

COUNCIL ASSESSMENT REPORT WESTERN REGIONAL PLANNING PANEL

PANEL REFERENCE & DA NUMBER	DA10.2021.291.1
PROPOSAL	Electricity Generating Works – Construction of a 4.95MW Solar Farm
ADDRESS	Lot 590 DP 1131468
APPLICANT	ERM – Danyil Skora
OWNER	Ross Earnest Wild
DA LODGEMENT DATE	11 November 2021
APPLICATION TYPE	[Development Application (Regionally Significant)]
REGIONALLY SIGNIFICANT CRITERIA	Clause 5 Schedule 7 of the SRD SEPP: a
CIV	\$9,169,949.00(excluding GST)
CLAUSE 4.6 REQUESTS	No Variations – Zone IN1 General Industrial
KEY SEPP/LEP	<ul style="list-style-type: none"> • <i>State Environmental Planning Policy (Planning Systems) 2021;</i> • <i>State Environmental Planning Policy (Resilience and Hazards) 2021;</i> • <i>State Environmental Planning Policy (Transport and Infrastructure) 2021;</i> • <i>State Environmental Planning Policy (Biodiversity and Conservation) 2021;</i> • <i>Draft Murray Local Environmental Plan 2021;</i> • <i>Murray Local Environmental Plan 2011; and</i> • <i>Murray Development Control Plan 2012.</i>
TOTAL & UNIQUE SUBMISSIONS ISSUES KEY IN SUBMISSIONS	NIL
DOCUMENTS SUBMITTED FOR CONSIDERATION	<p>Attachment A: Draft Conditions of consent</p> <p>Attachment B: Approval from Transport for NSW for imposition of Conditions</p>

	Attachment C: Approval from Essential Energy for imposition of Conditions Attachment D: Architectural Plans Attachment E: Statement of Environmental Effects Attachment F: Capital Investment Value (CIV) Report Attachment G: 7.12 Contributions Fee Invoice
SPECIAL INFRASTRUCTURE CONTRIBUTIONS (S7.24)	N/A – only 7.12 Applicable.
RECOMMENDATION	Approval
DRAFT CONDITIONS TO APPLICANT	[NO]
SCHEDULED MEETING DATE	10 May 2022
PLAN VERSION	13 October 2021 Version No 2
PREPARED BY	Risen Solar Technology
DATE OF REPORT	3 May 2022

EXECUTIVE SUMMARY

The development application DA 10.2021.291.1 seeks consent for the construction and operation of a 4.95MW solar farm at Lot 590 Hillside Road, Moama. The footprint of the proposed development comprises approximately 20ha of the development sites 36 hectares.

The project comprises a solar farm and ancillary features with an AC output capacity on approx. 20 hectares of the total 36ha of the development site. it is capable of generating 11GWh annually.

As noted within the SEE lodged in support of the proposal, the development features of the site include:

- *Site clearing and minor earthworks (levelling) including cut and fill based on recommendations from a Geotechnical Report and Topography survey to facilitate the construction and installation of the Solar Panels;*
- *Installation of fencing and gates for the proposed compound*
- *On-site stormwater management measures, such as basins and sediment control measures;*
- *Upgrading existing property access at Hillside Road to the development site to accommodate delivery and construction vehicles;*
- *Construction of internal access road within the development site;*
- *Delivery of demountable site office and portable amenities to the site (operational building and or the control room);*
- *Delivery of panels and frames within shipping containers;*
- *Delivery of inverter equipment and other electrical equipment;*
- *Post pilings and installation of PV models supporting structure and tracking system;*

- *Wiring of Panels and DC combiner boxes via underground cabling to inverter medium voltage power stations (MVPS). Installation of MVPS, switch gear, static reactive power compensator, and minor Battery Energy Storage Systems (BESS);*
- *Electrical cabling and installation of high voltage (HV) equipment for connection to Essential Energy network on 22kV pole;*
- *Solar farm generation testing and commissioning; and*
- *Removal of temporary site office and amenities once construction has been completed.*

Note: The proposed development aims to ensure compliance with the relevant State Environmental Planning policies and the Murray Local Environmental Plan 2011 and Murray Development Control Plan 2012 and an assessment against the relevant pieces of legislation has been provided throughout this report. It is the intent of the development to ensure that the proposal is consistent with the development outcomes envisaged for the development site and wider Moama locality. The sites characteristics (natural) have also been considered as part of this assessment to achieve the best possible design outcome.

The subject site is known as Lot 590 in DP 1131468 ('the site') and comprises a corner lot with two (2) road frontages including Hillside Road to the north and Cobb Highway to the east. and size is 37.28ha and measures 390m x 915m with development footprint of approximately 20ha. The subject site is situated approximately 7km north of the Moama town centre and adjoining the property in all directions is land primarily used for agricultural purposes, noting that the zoning changes to RU1 Primary Production. Immediately to the east is Cobb Highway, respectively zoned SP2 – Infrastructure. Surrounding land uses largely consist of farming land, with the exceptions being a scrap metal yard and sewage treatment facility within proximity to the proposed development. Cobb Highway and Centre Road bound the subject land to the east, with Hillside Road to the north and rural lands to the south and west respectively.

The site is zoned IN1 General Industrial and is mapped as River Murray Lands and is identified to be within Council's Urban Release Area. The site is not mapped as Bush Fire Prone Land, Flood Prone Land, Terrestrial Biodiversity (Native Vegetation), Key Fish Habitat (Aquatic Biodiversity), Wetlands, RAMSAR Wetlands, a Watercourse, mining resources or contaminated land. The site does not contain any known items of environmental heritage significance. The site is rectangular in shape and contains vegetation in the form of low-lying grass along with overhead powerlines traversing the front boundary along Cobb Highway.

An assessment of the proposal has been made against the relevant planning instruments applicable to the land and the proposal, these are:

- *State Environmental Planning Policy (Planning Systems) 2021;*
- *State Environmental Planning Policy (Resilience and Hazards) 2021;*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021;*
- *State Environmental Planning Policy (Biodiversity and Conservation) 2021;*
- *Draft Murray Local Environmental Plan (LEP) 2021;*
- *Murray Local Environment Plan (LEP) 2011; and*
- *Murray Development Control Plan 2012.*

There were no concurrence requirements from agencies for the proposal and the application is not integrated development pursuant to Section 4.46 of the *Environmental Planning and Assessment Act 1979* ('EP&A Act'). A referral to Essential Energy pursuant to *State Environmental Planning Policy (Transport and Infrastructure) 2021* and Crown Lands pursuant to S1.4 of the *Crown Lands Management Act 2016* were sent and raised no objections. It is

also noted that the Application was referred to CASA, LLS and TfNSW (Cobb Highway is a state road but is separated by a neighbouring allotment) with no objections raised, subject to conditions.

The application was placed on public exhibition from 02 December 2021 to 18 January 2022 (Pursuant to Schedule 1, Part 1, Division 3, Section 16 of the *Environmental Planning and Assessment Act 1979* the period between 20 December and 10 January (inclusive) is excluded from the calculation of a period of public exhibition. No submissions were received.

The application is referred to the Western Regional Planning Panel ('the Panel') as the development is '*regionally significant development*', pursuant to Clause (5)(a) of Schedule 6 of *State Environmental Planning Policy (Planning Systems) 2021* as the proposal is development for *electricity generating works* with a CIV over \$5 million.

