



COUNCIL ASSESSMENT REPORT WESTERN REGIONAL PLANNING PANEL

PANEL REFERENCE & DA NUMBER	PPSWES-70 DA2021/21	
PROPOSAL	Construction of a grid-connected solar PV installation no larger than 5MW.	
ADDRESS	Lot 2221 DP 1101864; 1570 Dandaloo Road NARROMINE	
APPLICANT	NSW Community Renewables (Narromine) Pty Ltd c/SLR Consulting	
APPLICATION TYPE	Development Application	
REGIONALLY SIGNIFICANT CRITERIA	Clause 5, Schedule 7 of the SRD SEPP: Private infrastructure and community facilities over \$5 million (a) Electricity generating works	
KEY SEPP/LEP State Environmental Planning Policy (State an Development) 2011; State Environmental Planning Policy (Infrastructum Narromine Local Environmental Plan 2011)		
CIV	\$6 438 964 (excluding GST)	
RECOMMENDATION	Approval subject to conditions	
DATE OF REPORT	18 June 2021	
SCHEULDED MEETING DATE	Select Date	

EXECUTIVE SUMMARY

The proposal includes a no larger than 5MW grid-connected solar PV installation. The solar farm will be connected to Essential Energy's network via a 22kV distribution line running adjacent to the southern boundary of the site. Electricity generating works are prohibited in the RU1 Primary Production zone pursuant to the Narromine LEP 2011. However due to the RU1 zoning, the proposed solar PV project is permitted with consent under clause 34 of SEPP (Infrastructure) 2007.

The site currently is used for periodic cropping and has been cleared of tall vegetation, except for two trees on the western boundary, which will remain. The site adjoins similar agricultural land to the west, Narromine Shire Council's Animal Shelter to the east, and R5 zoned Large Lot Residential land to the south, with Narromine's Aerodrome located to the north, opposite

Mitchell Highway. Frontage the Great Western Railway occurs to the land and vehicular access will be via frontage to Dandaloo Road.

The key issues addressed in the development application, include:

- Proximity to the Narromine Aerodrome and potential for glare and reflectivity issues;
- Glider activity/events associated with the Aerodrome and thermal impact;
- Proximity to R5 Large Lot Residential land and impact to visual amenity;
- Site falls within known flood prone land;
- Construction period impacts, traffic, noise, demand for water.
- Deliveries to the site for the construction.

The application was referred to CASA Aviation Group for comment, and a revision of the Reflectivity Glare Assessment was provided by the applicant as a result, which is considered an acceptable outcome. The construction deliveries are proposed to be delivered to site via Mitchell Highway, McNamaras Lane and Dandaloo Road. This will have the effect of increased traffic, and use of the level crossing associated with the Narromine to Nevertire line on McNamaras Lane. Transport for NSW have recommended additional line-marking at this location. The application was placed on public exhibition and neighbours notified in writing. Key issues raised were concern surrounding loss of agricultural land, visual amenity impacts (incl. glare), construction period impacts related to noise and traffic, and water use. Issues raised by agencies and the public are able to be addressed in conditions of consent.

Overall the development's benefits are acknowledged and potential impacts managed through proposed design or additional conditions. The recommendation is to approve the development subject to conditions.

1. INTRODUCTION

1.1 Background

A chronology of the development application is outlined below including the Panel's involvement (briefings, deferrals etc) with the application:

Table 1: Chronology of the DA

Date	Event
8 March 2021	DA lodged.
15 March 2021	Exhibition of the application.
11 March 2021	DA referred to external agencies.
15 April 2021	Request for Information from Council to applicant.
30 April 2021	Further information received.
3 June 2021	Panel briefing.

2. THE SITE AND LOCALITY

2.1 The Site

The proposed development site will be a leased section of a larger title. The development site is located in the south eastern corner of Lot 2221 DP 1101864 being a 59.72ha parcel, fronting Dandaloo Road. The proposed site area is rectangular in shape and comprises approximately 15 hectares, located to the west of Narromine Shire Council's animal shelter (Lot 1 DP109556). The proposed development site has frontage of approximately 280m on Dandaloo Road, being a sealed local road. The Dandaloo Road site is approximately 1.6km from the Narromine main street (Dandaloo Street) and Council Chambers (refer to Figure 1).



Figure 1: Site Location

2.2 The Locality

The locality has mixed land uses occurring in the vicinity of the development site (refer to Figure 2). Within a 1km radius of the site the following land uses are noted:

- Periodically cropped and grazed RU1 Primary Production zoned land.
- Rural industry including the NSW Grain Corporation Ltd loading facility.
- Developed R5 Large Lot Residential land.
- Developed and vacant available R1 General Residential land.
- Private recreational area, including the Narromine Golf Club Ltd. Tourist facility and related land uses, including the Narromine Aviation Museum and tourist accommodation (caravan park and motel, Tom Perry Dr).
- Council infrastructure, namely the current pound facility, NSC Animal Shelter (and site of previous sewage treatment ponds).
- Locally significant transport infrastructure, also exists. Narromine Airport is positioned north of the proposed site opposite the Mitchell Highway (classified

road). The northern boundary of the subject Lot 2221 is the Main Western Railway.



