigger Level (PNTL) of 35dBA LA_{eq}(15min).

The results from modelling of the operational phase of the development indicate that the development complies at all residential receivers.

Notwithstanding the results, as recommended in the noise assessment a post-commissioning one-off noise validation monitoring assessment report is to be prepared. Should the noise validation monitoring report require further mitigation, this will be required to be undertaken within 1 month of the date of the commissioning report.

Based on the foregoing assessment of likely noise impacts, the development is considered satisfactory on the basis that appropriate mitigation measures are implemented, coupled with the short term nature of the impacts during construction.

Cumulative Impacts

Cumulative impacts of a development can arise under four typical scenarios, namely:

- time crowded effects where individual impacts occur so close in time that the initial impact is not dispersed before the proceeding occurs
- space crowded where impacts are felt because they occur so close in space they have a tendency to overlap
- nibbling effects occur where small, often minor impacts, act together to erode the environmental condition of a locality and
- Synergistic effects occur where an amalgam of heterogeneous impacts interact such that the combined impacts are greater than the sum of the separate effects.

The development has the potential to generate one or more of the above scenarios, such as a number of noise generating construction activities occurring at once, or two or more large vehicles making deliveries at the same time, leading to potential traffic impacts upon the highway.

Notwithstanding the above, suitable conditions relating to such matters as the requirement for a Construction Environmental Management Plan, the requirements of TfNSW including the obligation to prepare a traffic management plan, and the required noise mitigation measures will act to ensure cumulative impacts are within acceptable levels.

Additionally, it is also noted that there are no other similar developments in close proximity to this site that would, collectively, have the potential to result in an unacceptable cumulative impacts.

THE SUITABILITY OF THE SITE s4.15(1)(c)

The site is considered suitable for the proposed development. Despite the identified conflicts with the long term residential land strategy and the known visual impacts likely to be experienced by adjoining and nearby sensitive receivers, the environmental impacts likely to be borne by external parties are within acceptable limits.

The Suitability of the Site s4.15(1)(c) (cont)

Additionally, it is acknowledged that the development is a permissible development under the provision of a state wide environmental planning scheme, despite it being impermissible under the Local Environmental Plan.

It is also noted that Council staff are not aware of any physical, technological or natural hazards affecting the land that would otherwise constrain the development from occurring in a satisfactory manner.

ANY SUBMISSIONS MADE IN ACCORDANCE WITH THE ACT s4.15(1)(d)

The proposed development is defined as "advertised development" under the provisions of the Environmental Planning and Assessment Regulations and Council's Community Participation Plan.

FIRST EXHIBITION PERIOD

The application was advertised for the prescribed period of 28 days, and at the end of that period 80 submissions were received - 59 objections and 21 submissions in support.

Following the initial exhibition period the submissions received by Council were redacted and furnished to the applicant with a request to provide a response to the matters raised.

The submissions have been considered by Council officers and key themes have been identified as either concerns from those submissions that are in opposition to the development, and comments of support for those submissions in support of the development.

This analysis of submissions is shown in the attached submissions consideration matrix.

Theme 1 - Visual Impacts/Amenity Impacts

The vast majority of submissions objecting to the development highlight the potential visual impacts likely to occur as a result of the development.

As stated above under the heading "Likely Impacts", the development site is located on undulating land and most adjoining land holders will observe the development from elevated positions.

The above visual impact assessment identifies the closest and/or most affected residential properties and analysis of the impacts is undertaken. That assessment concludes that whilst the development will be visible, the resultant impacts can either be ameliorated to tolerable levels; or where such mitigation is not possible due to slope or other characteristics, the separation distances are such that the impacts are not unreasonable.

Theme 2 - Impacts upon Landscape Character

Impacts on local character is a subjective concept. Local character is about the way one feels about a place; it relies on a qualitative analysis of particular attributes of a place.

The landscape character the subject of this development comprises rolling green hills that are used primarily for stock grazing. The presence of the highway influences the character of the area.

Theme 2 - Impacts upon Landscape Character (cont)

The above analysis concludes that the development will alter the landscape, there is no question about that; however the pertinent question is will the development unreasonably alter the landscape character in such a way that the development is unacceptable?

It's important to note that over the next 10-15 years this area will change as the residential area to the south of the development site slowly progresses north. It is quite reasonable to conclude that this would have a far greater effect on the landscape character than this development does.

For this reason and the other reasons provided throughout this report, the answer to the question, in the opinion of Council officers is, no.

Theme 3 - Traffic Impacts - Safety

A large number of submissions objecting to the development raised traffic impacts/safety concerns. It is noted that at the time of the first exhibition period the access point was approximately 100m closer to Thompson Road.

Partly due to this issue (and partly due to the cost of the constructing the access at the initially proposed point), the applicant amended the application to relocate the access further west. In doing so, it alleviates the identified traffic safety issues relating to proximity of the access with Thompson Road.