A briefing was held with the Panel on 08 February 2022 where following issues were discussed:

- Overview of proposed development
- Site is located in the industrial zoned land (outside identified Business Park) and land is not identified in Housing Strategy for future residential use (limited residential receivers)
- Internal referrals undertaken with draft conditions provided
- Assessment to include consideration of visual impact, glint/glare and noise/vibration
- External referral to CASA and TfNSW undertaken with no comments provided
- Submitted documentation does not identify any threatened species, ecological communities or Aboriginal Cultural Heritage impacts
- Access is provided from Hillside Road
- Draft Conditions should include unexpected items of heritage finds
- Clarification required in relation to the number of heavy vehicle movements during construction – discrepancy between Statement of Environmental Effects and Traffic Assessment
- Fence height to be confirmed, with preference for security fence to be located inside of landscaping and stock proof fence to be located outside of landscaping
- Essential Energy comments to be considered in relation to fencing and landscaping
- Landscaping – preference for a minimum width of 5m
- Site is not identified as being bushfire prone land or subject to flooding
- Public exhibition has been undertaken with no submissions received
- Consideration of cumulative impact of any proposed solar development on nearby land to be included in the assessment report

The Application is expected to create positive economic and social impacts. The proposal facilitates the site by providing a new development which achieves good design. It is in the public interest to reinforce the importance of this location for development typologies such as the subject application. Generally the proposal provides the following public benefits:

- The development has been designed to enhance and respond sensitively to its setting, and reflects the desired scale and significance of the immediate area.
- The built form fits within the character of the area and responds to the sites attributes and applicable development controls.
- There are no significant adverse impacts on surrounding properties in terms of sunlight access, views, visual and acoustic amenity and privacy.

The subject site is considered suitable for the intended use whereby the size and dimensions of the land are appropriate for accommodating the proposal. It is also noted that the zoning of the site permits the development as proposed. The proposed development has been assessed in accordance with the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979* and is considered to be satisfactory. Therefore it is recommended that the DA be determined by way of approval, subject to conditions of consent.

1. THE SITE AND LOCALITY

1.1 The Site

The site subject to this development application is located at Hillside Road MOAMA 2731 on Lot: 590 DP: 1131468. Land size is 37.28 ha. Site area measures 390m X 915m (36ha – footprint of the development is approximately 20ha).

The site is zoned IN1 General Industrial and is mapped as Murray Regional Environmental Plan No. 2 – Riverine Land and is identified to be within Council's Urban Release Area. The site is not mapped as Bush Fire Prone Land, Flood Prone Land, Terrestrial Biodiversity (Native Vegetation), Key Fish Habitat (Aquatic Biodiversity), Wetlands, RAMSAR Wetlands, a Watercourse, mining resources or contaminated land. The site does not contain any known items of environmental heritage significance. The site is rectangular in shape and contains vegetation in the form of low-lying grass along with overhead powerlines traversing the front boundary along Cobb Highway.

The subject site is situated approximately 7km north of the Moama town centre and adjoining the property in all directions is land primarily used for agricultural purposes, noting that the zoning changes to RU1 Primary Production. Immediately to the east is Cobb Highway, respectively zoned SP2 – Infrastructure. Surrounding land uses largely consist of farming land, with the exceptions being a scrap metal yard and sewage treatment facility within proximity to the proposed development. Cobb Highway and Centre Road bound the subject land to the east, with Hillside Road to the north and rural lands to the south and west respectively.

The proposed development site footprint is to be positioned away from the existing residence on the property to the south, utilising the north-eastern portion of the subject site for electricity and infrastructure and site access, with the internal perimeter access road being installed for use by project personnel.

The development site is located within the Murray River Local Government Area (LGA) and the cost of development for the proposed works is over \$9 million and as such the determining authority will be the Western Regional Planning Panel.

Figures 1-2 outline the subject site. An aerial photo of the subject site is shown as **Figure 2** below. Works are largely contained to the subject site.

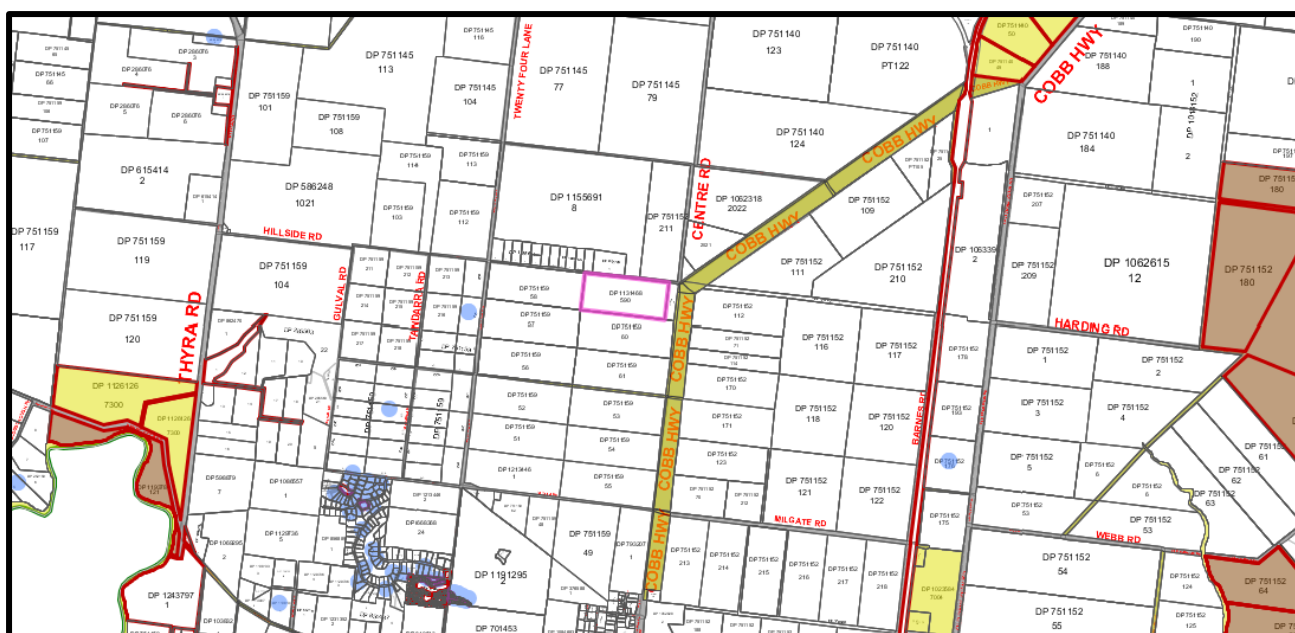


Figure 1 – Locality Plan with the Subject Site Outlined in Pink (Source: SSA).

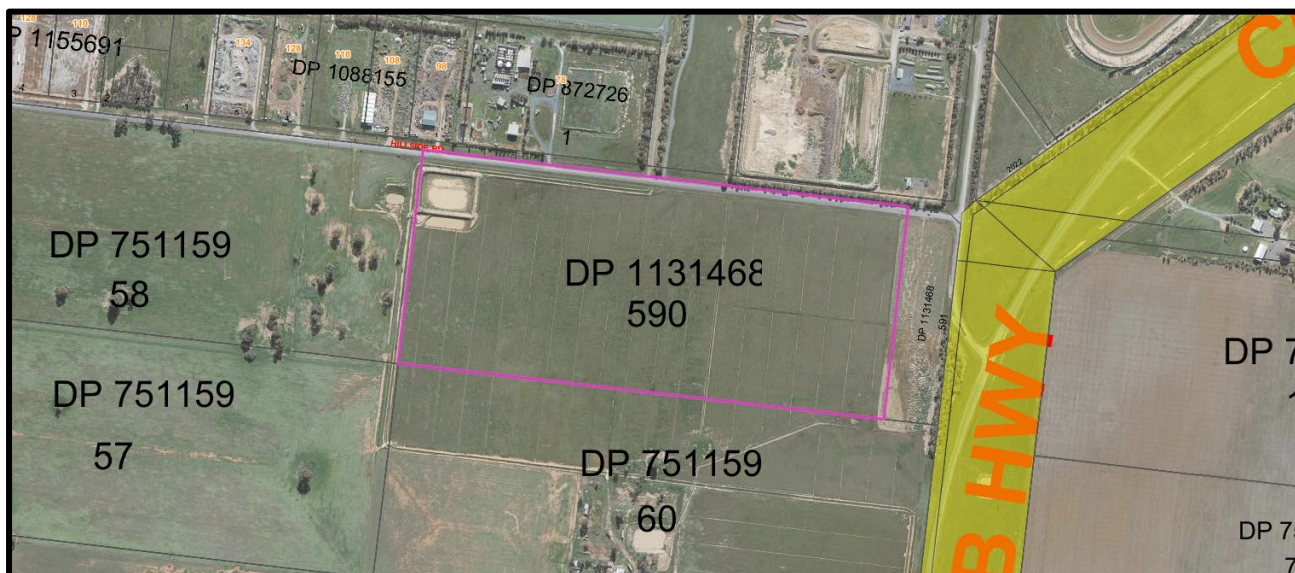


Figure 2 – Aerial Photograph with Subject Site Outlined in Pink (Source: SSA).