Figure 2: Features of the Locality

3. THE PROPOSAL

The proposal has been described in the Statement of Environmental Effects prepared by SLR Consulting Australia Pty Ltd on behalf of the Providence Asset Group and supporting plans. The proposal includes a no larger than 5MW grid-connected solar PV installation. The solar farm will be connected to Essential Energy's network via a 22kV distribution line running adjacent to the southern boundary of the site. The PV arrangement will consist of approximately 147 ground mounted single axis trackers. The PV arrays will have a clearance above the existing ground surface and extend to approximately 2.58m at maximum tilt. A 4m wide access road is proposed connecting the solar farm to Dandaloo Road adjacent to the eastern boundary of the site, approximately 1.3km west of Derribong Avenue. The solar farm is proposed to be fully fenced with 2.3m high security fencing including barbed wire at the top. During the construction period there is estimated to be up to 30 personnel on site for up to 6 months.

Table 2: Development Data

Control	Proposal
Site area	15ha part of Lot 2221 DP1101864 (total 59.72ha)
Zone	RU1 Primary Production
Max Height	PV arrays will have clearance above ground extending to 2.58m at maximum tilt.
Landscaped area	External to proposed fence with front setback and side setbacks.
Setbacks	Front setback min 30m.
Other site Improvements	Hardstand laydown area and compound suitable for B-Double turning; 4m wide access road with road works to crossover Dandaloo Road; Onsite stormwater detention basin; 4mx6m Shed for storage; Container power conversion station.
Temporary Site Improvements	Toilet blocks with rainwater tank; Storage containers; Crib rooms; And Site office.

4. STATUTORY CONSIDERATIONS

Section 4.15(1) of the *Environmental Planning and Assessment Act 1979* ('EP&A Act') outlines the matters which the consent authority must take into consideration in determining a development application. These matters as are of relevance to the development application include the following:

- (a) the provisions of any environmental planning instrument, proposed instrument, development control plan, planning agreement and the regulations
- (b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,
- (c) the suitability of the site for the development,
- (d) any submissions made in accordance with this Act or the regulations,
- (e) the public interest.

These matters are further considered below.

It is noted that the proposal is not considered to be:

- Integrated Development (s4.46)
- Designated Development (s4.10) or a
- Crown DA (s4.32)

However, the development is considered to be of the type requiring concurrence/referral (s4.13):

• Pursuant to the SEPP (Infrastructure) 2007, clause 45 Determination of development applications—other development – The proposed development will require works to connect to the overhead electricity power lines, hence triggers clause 45(1) and referral to Essential Energy in accordance with clause 45(2).

4.1 Section 4.15(1)(a)(i) - Provisions of Environmental Planning Instruments

The following Environmental Planning Instruments are relevant to this application:

- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy No. 55 Remediation of Land;
- Narromine Local Environmental Plan 2011.

These instruments are considered below.

State Environmental Planning Policy (State and Regional Development) 2011

The private infrastructure development, with a capital investment value greater than \$5 million, is considered 'regionally significant development' as defined by exceedance of certain criteria defined by Schedule 7 of the SEPP:

5 Private infrastructure and community facilities over \$5 million

Development that has a capital investment value of more than \$5 million for any of the following purposes—

- (a) air transport facilities, electricity generating works, port facilities, rail infrastructure facilities, road infrastructure facilities, sewerage systems, telecommunications facilities, waste or resource management facilities, water supply systems, or wharf or boating facilities,
- (b) affordable housing, child care centres, community facilities, correctional centres, educational establishments, group homes, health services facilities or places of public worship.

Hence the development application has been referred to the Western Regional Planning Panel for determination.

State Environmental Planning Policy (Infrastructure) 2007;

The proposal is defined as **electricity generating works** and is permitted with consent.

electricity generating works has the same meaning as it has in the Standard Instrument.

The term electricity generating works is defined by the Standard Instrument as follows—electricity generating works means a building or place used for the purpose of—

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

The SEPP provides permissibility to the project pursuant to clause 34 Development permitted with consent in the RU1 Primary Production zone. The development was referred to Essential Energy pursuant to clause 45 as indicated above.

State Environmental Planning Policy No. 55 – Remediation of Land

The SEPP requires consideration of the potential for contamination and suitability of the development site. Narromine Shire Council maintains a contaminated land register. The land is not registered as having a potential land contamination issue. No issue is raised in relation to proximity to any environmental protection licences issued within Narromine.

Narromine Local Environmental Plan 2011

The relevant local environmental plan applying to the site is the *Narromine Local Environmental Plan 2011* ('the LEP').