Additionally, it is noted that TfNSW have considered the development and advised of no objections, subject to certain conditions being imposed.

Traffic matters are addressed in detail above under the "SEPP (Infrastructure)" and "Likely Impacts" headings.

Theme 4 - Impacts on Entrance to the City/First Impression for Visitors

In relation to the experience of highway users, this is addressed above under the heading "Likely Impacts", more specifically the landscape character assessment. That assessment concludes that the development does not give rise to unacceptable impacts for road users.

In respect of the comments suggesting that the development impacts negatively upon the first impression of visitors/damages Orange's Brand as a tourism destination for visitors travelling from the west, this is a subjective supposition which is difficult to quantify.

In any event, for the reasons provided above and in consideration of the required mitigation in relation to landscaping, fencing treatment etc, the development is not considered to give rise to unacceptable impacts to road users.

Theme 5 - Proximity to Urban area

A number of submissions raised the inappropriateness of the development given its proximity to the urban areas of Orange. Whilst this comment is interrelated with the future expansion of residential land, it has been treated separately.

The proximity to residential land really only raises one possible impact, that being the identified visual impacts. It does not give rise to any environmental impacts (during an operation phase) such as noise or dust impacts that are typical of other developments, such as mining or quarrying activities which are also permissible in the rural zone.

The development's relationship to the nearest residential land/urban fringe does not, in and of itself, give rise to unacceptable impacts.

Theme 6 - Land-Use Conflicts/Agricultural Viability

A number of submissions raised concerns that the development conflicts with the agricultural use of the land and the fact that agricultural land is being used for non-agricultural purposes.

As detailed above under the heading "Likely Impacts", the development footprint represents approximately 13.8% of the total 78ha, and as such a viable amount of land is reserved to continue the agricultural use. Additionally, the applicant has submitted that sheep grazing within the development footprint will be undertaken.

Theme 7 - Future Residential Area

This is detailed above under the heading "Strategic Context".

This is a central issue in the determination of the suitability of the development in this location.

As detailed above, the land is identified as future residential land in Council's Sustainable Settlement Strategy review (2010), and there is a very strong likelihood that this land will be required for residential land at some point within the lifecycle of this development, albeit closer to the end of its lifecycle.

As such, it would be open for the Panel to arrive at the conclusion that the site is not suitable for this development. Or, alternatively, if the Panel is minded to approve the development, it would be prudent to limit the life of the development to a period of not more than 25 years. Should the 25 year mark approach and it can be demonstrated that the land is not required for another period of time, the beneficiary of the consent could seek to modify the terms of the consent to extend the life of the consent at that time.

8 - Site Selection - Alternative Sites

The vast majority of submissions objecting to the development raised poor site selection as an issue and suggested that alternative sites should be considered.

On this issue, the Panel can only assess the development before it. Unlike other types of development such as where an EIS is required, justification of need and exploration of alternatives is not required to be undertaken in this case.

The Panel need only be satisfied that the site is suitable for the proposed development and not consider if there are better/more desirable locations for this development.

9 - Decommissioning Plans

A number of submissions were received in relation to what happens at the end of the development's lifecycle, the panels taken being taken to landfill, who finances the development's removal?

9 - Decommissioning Plans (cont)

In response to these matters, ITP in its response to submissions (initial exhibition period) provided the following:

ITP is responsible for undertaking any decommissioning requirements at the end of the project life.

This is mandated by the following:

- Long-term contracts with landholders which include obligations to remove all equipment from the site and remediate the site to the same condition and repair as it was prior to the construction of the project. This includes removing permanent foundations and all aboveground structures;
- Conditions of Development Approval which govern the project prior, during and after construction. In our experience, it is common for these conditions to include an obligation to remediate the site to Council's satisfaction; and
- Terms of the generation licence granted from EE NSW which must be granted prior to any operations. Under the terms of this agreement, generators such as ITP must comply with disconnection and decommissioning provisions under the National Electricity Rules.

In relation to the commentary around waste, the following is submitted by the applicant:

There is a commercial scale recycling plant in South Australia (Reclaim PV Recycling) and we anticipate that options will increase over the life time of the project. Components within the solar panels are readily recyclable and industry experience in Australia has shown that end-of-life solar farms have a scrap value higher than the cost of removal, and are therefore unlikely to be abandoned.

Rehabilitation will be to the pre-construction soil condition and all built material will be removed. This is likely to occur within two years of the end of the project.

A condition is recommended be imposed that requires a decommissioning plan be submitted.

10 - Noise Impacts - Construction Phase

A number of submissions raise the issue of noise impacts occurring during the construction phase of the development.