1.2 The Locality

Moama is bounded by Nineteen Mile Road, Perricoota Forest Road, and the localities of Womboota, Thyra and Mathoura in the north, and the Murray River and the Victorian border in the east, south and west. Land use within proximity to the development site is largely for the purposes of primary production (with some residential developments at the rear of the site). The subject site is zoned IN1 and is also located within a small Urban Release Area (URA). Council's Strategic Planning Department have been contacted for comments regarding the location within the URA and the future plans for this particular mapped area. The development site is located approximately 7km north of the town centre, and it is noted that Council are currently preparing a Housing Strategy, which has identified that the current growth pattern of greenfield development is west along Perricoota Road. Until such time that Council's Housing Strategy is finalised, the Strategic Planning Department are unable to provide solid advice until the outcomes are released. It is noted however, that taking into

consideration the proximity of the development site to Council's industrial precinct, and the existing direction of the growth corridor, it is considered unlikely that the subject site and surrounding URA would ever be released as greenfield development, or even standard residential land. Infrastructure and services are located within the Moama Town Centre (Meninya Street), with some services being located within Echuca, across the Murray River.

2. THE PROPOSAL AND BACKGROUND

2.1 The Proposal

The proposal seeks consent for the construction and subsequent operation of a 4.95MW solar farm at Hillside Road, Moama.

Specifically, the proposal involves:

- *Site clearing and minor earthworks (levelling) including cut and fill based on recommendations from a Geotechnical Report and Topography survey to facilitate the construction and installation of the Solar Panels;*
- *Installation of fencing and gates for the proposed compound*
- *On-site stormwater management measures, such as basins and sediment control measures;*
- *Upgrading existing property access at Hillside Road to the development site to accommodate delivery and construction vehicles;*
- *Construction of internal access road within the development site;*
- *Delivery of demountable site office and portable amenities to the site (operational building and or the control room);*
- *Delivery of panels and frames within shipping containers;*
- *Delivery of inverter equipment and other electrical equipment;*
- *Post pilings and installation of PV models supporting structure and tracking system;*
- *Wiring of Panels and DC combiner boxes via underground cabling to inverter medium voltage power stations (MVPS). Installation of MVPS, switch gear, static reactive power compensator, and minor Battery Energy Storage Systems (BESS);*
- *Electrical cabling and installation of high voltage (HV) equipment for connection to Essential Energy network on 22kV pole;*
- *Solar farm generation testing and commissioning; and*
- *Removal of temporary site office and amenities once construction has been completed.*

The key development data is provided in **Table 1**.

Table 1: Development Data

Control	Proposal
Site area	36ha
GFA	NA
FSR (retail/residential)	NA

Clause 4.6 Requests	NA
No of apartments	NA
Max Height	NA
Landscaped area	NA
Car Parking spaces	NA
Setbacks	Refer to Figure 3 below for Setbacks and Site Overview of Proposal.

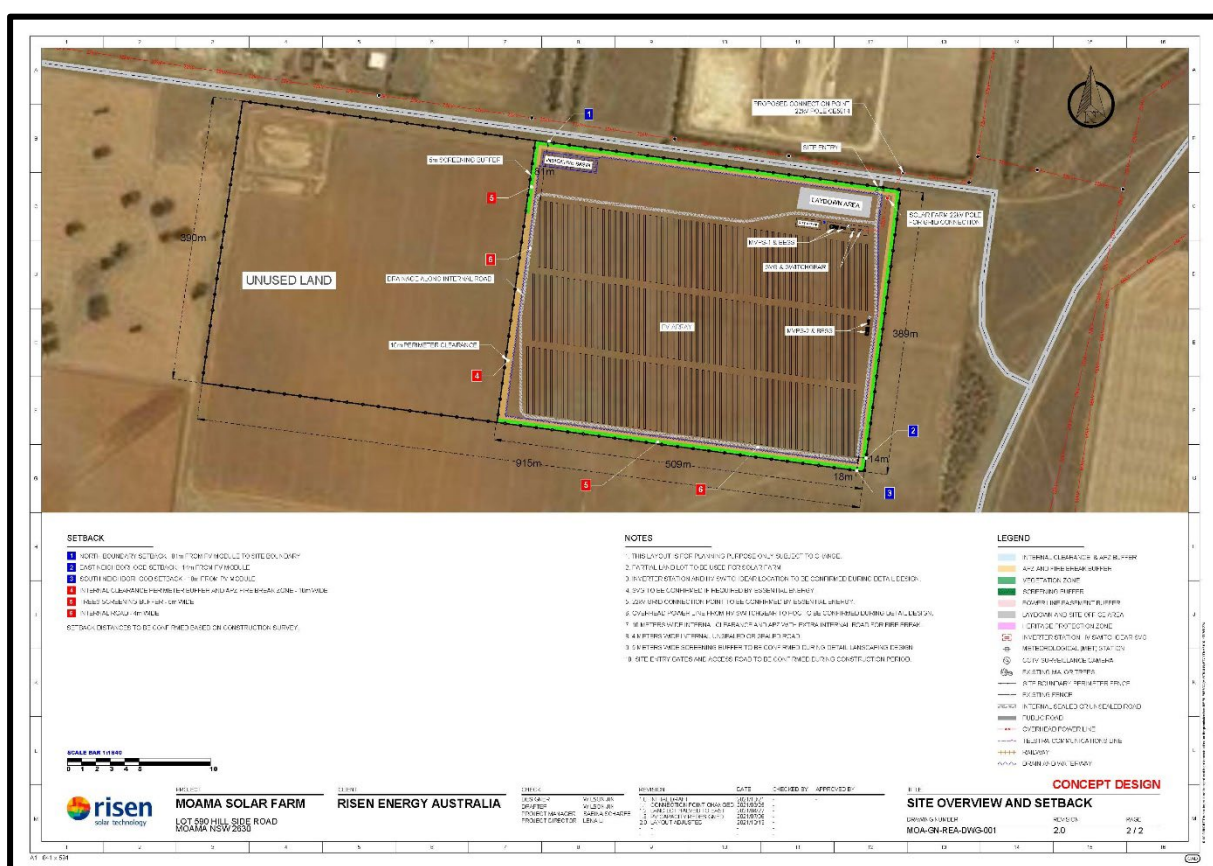


Figure 3 – Site Overview and Setback Plan (Source: Risen Energy Australia).

2.2 Background

The development application was lodged on **11 November 2021**. A chronology of the development application since lodgement is outlined in **Table 2**.

Table 2: Chronology of the DA

Date	Event
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11 November 2021	DA lodged
2 December 2021	Exhibition of the application
24 November 2021	DA referred to external agencies
9 February 2022	Request for Information from Council to applicant
8 February 2022	Panel briefing
3 March 2022	Additional information provided

2.3 Site History

Council's records show that the development site has been subject to one (1) previous Development Application. DA 207/11 Approved a two (2) lot subdivision and erection of a machinery shed on Lot 590 in DP 1131468 on 04 November 2011. There are no further Approvals on site located within the property file in Council's records.