The particular aims of this Plan are as follows—

- (aa) to protect and promote the use and development of land for arts and cultural activity, including music and other performance arts,
- (a) to encourage economic development through tourism activities, business, employment initiatives and fostering industry growth,
- (b) to protect and conserve the natural environment including surface and ground water, soil, air and native vegetation by encouraging sustainable development,
- (c) to encourage sustainable agricultural practices, including intensive agriculture, by minimising land use conflicts and facilitating farm adjustments.

The proposal is consistent with these aims as the proposal is inline with economic development aims and has made due consideration to potential land use conflicts.

Zoning and Permissibility (Part 2)

The site is located within the RU1 Primary Production Zone pursuant to Clause 2.2 of the LEP.

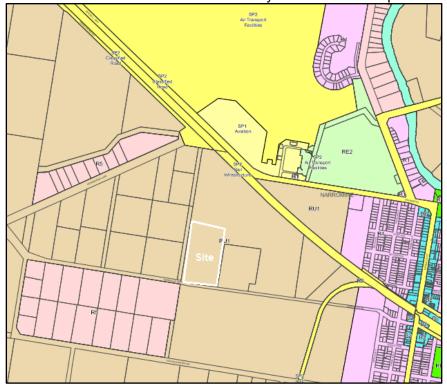


Figure 3: Excerpt from Land Zoning Map - Sheet LZN_004

According to the definitions in Clause 4 (contained in the Dictionary), the proposal satisfies the definition of 'electricity generating works' which is a prohibited land use in the Land Use Table in Clause 2.3. However, the land use is permissible pursuant to clause 34 of SEPP(Infrastructure) 2007 being a prescribed 'rural' zone.

The zone objectives include the following (pursuant to the Land Use Table in Clause 2.3):

- 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.

The proposal is not consistent with the objectives of the zone as the development does not encourage primary industry production or enterprises. However, the proposal is considered to be consistent with the zone objectives whereby the development design demonstrates measures to minimise conflict between land uses within adjoining zones (especially noting the mixed land uses occurring).

General Controls and Development Standards (Part 2, 4, 5 and 6)

The LEP also contains controls relating to development standards, miscellaneous provisions and local provisions. The controls relevant to the proposal are considered in **Table 3** below.

Table 3: Consideration of the LEP Controls

Control	Requirement	Proposal	Comply
Minimum subdivision Lot size (Cl 4.1)	400ha	The land area proposed to be developed is to be leased land only i.e. no subdivision proposed.	Yes
Land acquisition (CI 5.1/5.1A)	N/A	N/A	Yes
Heritage (Cl 5.10)	No Locally listed items are in vicinity to the development site.		Yes
Earthworks (Cl 6.1)	All earthworks are ancillary to the 'electricity generating works'.	Non-significant works proposed.	Yes
Flood planning (Cl 6.2)	Applies to the flood planning area.	A Flood Impact Assessment demonstrates compliance with flood controls. Conditions to be applied to ensure structures are flood compatible.	Yes
Stormwater Management (CI 6.3)	On-site stormwater retention for use as an alternative supply;	Stormwater detention ensure discharge meets pre-development flows.	Yes

Control	Requirement	Proposal	Comply
	minimise impact downstream.		
Groundwater Management (Cl 6.6)	Applies to mapped 'vulnerable land'.	No permanent facilities are proposed that include potential groundwater use or contamination through waste disposal.	Yes
Essential services (Cl 6.8)	Adequate arrangements are required for: (a) the supply of water, (b) the supply of electricity, (c) the disposal and management of sewage, (d) stormwater drainage or on-site conservation, (e) suitable road access.	The development proposal adequately addresses the requirement for essential services, excluding water. It is assumed water will be required to be tanked to the site for landscaping and cleaning volumes, with potable water from proposed rainwater tanks.	Yes
Airspace operations (CI 6.9)	Consideration of the potential to penetrate the Limitation or Operations Surface and consultation required with relevant Commonwealth body.	The development will not penetrate the OLS. Consideration for glare and reflectively also considered relevant due to the distance to aerodrome.	Yes

The proposal is considered to be generally consistent with the LEP.

4.2 Section 4.15 (1)(a)(ii) - Provisions of any Proposed Instruments

There are several proposed instruments which have been the subject of public consultation under the EP&A Act. However, no specific draft legislation has been identified as relevant to the proposal.

4.3 Section 4.15(1)(a)(iii) - Provisions of any Development Control Plan

The following Development Control Plan is relevant to this application:

• Narromine Development Control Plan 2011 ('the DCP')

Table 4: Consideration of the DCP Controls

Control	Requirement	Proposal	Comply			
	Chapter 5c Rural Development					
Setbacks	Buildings to be 50m from any local road; 40m from side or rear boundary.	Shed and compound - approx. 300m front boundary & 170m side setback.	Yes			
		Single axis solar array – proposed setbacks approx. 30m front boundary to Dandaloo Road. 20m side setback	No			
Buffer zones	Buffers between rural activities and dwellings	No dwelling on subject land.	Yes			
Building Heights	2 storeys or 9m above natural ground level.	Storage shed – 2.79m. Container Power Conversion station – 2.896m	Yes			
Access	Accesses are to be properly formed and drained so that stormwater is not channelled by the driveway onto the surface of Council's road. Where a crossover is proposed off a sealed road, the crossover is to also be sealed and drained.	Upgrade to access off Dandaloo Road to be determined in consultation with Council. Subject to s138 Approval Roads Act 1993.	Yes			