Noise impacts are addressed above under the heading "Likely Impacts". As noted above, the development will exceed Noise Management Levels during construction at nine residential receivers. As such, mitigation measures are required. In addition to this it is noted that the impacts will be short-term, limited to a period of three months, construction is limited to the daytime period under the NSW Noise Policy for Industry and no construction is to occur over a weekend.

Additionally, a Construction Environmental Management Plan is required to be prepared for the development which is to include a complaints register.

11 - Noise Impacts - Operational Phase

A small number of submissions have raised concerns in relation to noise impacts during the operational phase of the development.

As detailed above, the submitted acoustic assessment has assessed the likely operational noise levels and concluded that the development will not exceed the relevant noise criteria. Notwithstanding, to ensure that this is the case a post-commissioning report is required to assess noise levels and then implement any required mitigation within one month of the date of the report.

12 - General Construction Impacts (dust etc)

A small number of a submissions raised general construction impacts as a concern

In repose to this issue, a condition is recommend that requires a Construction Environmental Management Plan to be prepared prior to the issue of a Construction Certificate that addresses such matters as dust suppression, noise mitigation, construction activities and scheduling, working hours, stakeholder/community engagement etc.

13 - Decreased Property Values

Decreased property values are a concern for some residents as evidenced by a small number of submissions.

Changes in property values as a direct result of the development are not possible to quantify, and as such are not considered a factor that can be used to determine the appropriateness of a development in a particular locality.

14 - Inadequate Landscape Screen

A large number of submissions highlighted the inadequacies of the proposed landscaping. The submissions suggest that the species with mature heights of 2.5m and planted at 5m centres will do little to adequately screen the development, and some also suggest that the straight line planting arrangement will not result in a natural landscape.

Its noted that the landscape screening has been increased by the applicant as described above.

A detailed analysis of the quality and appropriateness of the proposed landscape screening offered as part of this development has been undertaken above.

Council staff agree that the landscape screening proposed even as amended is inadequate. Accordingly, a detailed condition is recommended that requires more meaningful landscaping and a landscape scheme that upon reaching semi-maturity will sit more appropriately in the rural setting.

To this end, the condition requires a mix of shrubs and eucalypt trees comprising a 75%:25% (shrubs(75%):trees(25%)) mix. Shrubs must have a mature height of at least 3m. All plants must be endemic to the Orange area. Eucalypt species must be a combination of the following; White Box *Eucalyptus albens*, Yellow Box *E. melliodora* and Blakely's Red Gum *E. blakelyi*. The planting arrangement must be irregular to emulate a natural setting and shrubs must be planted at maximum 2.5m centres. Trees can be planted at a greater distances but not more than 7m centres.

14 - Inadequate Landscape Screen (cont)

Shrub plants along the northern, southern and western boundaries must be advanced species with a 15L pot size or greater. Trees can be tube stock. Tube stock is more likely to result in a viable tree and adapts to its environment better than advanced trees types.

Additionally, to protect the landscaping from being impacted by stock grazing within the balance of the rural land; the outside perimeter of the 5m landscape screening must be fenced with stock-proof rural style fencing along the southern, western and eastern sides of the landscape screening.

A detailed landscape plan prepared by a registered landscape architect demonstrating compliance with the above requirements is required to be submitted and approved by Council's Manager Development Assessments prior to the issue of a Construction Certificate.

The landscaping should commence immediately upon commencement of development works (following receipt of the CC). This is to ensure that the plants can begin to establish as early as possible, construction personnel can monitor and maintain the landscaping during construction and replacement plantings can be undertaken if plants die in the first three months.

In addition to the above, following an Occupation Certificate being issued (commencement of the operational phase of the development), the landscaping is to be inspected quarterly; with any sick or dead plants being replaced within seven days of the monitoring period. The monitoring regime shall continue for a minimum period of 24 months following occupation. Council officers, or an officer/s appointed by the Council may inspect the landscaping at any time.

15 - Water Quality - Impacts on Creek System - Soil and Erosion Control

A number of submissions raised water quality, soil and erosion concerns or chemical run-off from weed control. In response to these matters, as detailed above the development is categorised as Nominated Integrated Development given the development's proximity to two watercourses which flow directly into Broken Shaft Creek. NRAR issued General Terms of Approval which include detailed conditions in relation to soil and erosion control which the beneficiary of the consent must implement.

In relation to contaminated run-off, the applicant has indicated that sheep grazing will occur within the development footprint which will assist with weed control. It is acknowledged that pesticides will be required as means of controlling invasive grasses. This is important from not only a biosecurity point of view, but also from a biodiversity perspective. It is noted that pesticide application (given the continued grazing of the land) is not expected to be any greater than routine broad acre applications that occur as part of most farming practices.

As noted above under the SEPP 33 considerations, relevant conditions are attached in relation to chemical storage.