The Panel should be aware of the following existing neighbouring developments:

- 10 Hillside Road, Moama – Moama Waste Management Facility and Pound
 - o DA 29/96 – Approved on 01 April 1996 – Solid Waste Disposal Depot;
 - o DA 070/05 – Approved 06 October 2004 – Construction of a Weighbridge;
 - o DA 237/15 – Approved 11 June 2015 - Animal Shelter - Detached Shed; and
 - o DA 224/15 – Approved 18 June 2015 – Colourbond Shed for Moama Waste Management Facility.
- 60 Hillside Road, Moama – Moama Sewerage Treatment Plant
 - o At the time of writing this report, no files were unable to be located within Council's Records. It is understood that the hard files located within Council's archives have not yet been transferred over for this site.

Figure 4 below outlines the location of the above two sites within proximity to the development site.

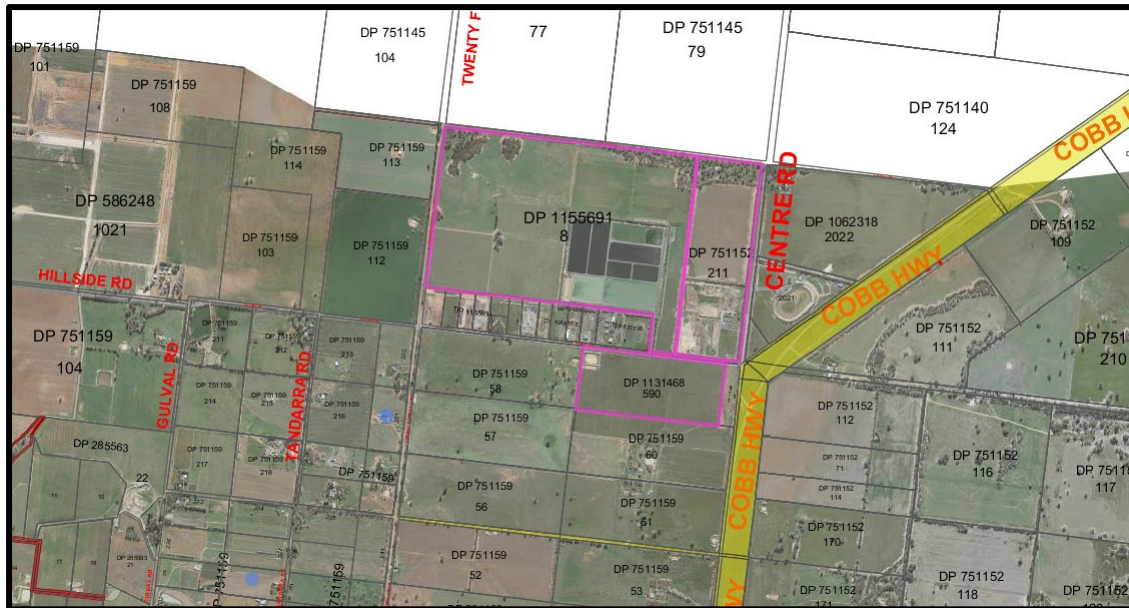


Figure 4 – Site Aerial with 10 Hillside Road, 60 Hillside Road, and Development Site Outlined in Pink (Source: SSA).

3. STATUTORY CONSIDERATIONS

When determining a development application, the consent authority must take into consideration the matters outlined in Section 4.15(1) of the *Environmental Planning and Assessment Act 1979* ('EP&A Act'). 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 (which are considered further in this report):

- Integrated Development (s4.46)
- Designated Development (s4.10)
- Requiring concurrence (s4.13)
- Crown DA (s4.33)

3.1 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 (Planning Systems) 2021*;
- *State Environmental Planning Policy (Resilience and Hazards) 2021*;
- *State Environmental Planning Policy (Transport and Infrastructure) 2021*;
- *State Environmental Planning Policy (Biodiversity and Conservation) 2021*;
- Draft Murray Local Environmental Plan (LEP) 2021;
- Murray Local Environmental Plan (LEP) 2011; and
- Murray Development Control Plan 2012.

A summary of the key matters for consideration arising from these State Environmental Planning Policies are outlined in **Table 3** and considered in more detail below.

Table 3: Summary of Applicable State Environmental Planning Policies
(Preconditions in **bold**)

EPI	Matters for Consideration	Comply (Y/N)
SEPP Planning Systems	<ul style="list-style-type: none"> • Clause 2.19(1) declares the proposal as regionally significant development pursuant to Clause 5(a) of Schedule 6. 	Y
SEPP Resilience and Hazards	<ul style="list-style-type: none"> • Chapter 3 – Potentially hazard and offensiveness of the proposed development has been considered within the proposal and is satisfactory. • Chapter 4 – Contamination and remediation has been considered within the proposal and is satisfactory subject to conditions. 	Y
SEPP Transport and Infrastructure	<ul style="list-style-type: none"> • Section 2.48 - (Determination of development applications—other development) – electricity transmission - the proposal is satisfactory subject to conditions. • Section 2.118 – development with a frontage to a classified road. • Essential Energy response has been uploaded onto the NSW Planning Portal. 	Y
SEPP Biodiversity and Conservation	<ul style="list-style-type: none"> • Chapter 2 – The proposed development is not considered inconsistent with this policy. • Chapter 4 – the subject land is not considered to be core koala habitat or potential koala habitat. • Chapter 5 – The subject site is mapped as River Murray Land. 	Y
Draft EPIs	The Draft <i>Murray River LEP 2021</i> soon applies, however, no issues have been identified. This document is not identified as a draft instrument as per 4.15(1)(a)(ii) of the EP&A Act 1979. Therefore, there are no relevant issues identified as part of this propped development application.	Y
Murray LEP	The site is zoned IN1 General Industrial and the proposed development is permitted with consent in the zone. The development is considered consistent with the objectives of the IN1 zone.	Y

Murray DCP	The proposed development is considered to meet the objectives of the DCP where applicable.	Y
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State Environmental Planning Policy (Planning Systems) 2021

State Environmental Planning Policy (Planning Systems) 2021 applies to the proposal as it identifies if development is regionally significant development. In this case, pursuant to section 2.19 of SEPP, the proposal is a regionally significant development as it satisfies the criteria in Clause 5(a) of Schedule 6 of the SEPP as the proposal is development for *electricity generating works* with a CIV over \$5 million. Accordingly, the Western Regional Planning Panel is the consent authority for the application. The proposal is consistent with this Policy.

State Environmental Planning Policy (Resilience and Hazards) 2021

The provisions of *State Environmental Planning Policy (Resilience and Hazards) 2021* have been considered in the assessment of the development application.

Chapter 3 – electricity generating works (including battery storage) are not identified as potentially offensive or hazardous within the guidelines. A risk screening assessment was provided within section 5.8.1 of the submitted SEE which indicated that the proposed development would not be considered potentially hazardous. It was concluded that the proposed development would not meet the definition of potentially offensive development.

Chapter 4 - Clause 4.6(1)(a) of the requires consent authorities to consider whether the land is contaminated, and 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.

A search of the NSW EPA contaminated land public record of notices identified no records within or near the development site in Moama. A search of the POEO Act register identified five (5) current POEO licensed facilities in Moama, with the closest being the Moama Sewer Treatment Plant, located opposite the development site along Hillside Road. The proposed development is not considered to impact this licensed facility or be impacted upon by the adjoining facility.

The subject land has been utilised for agricultural purposes, namely livestock grazing and small scale cropping. The project is considered broadly consistent with the established activity pattern on the development site, given the low intensity operations occurring after construction. The proposed development would be remotely operated for the most part, and a more sensitive land use is not considered appropriate. The site is considered suitable for its intended use and further investigation is not considered necessary at this time.

State Environmental Planning Policy (Transport and Infrastructure) 2021

The Transport and Infrastructure SEPP includes provisions for infrastructure and services to facilitate the effective delivery of infrastructure across the state. Permissibility for the purposes of electricity generation is provided pursuant to division 4 section 2.36 which states:

(1) Development for the purpose of electricity generating works may be carried out by any person with consent on the following land—

- (a) in the case of electricity generating works comprising a building or place used for the purpose of making or generating electricity using waves, tides or aquatic thermal as the relevant fuel source—on any land,*

(b) in any other case—any land in a prescribed rural, industrial or special use zone.