The following contributions plans are relevant pursuant to Section 7.18 of the EP&A Act and have been considered in the recommended conditions (notwithstanding Contributions plans are not DCPs they are required to be considered):

• Narromine Shire Council Section 7.12 Contributions Plan 2019

This Contributions Plan has been considered and included the recommended draft consent conditions. The monetary contribution set out in the following table is to be paid to Council prior to the issue of a Construction Certificate. The contribution as current at the date of this report is itemised below.

The contribution payable will be calculated in accordance with the contributions plan current at the time of payment, and will be adjusted at the time of payment in accordance with the Consumer Price Index (CPI) (All Groups Index for Sydney) published by the Australian Bureau of Statistic (ABS). Contribution amounts will be adjusted by Council each quarter.

Contribution Type		Proposed Developmer	Cost nt	of	Levy (%)	Payable	Total Payable
Section Contribution	7.12	\$6,438,964			1%		\$64,389.64

4.4 Section 4.15(1)(a)(iiia) – Planning agreements under Section 7.4 of the EP&A Act

There have been no planning agreements entered into and there are no draft planning agreements being proposed for the site.

4.5 Section 4.15(1)(a)(iv) - Provisions of Regulations

Clause 92(1) of the Regulation contains matters that must be taken into consideration by a consent authority in determining a development application, comprising the following:

- If demolition of a building proposed provisions of AS 2601:
- If on land subject to subdivision order under Schedule 7, provisions of that order and any development plan;
- Dark Sky Planning Guideline if applicable (note: not applicable for Narromine Shire);
- Low Rise Housing Diversity Design Guide for Development Applications (July 2020) if for manor house or multi dwelling housing (terraces).

These provisions have been considered and addressed in the draft conditions (where necessary).

4.6 Section 4.15(1)(b) - Likely Impacts of Development

The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality must be considered. In this regard, potential impacts related to the proposal have been considered in response to SEPPs, LEP and DCP controls outlined above and the Key Issues section below.

The consideration of impacts on the natural and built environments includes the following:

- Context and setting The proposal is considered to be generally consistent with the setting, in that the proposed solar farm is appropriate in the rural site due to the scale of development, the mixed land use surrounding and capacity of the site to be screened. Character and amenity of the locality and streetscape, are associated with extensive agricultural land use, rural residential development and rural industry.
- Access and traffic The proposal was supported by a Traffic Impact Assessment prepared by Intersect Traffic. The majority of the traffic movements associated with the development will occur during the construction period (approx. 6 months). The application specifies use of the Mitchell Highway, McNamara's Lane and Dandaloo Road. The construction of a new access road and upgrade to access into the development site is proposed off Dandaloo Road. The route requires crossing of the Main Western Railway. The impacts during the construction period are able to be managed and a Traffic Management Plan and Driver Code of Conduct is to be required as a condition of approval prior to issue of Construction Certificate. The application was referred to Transport for NSW and comments are provided below.

- Public Domain The development will not directly impact upon the public domain. It
 is envisaged the adjoining land held by Narromine Shire Council and utilised as the
 NSC Animal Shelter will not be adversely impacted by the development of a
 neighbouring solar farm.
- Utilities The application includes the establishment of the 5MW solar PV electricity generation plant with associated infrastructure and required works to connect to the overhead electricity powerlines, and hence was referred to Essential Energy, as the relevant electricity supply authority. The land is not serviced with other reticulated services.
- Heritage The site does not contain any locally listed heritage items. Due diligence
 assessment for Indigenous Cultural Heritage was included with the application.
 However, pertaining to risk for unknown heritage items, approval conditions should
 reflect actions in the event of uncovering an item.
- Other land resources Existing agricultural land will be utilised for the development.
 To uphold the objectives of the zone it is considered appropriate that the site rehabilitation be conditioned for end of life of the solar farm to ensure the land is brought back to a state suitable for primary production.
- Water/air/soils impacts The proposed stormwater management system is designed to reduce post development flows to align with pre-development conditions on site. This approach is supported by a Stormwater Management Plan. It is unlikely for the development to involve the discharge of toxic chemicals, and is therefore considered unlikely to contaminate the hydrological functions of groundwater systems or nearby water catchments. Conditions are proposed to ensure the implementation of erosion and sediment control measures.
- Flora and fauna impacts The application was supported by a due diligence desktop
 assessment with reference to the EP&A Act, BC Act and EPBC Act. A Biodiversity
 Offset Scheme Entry Threshold tool report did not trigger a further assessment. The
 development site has been actively cropped for fodder, grazed and predominately
 cleared of native vegetation with the exception of two tall trees that are to remain on
 the western boundary.
- Natural environment The development will not require significant changes to the natural contours of the site, however due to the flooding potential the permanent shed and power conversion station will be required to meet a flood planning level to reduce the potential economic impact of a flood and for risk management.
- Noise and vibration Construction and operational noise impacts were assessed by Muller Acoustic Consultants. Operational noise emissions including road noise criteria are able to be met without any specific mitigation measures. However, during the construction period, the noise management levels are modelled to be exceeded for at least four (4) residential properties. Condition is proposed to require a Construction Noise Management Protocol or the like which includes adequate procedures to respond to concerns from the community and notifies residents in proximity to the site prior to works commencing.
- Natural hazards The subject site is identified as within the 'Flood Planning Area'
 mapped in the Narromine LEP. The development does not contain a habitable
 component and is unlikely to require a regular onsite human presence, as such the