16 - Glare and Glint

A number of submission raise concern in relation to glare and glint impacts from both a general amenity perspective, and a safety impact for road users.

It is noted that the applicant has submitted a glare and glint assessment that concludes no adverse impacts.

It is acknowledged that the level of glare and glint will be reduced to acceptable levels given the sun tracking of the solar modules and the fact that the solar panels are designed to absorb solar irradiation as the means of generating electricity. A solar panel that reflects sunlight is inefficient. It is understood that it is possible to apply an antireflective coating to the solar panels. Given the proximity to the highway and to residential receivers, it is recommended as a precautionary principle that a condition be imposed that requires all solar panels to have an antireflective coating applied.

Given the comment above that the glare and glint will be acceptable due to the tracking of the sun, should the sun tracking fail on one or a group of modules, the modules should be manually adjusted to a full vertical position until the fault is fixed. Additionally, any damaged panels must be fixed as fast as practicable. This is a requirement of TfNSW. Such monitoring should be achieved by a computerised monitoring and fault identification system.

As mentioned above, the development was referred to TfNSW because it has frontage to a classified road. TfNSW raised no objections to the possibility of glare and glint from the facility on road users, other than to require a condition around maintenance of damaged panels.

Based on the forgoing, the development is considered acceptable with regards to glare and glint.

17 - Safety Risk (fire, electric shock, Electromagnetic Field Exposure (EMF))

A small number of submissions raise concerns in relation to safety matters, including such things as fire risk, electric shock risk, electromagnetic risk and the like.

In relation to fire risk, the SEPP 33 analysis provided by the application submits that the BESS will have a fire suppression system incorporated.

Additionally, whilst the land is not located in a bush fire prone area, as a precautionary measure it recommended that a static water supply of not less than 50KL be provided within the site to assist with firefighting should such an incident occur.

In relation to connections with the grid, earthing of the facility and electric shock risk, the applicant has provided the following:

Essential Energy (EE) NSW, as the network owner, will provide specific instructions to ensure that we are connecting in a manner that will not put the grid stability or any persons safety at risk. Conditions set out by EE are to be provided with their official offer to connect to the network and will be required to comply with these for the lifecycle of the project.

Further to the EE comment, Council in their obligations referred the application to Essential Energy. EE raised no objection and its requirements have been incorporated into the consent. (Refer to SEPP (Infrastructure) commentary above.)
17 - Safety Risk (fire, electric shock, Electromagnetic Field Exposure (EMF)) (cont)

In relation to concerns regarding electromagnetic field exposure, the applicant submits the following:

[U]nlike fossil fuels, such as coal, generating electricity from renewable sources, like solar, creates no emissions that are harmful to human health and the environment. According (sic) to the Australian Radiation Protection and Nuclear Safety Agency, which maintains continual oversight of emerging research into the potential health effects of the electromagnetic field (EMF) exposure, there is no established evidence of health effects from exposure to electric and magnetic fields from powerlines, substations, transformers or other electrical sources, regardless of proximity to the site.

18 - Contamination Risk from Panels

A number of submissions raise concerns that solar panels are made from potentially contaminating material and some carcinogens.

In response to these concerns the applicant submits the following:

[T]here appears to be some confusion about the toxicity of solar panels. Specialised solar cells, such as those used by the space industry, may use toxic metals (for example GaAs, GICS and CdTe cells). These are not used on commercial solar panel installations.

Instead, silicon-based solar cells are used. These are free of toxic heavy metals. Panels chosen for the development will meet the Australian standard AS/NZS 5033 for photovoltaic (PV) modules. A Construction Environmental Management Plan will be put in place to provide clear instructions for routinely checking the panels after construction to ensure structural integrity and performance throughout the project lifecycle. Any panel deemed as defective would be dealt with in line with the requirements of the POEO (2014) Act (Section 7.12.3) regarding panel recycling.

In response to the comments from the applicant there remains confusion around this issue, as a basic review of available literature suggests PV panels do contain heavy metals including lead, copper and cadmium, all of which are heavy metals. What is important to note is that the panels are fully concealed and these substances cannot leach out unless the panel is damaged.

With this in mind, given the proximity of the development to the Creek System a condition is recommended that requires bi-annual environmental monitoring reporting to be undertaken and a report submitted to Council. The monitoring shall report occurrences of any damaged panels in the reporting period and the results of localised discrete soil testing in the location of the damaged panel. Where contamination is identified, appropriate remediation must be undertaken immediately. Ground water monitoring may be appropriate in such circumstances. The report is to occur for the life of the development up until complete decommissioning/restoration of the site.

With the imposition of the above condition the Panel can thence be satisfied that the development is unlikely to give rise to any unsatisfactory contamination risks.