These provisions prevail over any inconsistency in any other planning instruments, inclusive of the Murray LEP 2011. As such, the proposed development is permitted with consent pursuant to the Transport and Infrastructure SEPP. In addition, section 2.48 of the SEPP relates to determination of development applications – other development – electricity transmission and states the following:

- (1) This section applies to a development application (or an application for modification of a consent) for development comprising or involving any of the following—*
- (a) the penetration of ground within 2m of an underground electricity power line or an electricity distribution pole or within 10m of any part of an electricity tower,*
 - (b) development carried out—*
 - (i) within or immediately adjacent to an easement for electricity purposes (whether or not the electricity infrastructure exists), or*
 - (ii) immediately adjacent to an electricity substation, or*
 - (iii) within 5m of an exposed overhead electricity power line,*

Subsequently, the application was referred to Essential Energy for comment, who provided the following response:

Strictly based on the documents submitted, Essential Energy makes the following comments as to potential safety risks arising from the proposed development:

- 1. Essential Energy's records indicate that there are existing overhead powerlines located across the street frontage of the property that are impacted by the proposal:*
 - a. A minimum clearance area of 10.0 metres must be maintained between any activity and the conductor/s (powerline/s). This includes fencing and/or screening/planting buffer.*
 - b. Minimum safety clearance requirements are to be maintained at all times for the proposed driveway access and/or exit (concrete crossovers), as such driveway access will pass under Essential Energy's existing overhead powerlines located at the front of the property. The driveway must comply with clearances for trafficable land, ground clearances must be maintained. Refer Essential Energy's policy CEOM7106.25 Minimum Clearance Requirements for NSW and the latest industry guideline currently known as ISSC 20 Guideline for the Management of Activities within Electricity Easements and Close to Infrastructure.*
 - c. Any proposed driveway access and/or exit (concrete crossovers) must remain at least 3.0 metres away from any electricity infrastructure (power pole, streetlight) at all times, to prevent accidental damage.*
 - d. Any excavation works in this area or works on the driveway must comply with ISSC 20 Guideline for the Management of Activities within Electricity Easements and Close to Infrastructure.*

Essential Energy also makes the following general comments:

- 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.*
- 2. Satisfactory arrangements are to be made with Essential Energy with respect to the proposed solar energy system 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.

3. In addition, Essential Energy's records indicate there is electricity infrastructure located within close proximity of the property. Any activities within this location must be undertaken in accordance with the latest industry guideline currently known as 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.
4. 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).
5. 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.

Council are of the opinion that these comments made by Essential Energy can be suitably conditioned within the development consent.

The Application was also referred to Transport for NSW given its frontage to Cobb Highway, pursuant to section 2.118 of the Transport and Infrastructure SEPP. Section 2.118 states the following:

- (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.*

Transport for NSW have provided the following response:

From the information provided it is understood that the proposal is for the construction of a 5MW solar farm. The subject site has frontage and access to Hillside Road which is classed as a local road within a 100km speed zone. The Cobb Highway, which is a classified "state" road, is located within close proximity to the subject site but is separated by a neighbouring allotment.

TfNSW has completed an assessment of the application, based on the information provided and focussing on the impact to the state road network. TfNSW notes for this application:

- The proposal is supported by a Statement of Environmental Effects (SEE) prepared by Environmental Resources Management Pty Ltd dated August 2021;
- The development does not seek access to the Cobb Highway. Proposed access to the site is from Hillside Road, approximately 150 from its intersection with Centre Road;

- The intersection of the local road network (Centre Road) with the classified road network (Cobb Highway) is considered to be to an adequate standard and will not require any upgrade as a result of this development;
- The Cobb Highway, Centre Road and Hillside Road to the site access point are approved Road Train Routes;
- The construction phase is expected to last approximately 12 months, which during peak construction will require 40 workers;
- It is anticipated that the construction will generate up to five heavy vehicle trips per hour in the busiest period of work and 32 light vehicle movements per day.

TfNSW emphasises the need to minimise the impact of development on the existing public road network and maintain the level of safety, efficiency and maintenance along the road network. As the proposed development is within close proximity to the Cobb Highway (HW21) the proposed conditions listed below are advisory for road safety and network efficiency reasons.

Transport for NSW has assessed the Application based on the documentation provided and would raise **no objection subject to conditions** on the basis that the Consent Authority ensures that the development is undertaken in accordance with the information submitted as amended by the inclusion of the conditions listed in **Attachment 1**.

Attachment 1

1. A Traffic Management Plan shall be prepared in consultation with the relevant road authorities (Council and Transport for NSW) to ensure that key traffic related issues associated with the development have been addressed, particularly during the construction and decommission processes. The appointed transport contractor shall be involved in the preparation of this plan. The plan shall address all light and heavy traffic generation to the development site and detail the potential impacts associated with the development, the mitigation measures to be implemented, and the procedures to monitor and ensure compliance. This plan shall address, but not necessarily be limited to the following;
 - i) Require that all vehicular access to the site be via the approved access route,
 - ii) Details of traffic routes to be used by heavy and light vehicles, and any associated impacts and any road-specific mitigation measures,
 - iii) Details of measures to be employed to ensure safety of road users and minimise potential conflict with project generated traffic,
 - iv) Proposed hours for construction activities. Note that night-time construction presents additional traffic related issues to be considered, if relevant,
 - v) The management and coordination of the movement of vehicles for construction and worker related access to the site and to limit disruption to other motorists, emergency vehicles, school bus timetables and school zone operating times,
 - vi) loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles,
 - vii) procedures for informing the public where any road access will be restricted as a result of the project,
 - viii) any proposed precautionary measures such as signage to warn road users such as motorists about the construction activities for the project,

- ix) a Driver Code of Conduct to address such items as; appropriate driver behaviour including adherence to all traffic regulations and speed limits, safe overtaking and maintaining appropriate distances between vehicles, etc and appropriate penalties for infringements of the Code,
- x) details of procedures for receiving and addressing complaints from the community concerning traffic issues associated with truck movements to and from the site.

2. Any works associated with the development shall be at no cost to Transport for NSW.

Council are of the opinion that these comments made by Transport for NSW can be suitably conditioned within the development consent.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

Chapter 2 – Vegetation in non-rural areas.

The proposed development is not considered inconsistent with this policy.

Chapter 4 – Koala Habitat Protection 2021

The development site is zoned IN1 and located outside of the Sydney Metropolitan Area and the Central Coast, as such the provisions of this chapter apply. The development site is larger than 1ha and within an LGA listed within the SEPP. Given that there is no existing KoM applying to the land, the SEPP must be considered to determine the presence and potential impact to core koala habitat that may occur as a result of the proposal.

Ecological surveys have been prepared in support of the proposed development and the BAR and targeted potential koala habitat. The results of the BAR determined that no primary, secondary or supplementary koala feed trees were identified within the subject site or within proximity. Given the lack of koala recordings, and the lack of core habitat, the preparation of a KPOM is not deemed necessary and further investigation is not required.

Chapter 5 – River Murray Lands

The subject site is mapped as River Murray Land.

Part 5.1 Introduction

5.1 Aims of this Chapter

Comment: The proposed development is consistent with the aims of this Chapter. The use of the land is unlikely to detrimentally impact upon the riverine environment of the River Murray and is well setback from any watercourse.

5.2 Objectives of this Chapter

Comment: The proposed development is consistent with the objectives of this Chapter.

Part 5.2 Planning principles

5.8 General principles

Comment: The proposed development is consistent with the general principles of this Chapter and is unlikely to adversely affect the River Murray.

5.9 Specific principles

Comment: The proposed development is consistent with the specific principles of this Chapter.