risk to life is minimal. The flood impact assessment notes that the elevated nature of the array will allow for floodwater to flow freely underneath the panels and will not adversely obstruct the natural flow of floodwater. As non-residential development, the DCP provides a requirement of the 2% AEP plus 0.5m freeboard. However, the site is not inundated at this event. The assessment suggests the buildings and critical infrastructure at the site be set at the 1% AEP flood level of 237.6m AHD as the FPL, with buildings and critical infrastructure at the Site be set at or above this level. Council is accepting of this approach. Structures to be constructed above the adopted flood level include:

- Temporary construction buildings;
- Operations & Maintenance building (O & M shed);
- Power conversion unit
- HV RMU & metering
- PV combiner boxes.
- Safety, security and crime prevention The site is proposed to be fully enclosed by a security fence (with barbed wire top). The development application does not specify any proposed security lighting.
- Social and Economic impact The proposed development has the potential to generate positive social and economic benefits to the Narromine Shire. The capital investment value of the development is approx. \$6.44 million and will generate employment opportunities of up to 30 people during construction. The proposal outlined benefits of provision of cleaner renewable energy, and the importance of maintaining good relations with people living in vicinity to the proposal site.
- Site design and internal design The proposal is set out appropriately on the site to mitigate potential impacts and interaction with the Main Railway Line. The positioning has provided adequate setbacks from boundaries and road frontage. The hardstand area and structures are setback from Dandaloo Road and able to be adequately screened. The access roads are appropriate for the traffic expected to be associated with the development. The provision of fencing is a concern for visual impact to the residents. Condition is proposed to provide that this fencing be a reduced height and be black in colour with landscaping on the outer side of the fence. Also additional landscaping is to be conditioned for the eastern boundary.
- Construction Demolition work and extensive site preparation earthworks are not required. Conditions are recommended to assist in minimising noise impacts including the preparation of a Construction Noise Management Plan prior to the issue of a Construction Certificate. During the construction phase, there is the likelihood that dust will be generated through site preparation works, vehicular movements, and road upgrades. Once the development is operational there are no anticipated impacts on air quality. Conditions are proposed to ensure dust suppression techniques are employed during the construction phase. Traffic during the construction period should also be managed through a Traffic Management Plan.
- Cumulative impacts There are no potential cumulative impacts associated with the
 proposal. There are no other solar farms proposed in the vicinity of the site.
 Cumulative traffic impacts have been considered. The development is consider to be
 generally consistent with the planning controls for the RU1 zone such that the
 development will not result in an adverse cumulative impact.

Accordingly, it is considered that the proposal will not result in any significant adverse impacts in the locality as outlined above.

4.7 Section 4.15(1)(c) - Suitability of the site

The proposed development is located in the RU1 Primary Production Zone and is prohibited in the Zone. Pursuant to Clause 34(7) of *State Environmental Planning Policy (Infrastructure)* 2007, 'electricity generating works' may be carried out by any person with consent on any land in a prescribed rural or residential zone. As the site is in a prescribed rural zone, it is permissible with consent under the SEPP.

The suitability of the site has been addressed in the above sections of the report. The mixed land uses occurring in vicinity of the site provide unique considerations for visual, traffic and construction management.

Overall, the development of the site will not create significant adverse impacts on the context and setting of the area. Additionally, the development of the site will not detrimentally affect adjoining land and is unlikely to lead to land use conflict, with appropriate mitigation measures included.

- The development is compliant and permissible by virtue of Clause 34(7) of State Environmental Planning Policy (Infrastructure) 2007 and is consistent with the relevant provisions of the Narromine Local Environmental Plan 2011.
- The proposal is considered to be satisfactory in regard to Section 4.15 of the Environmental Planning and Assessment Act 1979.
- The potential impacts of the development are considered able to be satisfactorily managed appropriately through Conditions of Consent.
- There are no planning or environmental concerns surrounding the development that would warrant refusal. The protection of the Narromine Aerodrome from incompatible land use is a high priority. The application was able to demonstrate through the Reflective Glare Assessment Report (with revision) that the risk of glare on runways is negligible.