19 - Connection to Grid

Some submissions raised concern with regards to the connection of the facility to Essential Energy's electricity network and the impacts upon the grid as a result of the development. In repose to this issue, it is noted that EE will require certain conditions on the network connection which will need to meet as a requirement of the project. Furthermore, the application was referred to EE and no objections were raised at that time.

20 - Limited Community Benefit

A number of submissions raised concerns in relation to the limited benefits for the community as a result of this development. Some submissions note that this is not essential infrastructure.

In response to these comments, this development is a commercial venture which is partly funded by an investment group. There are no aspects of the NSW planning system that prevents such a development from occurring, and in the same vein there is nothing in the planning system restricting development of this type to a needs based model or essential community infrastructure. The development is a land-use that is permissible in the zone via the SEPP (Infrastructure).

In relation to job creation, S4.15 of the EP&A Act obligates the Panel to consider certain likely impacts of the development, one being economic impact¹⁰. In respect of this development, the development is not expected to have a negative economic impact in the community (ie job losses are not likely to occur as a result of this development); but rather a positive one during the construction phase. For instance, a local bus company is likely to be engaged to transport construction personnel to site, necessary plant and equipment (water carts, portable toilets and portable lunch rooms, machinery etc) are is likely to be hired from local plant hire companies, and so on. Additionally, out-of-town construction personnel would stay, eat and drink, and shop locally during the construction phase.

So, whilst not all of the 50 personnel required to construct the development would be local, there would be positive externalities in other areas of the local economy directly attributable to the development. There are also other community benefits purported in the submission in support of the development such as reduced energy costs.

21 - Errors in Material

A number of submissions have highlighted numerous errata in the submitted material from the applicant. This has made the assessment by Council staff difficult. It has also frustrated the process and added additional angst within the community.

Some of the errors included identifying the neighbour's property as the development site, discrepancies in the total footprint of the site, discrepancies around the overall height of the solar modules, height of fencing, errors in distances of various surrounding locations and the development site, properties omitted from the visual impact assessment, distances from the development site of nearby properties inflated etc.

These have mostly been corrected. However, in the detailed assessment of the most recent drawings it is noted that the plans on page ORA2B-G-210 Rev 2 nominate a setback from lot boundaries for security fencing at 3m, where the next plan nominates a 5m setback to the front boundary. To address this, a condition is recommended to reinforce the greater setback.

As detailed above, numerous errata are identified in the submitted visual impact assessment. Notwithstanding this, Council officers have carried out a complete assessment of visual impacts.

¹⁰ A development's effect on property values is not considered an economic impact.

22 - Environmental Benefit

A number of submissions in support of the development raised the environmental benefits as a consequence of this development, such as reduced CO₂ emissions, reduced reliance on fossil fuels etc.

It is acknowledged that generating electricity from renewable energy sources will have positive benefits for the environment and future generations. However, these need to be balanced against other localised impacts of these types of development which have been ventilated in the forgoing sections of this report.

23 - Jobs

A number of submissions raised job creation being a benefit as a result of this development.

As detailed above, direct employment as a result of this development will be limited. The operational phase of the development will not produce any local jobs. However, as detailed above there will be indirect employment benefits from the development. A number of the submissions suggest that for every 1MW of power generated, 3.5 direct and indirect jobs are created. Council staff have no data available to substantiate this claim.

24 - Limited Impacts

A small number of the submissions in support suggest that this development generates near nil impacts.

The forgoing assessment suggests this is not the case. There are impacts generated by the development - some negative and some positive. The purpose of this assessment is to guide the Panel in arriving at a decision on the application.

25 - Economic and Social Benefits

A number of submissions highlight the economic benefits for this development, including jobs and an economic boost for the local economy. This is discussed above.

Some submission in support also suggest that this development will allow residents in a lower socio-economic demographic to access renewable power. It also allows residents who do not own a home or own a property where domestic scale solar is not practicable to access renewable energy. The social benefits are appreciated.

26 - Other Matters

This section addresses matters raised in submissions outside of the above themes.

Submission 11 raises concerns around security and privacy. In response to this it is noted that the facility is fully fenced with security fencing at a total height of 2.1m. As such, territorial reinforcement will be achieved. In relation to privacy, the facility is unstaffed apart from quarterly daytime maintenance periods. As such, the development will not give rise to any privacy impacts.

Submission 13 raises a number of issues other categories, namely impact upon biodiversity, the accuracy of the CIV and future expansion. In relation to biodiversity impacts, these are addressed above under heading "Section 1.7 - Application of Part 7 of the *Biodiversity Conservation Act 2016* and Part 7A of the *Fisheries Management Act 1994*" and "Section 7.4 - Terrestrial Biodiversity".