Part 5.3 Planning requirements and consultation

5.12 Planning Control and Consultation Table

Comment: The application was not required to be referred under this Chapter.

5.13 Building setbacks—special provisions

Comment: The proposed development is set well back from the Murray River (in excess of 1km) which is considered an acceptable outcome.

Murray Local Environmental Plan 2011

The relevant local environmental plan applying to the site is the *Murray Local Environmental Plan 2011* ('the LEP'). The aims of the LEP include:

- (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 sustainable economic growth and development within Murray,*
- (b) to encourage the retention of productive rural land in agriculture,*
- (c) to identify, protect, conserve and enhance Murray's natural assets,*
- (d) to identify and protect Murray's built and cultural heritage assets for future generations,*
- (e) to allow for the equitable provision of social services and facilities for the community,*
- (f) to encourage and focus growth in the Moama and Mathoura townships,*
- (g) to provide for future tourist and visitor accommodation in a sustainable manner that is compatible with, and will not compromise, the natural resource and heritage values of the surrounding area.*

The proposal is consistent with these aims as the proposal is considered to encourage sustainable economic growth and development within the LGA.

Zoning and Permissibility (Part 2)

The site is located within the IN1 General Industrial Zone pursuant to Clause 2.2 of the LEP. Figure 6 below details the land zoning. The proposal is permissible in the zone with consent.

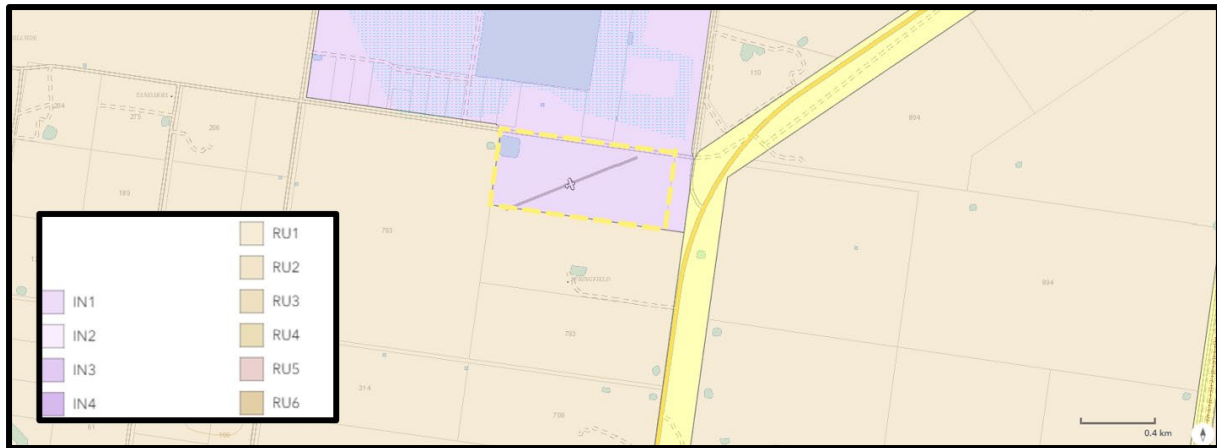


Figure 6 – Land Zoning Map with Subject Site Outlined in Yellow (Source: NSW Planning Portal).

According to the definitions in Clause 4 (contained in the Dictionary), the proposal satisfies the definition of electricity generating works which is a permissible use with consent in the Land Use Table in Clause 2.3. It is noted that the proposed development is also permitted pursuant to the Transport and Infrastructure SEPP, as outlined above.

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

- *To provide a wide range of industrial and warehouse land uses.*
- *To encourage employment opportunities.*
- *To minimise any adverse effect of industry on other land uses.*
- *To support and protect industrial land for industrial uses.*
- *To define and consolidate the existing industrial area in and near Moama.*

The proposal is considered to be consistent with these zone objectives for the following reasons:

- The development is considered to promote a wide range of industrial uses whilst minimising any adverse effects of industry on other land uses.

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 4** below.

Table 4: Consideration of the LEP Controls

Control	Requirement	Proposal	Comply
1.9A	<i>For the purpose of enabling development on land in any zone to be carried out in accordance with this Plan or with a consent granted under the Act, any agreement, covenant or other similar instrument that restricts the carrying out of that</i>	Noted.	Y

	<i>development does not apply to the extent necessary to serve that purpose.</i>		
5.10	<i>To conserve the environmental heritage and heritage significance of heritage items and heritage conservation areas of Murray.</i>	The site does not contain any known items of Environmental Heritage Significance. It is the responsibility of the Applicant to ensure compliance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales. Any consent issued will contain the standard condition regarding protection of Aboriginal Cultural Heritage.	Y
5.11	<i>Bush fire hazard reduction work authorised by the Rural Fires Act 1997 may be carried out on any land without development consent.</i>	The development site is not mapped as bushfire prone land. It is further noted that the proposed development is not a habitable building and is therefore not listed as a special fire protection purpose under section 100B of the Rural Fires Act 1997.	Y
5.21	<i>To minimise the flood risk to life and property associated with the use of land,</i>	The development site is not identified as flood prone land.	Y
6.1	<i>The objective of this clause is to require satisfactory arrangements to be made for the provision of designated State public infrastructure before the subdivision of land in an urban release area to satisfy needs that arise from development on the land, but only if the land is developed intensively for urban purposes.</i>	Council are in receipt of correspondence from the Department of Planning & Environment that states the satisfactory implementation of public infrastructure is complete.	Y
6.2	<i>Development consent must not be granted for development on land in an urban release area unless the Council is satisfied that any public utility infrastructure that is essential for the proposed development is</i>	As above.	Y

	<i>available or that adequate arrangements have been made to make that infrastructure available when it is required.</i>		
6.3	<i>The objective of this clause is to ensure that development on land in an urban release area occurs in a logical and cost-effective manner, in accordance with a staging plan and only after a development control plan that includes specific controls has been prepared for the land.</i>	As above.	Y
6.4	<i>A provision of this Part prevails over any other provision of this Plan to the extent of any inconsistency.</i>	As above.	Y
7.1	<i>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— the supply of water, the supply of electricity, the disposal and management of sewage, stormwater drainage or on-site conservation, suitable road access.</i>	Services are readily available to the site.	Y
7.2	<i>To ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land,</i>	No significant earthworks are proposed. Any earthworks required are to facilitate the construction of the development and will be minor in nature.	Y
7.3	<i>The objective of this clause is to maintain aquatic and terrestrial biodiversity by— protecting native fauna and flora,</i>	Findings of the BAR indicate that there are no threatened species or TECs listed under the EPBC Act occur within the development site. Therefore the development	Y

	<i>protecting the ecological processes necessary for their continued existence, encouraging the recovery of native fauna and flora and their habitats.</i>	will not have a significant impact on relevant MNES and did not require referral under the EPBC Act.	
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The proposal is considered to be generally consistent with the LEP.

3.2 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, and which may be relevant to the proposal, including the following:

- *Draft Murray River Local Environmental Plan 2021*

These proposed instruments are considered below:

The *Draft Murray River LEP 2021* soon applies, however, no issues have been identified. This document is not identified as a draft instrument as per 4.15(1)(a)(ii) of the EP&A Act 1979. Therefore, there are no relevant issues identified as part of this proposed development application.

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

The following Development Control Plan is relevant to this application:

- *Murray Development Control Plan 2012* ('the DCP')

Chapter 3 – industrial development applies to the proposal, and an assessment against the applicable controls is provided below.

- Landscaping
 - All industrial sites are to be landscaped
 - A range of plant species of various heights are to be used in the landscaping to create interest, improve visual amenity and help screen storage and car parking areas.
 - Landscaping areas are to be protected from vehicle movement areas to prevent the damage to these vegetated areas.
 - Landscaping must be designed to ensure low maintenance.
 - Existing mature trees should be incorporated in the development where possible.
 - Wherever possible native plant species are to be utilised in landscaping with preference given to drought tolerant species

Comment: the proposal includes landscaping that is considered appropriate for the development and subject site.