4.8 Section 4.15(1)(d) - Public Submissions

The proposed development is defined as "locally significant development" and was notified to adjoining landowners and publicly exhibited for a period of 14 days from Wednesday 15 March 2021 until Wednesday 2 April 2021. At the end of the prescribed period, five (5) submissions were received.

These submissions are considered in Section 5 of this report.

4.9 Section 4.15(1)(e) - Public interest

The impact on the community has been balanced with the identified positive economic and social impacts. Residents in the locality will be potentially impacted the most through the construction period. These impacts can be adequately mitigated with management measures supported by conditions of consent. The visual screening will be important to reduce the impact to neighbours in the longer term.

Broader impacts to the Narromine community pertain to the protection of the major special purpose infrastructure precinct associated with the Narromine Aerodrome. The aerodrome is

significant to the Narromine Shire for transport, economic activities, including tourism (gliding events) and aviation-based business and residential development. The proposed tracking PV array has been assessed for glare and reflectivity. The potential impact of solar farms on air currents and aviation (specifically glider activity) was raised as a concern pre-lodgement. This aspect is somewhat unable to be quantified as there is no documented evidence or applicable academic research focussed on the assessment of the impact of solar farms in this regard. The comments on the findings of the applicant's literature review revealed that air temperatures were slightly elevated in the centre of (directly above and directly adjacent to the solar arrays, with the temperatures retuned to ambient only a few metres above the solar farm. Narromine Gliding Club is a regional gliding club in NSW and is located at the Narromine aerodrome. Anecdotal evidence from a representative of the local Narromine Gliding Club was provided to Council that supported that glider pilots will utilise updrafts and having an understanding change in thermal activity due to stands of trees, and structures (including solar farms) will need to be part of a 'pre-start' assessment of the locality by pilots before flights occur. It was indicated this is something that was manageable.

The development on balance is consistent to addressing the well-being of the public. Conditions of consent will be required to ensure construction impacts are managed.

5. REFERRALS AND SUBMISSIONS

5.1 Agency Referrals and Concurrence

The development application has been referred to various agencies for comment as required by the EP&A Act and outlined below:

- Essential Energy General comments on the development received with the applicant required to undertake further consultation with Essential Energy regarding safety risks and for the appropriate connection agreements.
- Transport for NSW The consideration of the Mitchell Highway as part of the transport route was included and TfNSW as the authority for the rail corridors of the Country Regional Network (CRN).
- CASA Aviation Group Review of the Reflectivity Glare Assessment in particular consideration of the proximity of the Narromine Aerodrome was provided.
- Air Services Australia Extensive assessment was not required due to the proposal not penetrating the OLS. Referral to CASA recommended.

TfNSW offered the following comments to the consent authority for consideration:

- Traffic volumes at the intersection of McNamara's Lane and the Mitchell Highway should be considered against the Warrants for Turn Treatments in Austroads - Guide to Road Design, to determine whether the intersection traffic would require an upgrade of the intersection turn treatments.
- The developer should consider measures to limit impacts associated with peak traffic such as the provision of private buses for construction employees with suitable locations for drop off and pick up identified in consultation with Council.
- 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.

• Consideration should be given to the preparation of a Traffic Management Plan and a Driver Code of Conduct in consultation with Council.

The outstanding issues raised by Agencies are considered in the Key Issues section of this report.

5.2 Council referrals

The development application has been referred to various Council officers for technical review as outlined **Table 5.**

Table 5: Consideration of Council Referrals

Officer	Comments
Engineering	No objections subject to conditions: including requirement for a dilapidation survey of road conditions prior to the construction commencing.
Building	No objections subject to conditions for construction certificate.

The issues raised by Council officers were identified in the pre-lodgement advice provided to the applicant and addressed primarily in the application. These are considered in the Key Issues section of this report.

5.3 Community Consultation

The proposal was notified in accordance with the DCP from Wednesday 15 March 2021 until Wednesday 2 April 2021. The notification included the following:

- Notification letters sent to adjoining and adjacent properties (50 notification letters sent):
- Notification on the Council's website and Council Column publications.

The Council received a total of 6 unique submissions, comprising 3 objections and 1 submission in favour of the proposal. The issues raised in these submissions are considered in **Table 6.**

Table 6: Community Submissions

Issue	Detail of issue and Council Comments
Traffic on Local roads	Construction management issue for amenity of residents on Dandaloo and McNamaras Lane. Understand avoidance of main town areas, however residents on these roads are impacted.