26 - Other Matters (cont)

In relation to the accuracy of the CIV, Council staff required clarification of the cost estimate to include a reasonable contingency. The latest cost estimate includes a 1% contingency. Whilst this is lower than industry standard, given the nature of the development being the installation pre-fabricated solar panels, the likelihood of needing a contingency of 5% or more is limited. In any event the CIV purported by the applicant is more than \$1 million away from the \$10 million dollar threshold. This allows for at least a 5% contingency for the development in line with industry standards.

Submission 18 is in support of the development. The submission suggests that the development will have little to nil negative impacts and that the proposed screening will enhance the location. In response to this submission, there will be localised negative impacts as described in the above visual impacts assessment; and in relation to the landscaping, as detailed above the proposed landscaping is considered inadequate and more extensive landscaping is required to provide a meaningful means of screening the development in the context and setting.

Submission 19 suggests that the location is unsuitable due to meteorological constraints. Given the development is a commercial venture, this is a matter for the applicant. This is no different to a café being in a poor location with limited footfall for example. This is not a planning consideration.

Submission 21 provides a very detailed dissection of the proposed development application and identifies the following issues outside of the matters discussed above:

- inconsistency with Orange LEP;
- economic evaluation of the development;
- costs borne by EE;
- non-essential infrastructure;
- limited consultation by applicant and Council;
- inconsistent BCO sub-regional strategy; and
- limited justification of site selection.

In response to the above, inconsistencies between the SEPP (Infrastructure) and the LEP have been discussed above. Briefly, the development is prohibited under the LEP but permissible under the SEPP, and the SEPP prevails to the extent of any inconsistency.

In relation to the economics of the development, again this is a commercial development. The economic viability of the development is a matter for the applicant and is not a planning consideration. The cost borne by EE to allow connections to the grid is a matter between the applicant and EE, it is not expected that EE would allow themselves to be out-of-pocket as a result of this development. In relation to the comment that this development is non-essential infrastructure like a sewerage treatment plant or a major freeway, Council staff agree - this is not essential. NSW is fortunate in that there is no real threat on the reliability of electricity supply, unlike other states; but again this is not public infrastructure - this is a commercial venture, no different to any other business.

In relation to consultation by the applicant, this is unfortunate. Council encourages pre-lodgement consultation with neighbours as early as possible in the initial scoping and planning phase, however the NSW planning system does not enforce this. The number of objections and the general sentiments of neighbours and other members of the community are probably reflective of this lack of consultation by the applicant.

26 - Other Matters (cont)

In response to the criticism of Council, Council has obligations to public notify the application for a period of 28 days, Council fulfilled this obligation. Council also has a policy of needing only to notify immediately adjoining neighbours. Council staff notified well beyond this, including residents in the adjoining LGA.

It should also be noted that Council elected to exhibit the amended application, so the application was effectively exhibited on two separate occasions.

Additionally, Council staff met with the three immediately adjoining owners to better understand their opinions of the development and to better understand how the development may impact their properties. The Director of Development Services also attended a meeting of neighbours on 24 October 2020 to discuss residents' concerns and the process of a development application determined by the Planning Panel.

In response to the comment that the development is inconsistent with the Blayney Cabonne Orange Sub-regional Strategy. The three LGAs have held the referenced Strategy since 2008. The 2008 strategy seeks to guide decision making in and around rural and industrial land.

A revised strategy has recently been placed on exhibition by Blayney and Cabonne, and is currently on exhibition with Orange. The draft revised Strategy endeavours to promote and protect sustainable agriculture, support rural economic growth including rural tourism, recognise and manage land around Mt Canobolas, support mining, protect environmental values and manage threats including climate change; and manage the rural/urban interface.

Given what the draft Strategy seeks to achieve, the development is not considered to be inconsistent with the strategy. The development will allow a large proportion of the site, being approximately 86% of the site, to continue to be used for agricultural purposes, and detailed commentary is provided above in relation to the future urban growth of Orange to the northwest.

Neither the 2008 Strategy nor the draft Strategy explicitly seek to preclude developments such as the type proposed in this application from occurring.

In relation to the last matter, unlike other types of development such as designated or state significant development that have very specific requirements around what is mandated to occur as part of an EIS, local development (which this development is) does not require the same level of assessment. That is to say, there is no requirement on the applicant to justify the need of the development; nor is there is a requirement to explore alternatives to what is proposed.

Submission 23 makes a suggestion that the development will morph into a much larger development over time. In response to this, Council staff and the Panel can only consider what is before it. The application is for a 10.8ha solar farm. There is no suggestion within the application that the development will expand into the future.

Submission 33 suggests the LEP is being ignored. In response to this issue, the LEP is not being ignored - there is a State policy that prevails over an LEP.

26 - Other Matters (cont)

Submission 34 provides a detailed dissection of the application and highlights what the author believes to be numerous shortcomings. In particular the submission raises the following matters outside of the key themes addressed above:

- accuracy of the CIV;
- solar exposure levels inaccurate;
- impacts on kangaroo population;
- impacts on flora; and
- nil community consolation with neighbours.