- Setbacks
 - 10m from primary boundary
 - 3m rear and side

Comment: proposed setbacks comply with the controls.

- Amenity
 - All development is to comply with the requirement of the Protection of the Environment Operations Act 1997 and its Regulation.

Comment: this is to be suitably conditioned as part of the consent.

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):

- *S7.12 Development Contributions Plan 2011*

This Contributions Plan has been considered and included the recommended draft consent conditions. Section 7.12 Levy Development Contributions must be paid to Council prior to the release of the Construction Certificate. Section 7.12 charges are 1% of the submitted estimated cost of the development.

3.4 Section 4.15(1)(a)(iia) – 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.

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

The regulations have been considered in the assessment of this application. It is considered the application is consistent with the objectives of the regulations.

93 Fire safety and other considerations

(1) This clause applies to a development application for a change of building use for an existing building where the applicant does not seek the rebuilding, alteration, enlargement or extension of a building.

Comment: Not applicable.

(1) In determining the development application, the consent authority is to take into consideration whether the fire protection and structural capacity of the building will be appropriate to the building's proposed use.

Comment: Not applicable. *Fire protection and structural capacity* of a building means:

- (a) the structural strength and load-bearing capacity of the building, and
- (b) the measures to protect persons using the building, and to facilitate their egress from the building, in the event of fire, and
- (c) the measures to restrict the spread of fire from the building to other buildings nearby.

(3) Consent to the change of building use sought by a development application to which this clause applies must not be granted unless the consent authority is satisfied that the building complies (or will, when completed, comply) with such of the Category 1 fire safety provisions as are applicable to the building's proposed use.

Note. *The obligation to comply with the Category 1 fire safety provisions may require building work to be carried out even though none is proposed or required in relation to the relevant development consent.*

Category 1 fire safety provision means the following provisions of the Building Code of Australia, namely,

EP1.3: Fire Hydrant

EP1.4: Automatic fire suppression

EP1.6: Suitable facilities for fire brigade to co-ordinate intervention

EP2.1: Automatic smoke detection for sleeping occupants

EP2.2: Evacuation route

EP3.2: Lifts

in Volume One of that Code and P2.3.2 in Volume Two of that Code.

(4) Subclause (3) does not apply to the extent to which an exemption is in force under clause 187 or 188, subject to the terms of any condition or requirement referred to in clause 187 (6) or 188 (4).

(5) The matters prescribed by this clause are prescribed for the purposes of section 4.15(1)(a)(iv) of the Act.

Comment: No existing buildings.

94 Consent authority may require buildings to be upgraded

(1) This clause applies to a development application for development involving the rebuilding, alteration, enlargement or extension of an existing building where:

(a) the proposed building work, together with any other building work completed or authorised within the previous 3 years, represents more than half the total volume of the building, as it was before any such work was commenced, measured over its roof and external walls, or

(b) the measures contained in the building are inadequate:

(i) to protect persons using the building, and to facilitate their egress from the building, in the event of fire, or

(ii) to restrict the spread of fire from the building to other buildings nearby.

(c) (Repealed)

(2) In determining a development application to which this clause applies, a consent authority is to take into consideration whether it would be appropriate to require the existing building to be brought into total or partial conformity with the Building Code of Australia.

(2A), (2B) (Repealed)

(3) The matters prescribed by this clause are prescribed for the purposes of section 4.15(1)(a)(iv) of the Act.

Comment: No existing buildings.

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

3.6 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.

- **Amenity**
 - The development is considered to have an acceptable impact on local amenity. There will be some localised visual and construction noise impacts on a small amount of receivers. Mitigation measures are considered to be able to be satisfied via conditions of consent.
- **Waste**
 - Waste will be generated during the construction phase and predominantly be classified as solid waste. Such examples include; packaging materials, excess building materials, scrap metal and cabling materials. Masonry products including concrete waste, excavation of top soils and vegetation clearing and bio wastes.
 - All waste generated on site during all phases of the development will be managed in accordance with the POEO Act and adhere to the objectives of the Waste Avoidance and Resource Recovery Act 2001.
 - Waste produced during construction will be disposed of at a licensed facility.
 - No trees are permitted to be removed, however any green waste (e.g. low lying grass) will be mulched and rehabilitated at the site or appropriately removed.
 - Upon decommissioning of the development (20–30-year life span), all infrastructure including cabling and panels and mounting frames including footings and inverters will be disassembled and removed from the site.

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

- **Context and setting**
 - The proposed development is unlikely to adversely impact upon the built environment. The built form is considered to appropriately respond to the site's natural features.
 - A Visual Impact Assessment has been prepared and is provided within the submitted SEE. The project was rated as having a negligible visual impact from ten locations, as a result of screening from existing vegetation. The assessment noted that the visual impacts are likely to be higher when the development is under construction and mitigated over time (by vegetative screening) with the implementation of measures to ultimately achieve a low or negligible impact overall.
 - From a visual perspective, the composition of materials utilised throughout the development is not considered to adversely impact the public domain.
 - The proposed development conforms to the site's natural landform and is considered to be appropriate for the location given its uniform layout, and subsequently is not considered to create any adverse bulk and scale impacts.
- **Access and traffic**
 - A Traffic and Transport Impact Assessment (TTIA) has been undertaken in support of the Application.
 - Access is proposed via Hillside Road and the SEE lodged in support of the application makes reference to existing access arrangements being upgraded. Further information required.

- Traffic generation along Cobb Highway and Hillside Road is understood to increase during the construction and installation stage of the proposed development. The TTIA states the following:
 - *Construction activities are anticipated to generate up to five heavy vehicle trips per peak hour in the busiest period of the works. On average that would equate to one heavy vehicle trip every 12 minutes, which would have minor impact on the operation of the surrounding road network.*
 - *The works are expected to generate up to eight inbound and eight outbound light vehicle trips due to construction stage travelling to/from work. During the peak construction period there would be in the order of 16 inbound and 16 outbound light vehicle trips per day.*
 - *Typically, staff would travel to site before the 7am start time and leave site after the 6pm finish time (construction hours subject to Council requirements). Both of these periods fall outside of the road network peak hour, namely 7:30am-8:30am and 4:30pm -5:30pm. Therefore, light vehicle trips generated by construction staff would have a minor impact on the surrounding road network.*
 - *Once the project is operational, there would be between two-four operations and maintenance (O&M) staff who would attend the site day-to-day. When required to attend the site, O&M staff would generate up to four inbound and four outbound light vehicle trips across the workday which would cause minimal impact on the local road network.*
 - *Equipment repairs and cleaning of the solar panels would be undertaken approximately 2-3 times a year. These works would occur across a five-day period each time and would require a workforce of up to three personnel on a daily basis.*
 - Based on the information provided the proposed development is not considered to have an adverse impact upon existing traffic flows, intersection capabilities or local amenity. Once upgrade works have been completed on existing access arrangements, vehicles will be readily available to enter the site without disrupting the surrounding road network.
 - Once upgrade works have been complete it is considered that there is appropriate room for vehicles to enter and exit the site in a forward direction. This reduces possibilities of conflict and therefore enables safe maneuvering of vehicles on site.
 - *20 on site car parking spaces are proposed for the construction workers. It is anticipated that there would be up to 16 light vehicles by construction personnel onsite per day. Thus all staff parking demand would be provide onsite.*
 - *On a daily basis, there would be up to four operations and maintenance vehicles on site to carry out regular vegetation maintenance beneath and around the solar farm equipment. The project will be operated remotely and therefore there will be no permanent staff onsite.*
 - *Equipment repairs and cleaning of the solar panels would occur two-three times per year for five das each time. This operation would require a workforce of three personnel on a daily basis. Parking demand associated with these works would be accommodated across the former construction staff parking area.*
 - *Overall the proposed car parking provision during the construction phase and operations phase of the project are deemed to be sufficient.*
 - Based on the information provided Council is satisfied that there are no traffic related matters of significance arising from the proposed development.
- Utilities
 - Reticulated water and sewer services are not required to be provided to the solar farm as there are no permanent staff or amities proposed on site, portable amenities for onsite ablutions and water supply by way of a portable tank or cat are proposed to be utilised during the construction phase.