Issue	Detail of issue and Council Comments
Road conditions	Consider an improvement to the road standard and width for the traffic (esp. considering the existing local grain harvest traffic). The already stressed road conditions is a concern. Concern about cost to Council and community for ongoing repair and maintenance of the roads.
Railway crossing is not of ideal standard	Concern raised as to the standard and safety of the level rail crossing. Adequate separation from the main western railway line is able to be achieved.
Visually unattractive/ landscaping	Submission request for fencing to be black and for landscaping to be properly executed to prevent an eyesore. Other more appropriate sites may be available with less visual amenity issues. This is a valid visual amenity issue for residents in Dandaloo Street.
Use of valuable agricultural land	Submissions raised concern that valuable primary production land is being used.
Proximity to dwellings and land with further residential development potential	Concern that the site choice could be improved to reduce the potential visual impacts by locating closer the GrainCorp facility.
Proximity to Narromine Aerodrome	Protection of the aerodrome as the site is important for diverse needs in the community: SkyPark Estate, clubs, motel, museum, further highlighting the economic dependence the town has on the aerodrome with large events for gliding. This is including an impact on the setting of the town. This is a valid concern for the public interest.
Proximity to Narromine town sub- station	Concern was raised regarding the impact on town power supply. Ensuring the appropriate comment from Essential Energy.
Details of future plans uncertain	The developers contacted residents in January 2021, with copy of the letter supplied. The letter notes the Company is leading the industry in renewable energy sources and innovative hydrogen energy storage. Concern clarification of future plans for a hydrogen storage facility was not evident in application.

Issue	Detail of issue and Council Comments
Waste associated with panel life span	Submission notes that panels have expected life of 20yrs. This will be waste for Shire to deal with, where will the waste be taken?
Screening vegetation	Concern regarding appropriate vegetation species choice.
Weed management	Confirm will stock be able to graze below the panels? How would this be practical? It is noted that this is not expanded upon in the SEE and stock grazing is not expected.
Noise impacts	Concern for the construction period particularly and impact on residents. Including traffic noise, and pile digging.
Concern of glare from the panels	Concern raised in relation to proximity to the airfield and glare and thermal impacts affecting pilots' safety.
Water supply	Concern that water for cleaning of panels and landscaping has not been adequately demonstrated and whether groundwater bore is proposed that may impact water levels for residents.
Stormwater management	Where is overflow from stormwater dam proposed to be directed? Clarify that the application refers to an unnamed water course which is actually the irrigation channel.
Land Tenure and rehabilitation	The application states that the proposed solar farm site will be leased land. Though this is not clarified against a timeframe and proposed rehabilitation standard.
Independence of the assessment	Submission raises concern that the developer Providence Asset Group has a 'sub company' being the author of the SEE being SLR Consulting Australia P/L and former KDC P/L or part thereof. This was raised as a concern as to the bias that may be in the reporting. The connection between the companies was not substantiated, and this is not considered a valid consideration.

6. KEY ISSUES

The following key issues are relevant to the assessment of this application having considered the relevant planning controls and the proposal in detail:

6.1 Proximity to Narromine Aerodrome

Issue: The Narromine Aerodrome is located north of the Mitchell Highway site within 1km of the site. The aerodrome forms key infrastructure for the Narromine Shire. Land use conflict is a concern for the ongoing safety of airfield activities, with impact of glare, reflectivity and thermal issues. Also protecting the unique setting to Narromine aerodrome is important due to the mixed tourism, residential and aviation/industrial land use pivoting on a thriving airfield.

Perspectives: Runway approaches were of particular concern for safety. CASA Aviation Group raised no objections to the proposal with regard to the sealed runways if the panels would be in "±60" Normal Tracking" mode for the vast majority of the time. The potential for yellow glare was addressed satisfactorily.

Council comment: The future use of security lighting near the aerodrome should be subject to conditions. PV Array related operations should be addressed in a management plan for the construction phase and separately the operation phase of the site. Protection of the wider visual setting can be addressed as part of the landscaping plans. Upgrading of solar panels and ancillary infrastructure should also be addressed in the management plan. Over time, the applicant may upgrade the solar panels and ancillary infrastructure on site provided these upgrades remain within approved development footprint of the site. Prior to carrying out any such upgrades, the developer should be carrying out consultation and appropriate assessments taking into consideration any realised impacts on the aerodrome.

Resolution: Conditions of consent are proposed to maintain a management plan for the site. This should include consultation with Narromine airport user groups; if safety concerns relating to glare caused by the solar panels are raised by pilots when operating (especially for major gliding events) the location/configuration of the panels may need to be reviewed and revised. This is consistent with CASA advice received. Condition that security lighting is not to be installed.

6.2 Landscaping and Visual Impacts

Issue: The site has sensitive receptors in terms of residents in Dandaloo Road. Visual amenity of a currently rural setting is to be impacted. Generally, the wider setting in proximity to Narromine urban area is important. The site has included setbacks with opportunity for improved landscaping, and fencing. The application seeks to include a 2.3m high fence with barbed wire at the top. The fencing was also raised in neighbour submission as a visual concern.

Perspectives: The Visual Impact Assessment prepared by the applicant included a landscaping proposal focussing on the southern and western lease boundaries. The northern side of the site is not exposed; however, the eastern side of the site should also be addressed with landscaping to address views from this side of the site more fully.

Council comment: The visual amenity is to be affected at the site currently used for primary production with no built structures. The provision of inappropriate fencing is a concern for Council. Condition is proposed to provide that this fencing be a reduced height and be black in colour with landscaping on the outer side of the fence. Also, additional landscaping is to be conditioned for the eastern boundary, (in line with feedback at the Panel site briefing). Council is concerned that the landscaping will

not be able to be established in the climate without a water supply and this should form part of the landscaping plan i.e. show details of irrigation system (possible drip from a tank).