In response to the above, the accuracy of the CIV has been raised with Council and is discussed in detail above, so too has the issue of the level of solar exposure for the development.

Impacts on biodiversity are addressed above, especially the eastern grey Kangaroo is not considered a threaten species, and in any event a 13.8% reduction in the area of rural land currently accessed by kangaroos is not expected to impact on kangaroo populations.

Comments regarding the community consultation by the applicant are discussed above.

Submission 35 suggests that the development is the first of three additional expansions or stages. In response to this, Council staff and the Panel can only assess what is in the development application. It would be unlawful for Council or the Panel to assess and determine an application based on the suspicion that it may expand in the future. Should an application for expansion occur in the future, that application would be subject to the same rigour of assessment as is required under this assessment.

It is noted that submission 41 is very similar to submission 35 and is co-signed by eight parties.

Submissions 44-55 are pro-forma. Those submissions raise also raise the possibility of future expansion, which is addressed above.

Submissions 56 – 68 and 71 -80 are all in support of the development and suggest that the development will have positive benefits for Orange's brand in that it promotes Orange as a progressive and climate aware city.

SECOND EXHIBITION PERIOD (revised exhibition material)

As a consequence of the applicant considering the submissions received, the applicant elected to amend the proposal, primarily as a means of ameliorating some of the impacts borne by properties to the west of the subject land. The extent of the changes made by the applicant are detailed above.

As noted above, in doing so this had the effect of stretching the development site further to the south and thus closer to the southern neighbour.

These amendments were considered material changes to the application, and as such the application was re-exhibited to make neighbours and the general public aware of the changes.

It was noted in the notices prepared by Council staff that previous submissions would be considered. So it would not be accurate to construe that the reduced number of submissions between the second and first exhibition periods are a reflection of community acceptance or changed community sentiment with regards to the application.

Second Exhibition Period (revised exhibition material) (cont)

At the conclusion of the second exhibition period 13 submissions were received.

The majority of issues raised in the submissions received during the revised exhibition period are addressed above. Some however raise matters that required further commentary.

Submission 1 raises concerns in relation to the project's need. Unlike designated or state significant development where an EIS is required, applicants proposing local development are not required to provide justification of a project need, nor are they required to provide alternatives. In any event, the applicant has provided a justification of the project as part of their application.

The submission also raises concerns around the CIV of the development, stating the contingency is inadequate. Council staff have required the applicant to prepare a new costings report on two separate occasions. In relation to the CIV for the development, it is noted that the calculation of CIV excludes GST, and as such the development is less than \$9m. On this basis, the development, even with a 5% contingency would remain below the \$10m threshold for state significant development.

In any event, as the development is well separated from the area of environmentally sensitive land, the \$10m threshold may not even be triggered in any event. This is a moot point as the development is well below the threshold.

Submission 3 references two strategic documents; the Local Strategic Planning Statement and the Blayney Cabonne Orange Sub-regional Strategy. Both these documents are addressed in detail under the heading "Strategic Context". The development is not inconsistent with those documents.

The submission also raises the point that the development will impact residential properties into the future when the residential area is extended. It is impossible to pre-empt such an impact occurring, nor is it possible to quantify an impact that does not presently exist.

Submission 6 raises concern in relation to possible future expansion. Council staff and the Panel can only consider the DA before it and not pre-empt further expansion. In any event, the applicant has accepted a condition that restricts the solar farm on the land to not more than 5MW capacity.

Submission 7 is in support of the development, however the support is conditional upon greater landscape screening being provided. As detailed above, a condition is attached to this effect.

Submission 8 raised safety concerns in regards to the safety aspects associated with electricity and connections to the grid. In response to this, the applicant provides the following:

Some submissions raised concerns about safety management throughout the project lifecycle. Safety of the proposed development is paramount. Throughout the lifecycle of the project we are bound by Australian laws to comply with workplace health and safety standards.

A Construction Environmental Management Plan (CEMP) will be prepared by the Contractor engaged for construction and operation of the project and will outline the appropriate measures they will take to mitigate any potential risks.

Second Exhibition Period (revised exhibition material) (cont)

The development site is not mapped as being bushfire prone land. Nevertheless, a Bushfire Management Plan will be prepared which outlines the mitigation measures to be undertaken to minimise fire risks. We have included an 8m setback between the fence to the solar farm infrastructure to allow for ease of access. The trees are planted external to the security fence to reduce fire risk within the fenced area.

With respect to hail risk, the solar panels will be comprised of laminated tempered glass construction. We would not expect the disbursement of any glass or other material in the event of a hail storm.

Some submissions raised concerns about the safety of the connection into the distribution network.

ITP is working with Essential Energy to ensure that the proposed connection will not have any adverse effects on the distribution network. ITP has submitted a Preliminary Connection Enquiry and a Detailed Connection Enquiry to Essential Energy and is currently working through the modelling acceptance processes with Essential Energy. Essential Energy, as the network owner, will provide specific instructions to ensure that we are connecting in a manner that will not put the grid stability or any persons safety at risk.

The solar farm will also consist of an inverter station incorporating the high/medium voltage switchgear and transformers and two 3.0 MW inverters. The inverter station is ground mounted and incorporated on a 12.19m skid. The inverter will connect by way of cables running overhead to connect to the 11 kV power lines running along the eastern boundary of the property to inject power to the electricity grid.

As detailed in the SEE, the solar farm uses MVPS-6000 which comprises 2x SMA Sunny Central inverters (SC3000) (see image below). The transformers are liquid immersed and hermetically sealed for best reliability and minimum maintenance. The skid has integrated bunding should leakage occur and meets all relevant Australian Standards.

The solar farm is to be enclosed along all boundaries within a 1.8 metre high security fence. The proposed fence is to be chain mesh steel topped with three rows of barbed wire giving a total height of 2.3 m. The total fenced area is 10.8 ha. Along the boundaries with landscaping, the fence is to be placed between the shrubs and the first array of PV panels so that is it screened from passing traffic and neighbours by the vegetation.

Arrays are to be setback a minimum 8 metres from perimeter security fences. The fence is set back 198 m from the southern boundary, 483 m from the western boundary, 5 m from the boundary along the Mitchell Hwy and 55 m from the existing access lane on the eastern boundary.

The whole power system (substation and power generation) is enclosed by a suitable fence but we do not used crushed gravel between or under the panels to exclude plant growth. On the contrary, we encourage native grass growth and sheep grazing as a preferred maintenance method. Crushed gravel will be used sparely, only as required, for example on the entry road and to stabilise the inverter station.

The project includes a full earthing design which must be approved by Essential Energy prior to energisation. This includes electrical equipment protection from lightning.

Second Exhibition Period (revised exhibition material) (cont)

The CEMP will also outline the appropriate measures they will take to mitigate any potential risks. The CEMP will include operational policies and procedures that will be established in consultation with the manufacturer's instructions, construction staff and ground crews.

Specific questions:

• Will network users endure voltage supply interruptions and transformer/recloser trips? No.

Extensive network modelling has been undertaken by ITP to meet all Essential Energy voltage requirements. Essential Energy will maintain control over reclosers to ensure continued reliability of their network.

PUBLIC INTEREST s4.15(1)(e)

The proposed development is considered to be of moderate to high interest to the wider public due to the volume of public submissions and the nature and extent of potential visual impacts. Notwithstanding this, from the foregoing detailed assessment it can be concluded that the development is within acceptable limits and passes the public interest test.

The proposal is not inconsistent with any relevant policy statements, planning studies, guidelines etc that have not been considered in this assessment.

SUMMARY

The proposed development is permissible with the consent of the Western Region Planning Panel pursuant to clause 34 of State Environmental Planning Policy (Infrastructure). The proposed development complies with the relevant aims, objectives and provisions of Orange LEP 2011 (as amended) and DCP 2004.

The subject land is located in a future residential area in Council's long-term housing strategy, however the forward projections indicate that the land will not be required within the 15-20 year timescale. Beyond this period it is expected that those parts of the site that are unencumbered/more easily serviced, *are* likely to be required within the 20-25 year timescale.

That being said, the rapid growth of renewable energy technologies adds another complexity to this equation. It is near impossible to predict whether this project will remain commercially viable past the 20 year mark; or whether technology advances between now and 2040 will mean that current solar technologies have advanced to the point where technologies contemplated in this application are redundant or replaced with much more efficient technology, where the same throughput of electricity can be generated using much less land area.

A section 4.15 assessment of the development indicates that the development *does* present (relatively localised) visual impacts in the locality, some of which cannot be entirely ameliorated even once landscaping has reached maturity. Moreover, it is acknowledged that extensive conditions of consent are required to ensure that the development is within acceptable levels. Given these two factors, it would open for the Panel to consider these impacts unacceptable, and thence refuse the development.

Summary (cont)

On balance however, with the identified essential conditions of consent as articulated in the foregoing assessment, the development is considered to be within acceptable levels of environment impact, and as such the development is recommended for approval.

Attached is a draft Notice of Approval outlining a range of conditions considered appropriate to ensure that the development proceeds in an acceptable manner.

COMMENTS

The requirements of the Environmental Health and Building Surveyor and the Engineering Development Section are included in the attached Notice of Approval.

ATTACHMENTS

- Submissions Matrix
- Notice of approval
- Plans
- General Terms of Approval NRAR
- TfNSW annexures

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