Resolution: Condition to be proposed to adequately screen the PV array and compound with softening landscaping treatments (added to eastern side of the development). Proposed condition to require a revised landscaping concept with use of a black wire security fence with the height of the fence to be reduced as far as practical. Landscaping proposed is to include a mix of tall and shrub species greater utilising the setback from Dandaloo Road, with all landscaping to be on the outer side of the fence and watering system proposed prior to Construction Certificate issue.

6.3 Construction Noise and Roads

Issue: The Noise Impact Assessment notes that the development will result in noise exceedances for the construction period. Noise management levels are modelled to be exceeded for at least four (4) residential properties. Road emissions associated with the project are not expected to increase existing levels by more than 2dB. The construction traffic will require use of the level crossing.

Perspectives: Transport for NSW has recommended a condition to manage use of the existing Public Level Crossing at McNamara Lane:

"Prior to issue of a construction certificate, a yellow cross-hatch markings on the roadway on MacNamara's Lane and additional signage on approach to the crossing must be provided to alert road users and to prevent short stacking of heavy vehicles.

Reason for condition

Considering the increased traffic using the level crossing (during construction and operation phases), there is likely to be a short stacking issue for the proposed development traffic exiting MacNamara's Lane and turning right onto Mitchell Highway (and only if) two or more heavy vehicles form a queue across the railway. No alteration to the protection level of MacNamara's Lane level crossing (passive to active) is required".

Council comment: Roads are to be inspected prior to the commencement of work, and repairs made at the end of the construction period. Include condition that "the developer or his agent must undertake a site inspection of the adjacent kerbs, gutters, footpaths, walkways, carriageway, reserves and the like, prior to commencement of work and document evidence of any damage to existing assets. Failure to identify existing damage will result in all damage detected after completion of the building work being repaired at the applicant's expense. Any damage to Council's infrastructure that occurs as a result of the development must be repaired immediately to Council's satisfaction and at no cost to Council".

Condition is proposed to require a Construction Noise Management Protocol or the like which includes adequate procedures to respond to concerns from the community during the construction phase of the development.

Resolution: Issues can be addressed with appropriate conditions.

6.4 Proximity to R5 land and Future Growth

Issue: The development land is in close proximity to existing R5 Large Lot Residential zoned land and other land in proximity to the site that is part of future opportunity for growth of the town of Narromine.

Perspectives: The site should be maintained as vacant grazing land to minimise land use conflict potential. Alternatively, particular consideration be provided to amenity considerations (esp. visual).

Council comment: Council is supportive of the project and positive social and economic outcomes, with adequate consideration of the longer-term impacts. The development site has not been identified as potential residential land. Overall with mitigation measures the site suitability issues are acceptable.

Resolution: Provide adequate management measures to ensure the long-term visual impacts are minimised.

6.5 Flood Prone Land

Issue: The land has known flood risks and inundation is expected at the 1 in 100 yr event.

Perspectives: The assessment suggests the buildings and critical infrastructure at the site be set at the 1% AEP flood level of 237.6m AHD as the FPL, with buildings and critical infrastructure at the Site be set at or above this level.

Council comment: Council is accepting of this approach. Structures to be constructed above the adopted flood level include:

- Temporary construction buildings;
- Operations & Maintenance building (O & M shed);
- o Power conversion unit
- HV RMU & metering
- o PV combiner boxes.

Resolution: Issues can be addressed with appropriate conditions.

7. CONCLUSION

This development application has been considered in accordance with the requirements of the EP&A Act and the Regulations as outlined in this report. Following a thorough assessment of the relevant planning controls, issues raised in submissions and the key issues identified in this report, it is considered that the application can be supported.

The development of the site is permissible as 'electricity generating works' pursuant to clause 34 of SEPP(Infrastructure) 2007 being in a prescribed 'rural' zone. Key issues relating to the construction phase include, noise and traffic management. Overall, the visual amenity impacts of the site need to be further addressed in a landscaping concept that is subject to conditions being satisfied. The compatibility with the Narromine Aerodrome is a concern due to the significance this special infrastructure site has locally. Ongoing management measures

and neighbour engagement will be necessary to address some of these identified issues. It is considered that the key issues as outlined in Section 6 have been resolved satisfactorily through amendments to the proposal and/or in the recommended draft conditions at Attachment A.

8. RECOMMENDATION

That the Development Application DA No 2021/21 for Construction of a grid-connected solar PV installation no larger than 5MW at 1570 Dandaloo Road (lot 2221 DP1101864) be APPROVED pursuant to Section 4.16(1)(a) of the *Environmental Planning and Assessment Act 1979* subject to the draft conditions of consent attached to this report at Attachment A.

The following attachments are provided:

- Attachment A: Draft Conditions of consent.
- Attachment B: Development Plans.