- Heritage
 - The site is not subject to any heritage conservation provisions.
 - Aboriginal Cultural Heritage - No known items identified on the subject land. In any event statutory requirements would trigger contingency measures if any cultural heritage was subsequently identified.
- Water/air/soils impacts
 - The site terrain generally varies between 97 and 98m AHD. To the north and east, Hillside Road, Centre Road and Cobb Highway act as a ridgeline for the catchment contributing stormwater runoff to the site. The catchment is also bounded by existing open channels to the west and south. the lowest point of the site is the dam located in the north-west corner.
 - Air quality within the locality is typical of the rural region. It is generally high however dust raised during drier months contributes to sporadic reductions in air quality, with increase in the level of particulate matter in the air due to the burning of agricultural residues and soil cultivation for cropping.
 - During the operational phase of the development, soils at the site will be stable and vegetated with perennial grass cover. Dust generation will be closely managed as it is harmful to the effectiveness of the solar array to generate electricity and cause nuisance to surrounding receptors. Solar farms have very low air emissions of air pollutants whilst in operation.
- Flora and fauna impacts
 - No areas of critical habitat are affected by the proposal no native vegetation will be impacted upon.
- Natural environment
 - The proposed development is not considered to have any adverse impacts on the natural environment. As outlined in this report the development site is considered suitable for its intended use.
- Noise and vibration
 - *Only residential receptors have been identified within the potential area of influence of this project. There are 3 residential receptors in total.*
 - *The operation of the project will involve noise emissions from transformers and inverters used in the development site. Due to the size of the project, noise associated with maintenance works would be limited to the daytime hours only and maintenance noise related impacts are not anticipated.*
 - *Operational noise sources consist of two inverters and one transformer. The transformer is proposed to be located at the north eastern corner of the project site and the inverters and BESS are in the eastern side of the project site. The nearest residential receptors to the dominant noise source are located approximately 730m to the south and east of the project site. Therefore noise levels from the project are expected to comply with the most stringent night time operational noise criteria identified in this assessment (i.e. < 35 dBA for residential receptors). As such no recommendations for operational noise mitigation and management measures are warranted or provided in this assessment.*
 - Based on the above, and given the industrial zoning of the development site, the proposal is considered to have negligible impact on noise emissions and will not result in adverse impacts on surrounding rural residential receivers.
- Construction and operational impacts
 - Nuisance or unacceptable level of noise / vibration amenity may arise from the construction or operational activities associated with the development. It is expected that the impact from operational noise and vibration will be negligible with the implementation of appropriate management measures. Such can be suitably conditioned.

- Natural hazards
 - The development site is not subject to bushfire or flooding as outlined in this report.
- Whilst the site is not mapped as bushfire prone land, the PBP 2019 contains specific bushfire mitigation measures relating to solar farm development and outlines standard construction bushfire risk reduction and management measures including availability of fire-suppression equipment, access and water and appropriate bushfire emergency management planning should be in place, in addition to solar farm specific measures, such as:
 - Solar farms require certain consideration to allow for adequate clearances to combustible vegetation as well as firefighting access and water the following mitigation measures will need to be included for the proposed development-
 - A minimum 10m APZ for the structures and associated buildings / infrastructure; and
 - The APZ must be maintained to the standard of an inner protection area (IPA) for the life of the development
- Infrastructure for the purposes of requiring an APZ excludes road access to the site and power or other services to the site and associated fencing.
- A Bush Fire Emergency Management and Operations Plans will need to be prepared following determination which will be required to outline appropriate management and maintenance of bushfire protection measures, for the life of the development, This plan is to be development in consultation with the RFS.
- Safety, security and crime prevention
 - The proposed development is considered to satisfy the principles of Crime Prevention Through Environmental Design. In this regard, a number of security features have been introduced:
 - Landscaped areas to be maintained to a good standard;
 - Clear delineation between public and private areas;
 - Design minimises public access to restricted areas.
 - Based on the above provisions, the requirement of CPTED are deemed to be met.
- Social impact
 - The development as proposed is not considered to create any adverse social impacts.
- Economic impact
 - The proposed development is considered to create positive economic effects to the community whilst under construction.

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

3.7 Request for Information following on from Panel Briefing

On 09 February, Council issued a Request for Information seeking clarity on the following with regards to the proposed development:

- Fence Height;
 - Please confirm height of fencing.
- Landscaping;
 - Please confirm landscaping width.
- Raised Platforms;

- Clarification is sought as to why some of the structures are to be located on a raised platform. It is noted that the architectural plans detail the SVG Elevation and the Switchgear Cabinet Elevation to be located on top of a raised structure.
- Heavy Vehicle Trips During Construction
 - The Panel identified inconsistencies between the Statement of Environmental Effects and the Traffic Impact Statement lodged in support of the proposed development. Clarification is sought as to the number of heavy vehicle trips required during construction.
 - The SEE states the following: *Construction activities are anticipated to generate up to five heavy vehicle trips per peak hour in the busiest period of the works. On average, that would equate to one heavy vehicle trip every 12 minutes, which would have a minor impact on the operation of the surrounding road network.*
 - The TIS states the following: *During construction, there would in the order of: 10 inbound and 10 outbound heavy vehicle trips per day (during peak construction there would be in the order of 14 inbound and 14 outbound heavy vehicle trips per day).*

The Applicant provided the following comments:

The Construction section of the SEE (Section 5.4.2.1) states the same as per Section 4.1 and Table 4.1 of the Traffic report attached as Appendix E.

The proposed Site fence is proposed to be a 2m high galvanized steel fence with steel cap up to a maximum height of 2.3m. Though this has not been stated within the SEE nor the drawings, this fence height is consistently applied across all Risen solar farm sites.

In consideration of the appropriate electrical guideline “ISSC 20 Guideline for the Management of Activities within Electricity Easements and Close to Electricity Infrastructure”, the following design options are proposed to be adopted through the ‘detailed design’, where and if required, to avoid electrical hazard and keep sufficient clearance:

1. The distance of perimeter fencing from any existing electrical poles, will be adjusted to be at least 15m. (refer to Section 7.2.4 - 15m clearance)
2. The height of perimeter fencing shall be limited accordingly (refer to Section 7.2.3 - 4.6m height including human above fence; refer to Section 7.1.2 - 2.5 metres if climbable)
3. Earthing connection from fence to reduce step/touch potential at fault. (refer Section 4.1.3 - metallic fence)
4. Further insulated section installed on fence. (refer Section/s 4.1.3 - metallic fence & 9.2.1 - fence segregated by an insulating panel)

As per Site Overview and Setback drawing, 5m wide screening buffer is included as Note 9, which refers to the width of landscape planting. Also, the type of trees species proposed, and height at full maturity are all noted in Section 8.1 of the LVIA.

The elevated plant structure includes switch-gear cabinets and Static volt-ampere generators (SVG) which are all required to support the solar panel-to-grid supply. These structures are elevated to a nominal height above ground

level to:

- accommodate enough clearance for the electrical cabling that enters/exits these facilities from below,
- include ventilation as these pieces of equipment do require cooling/ventilation; and
- preventing ingress of any localised stormwater during rain events.

These structures are also located together in a small cluster in the north-eastern portion of the site which is mostly indiscernible from the predominant proposed solar arrays themselves. However, these structures have been considered in the overall site context in respect of visual amenity, resulting in the proposed screening (height and density) around the perimeter of the site, aiming to effectively manage the assessed visual impact.

Comment: Council are of the opinion that these comments satisfy the concerns raised within the RFI issued following on from the Panel Briefing.

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

Having regard to the characteristics of the site and its location within Moama, the proposed development is considered appropriate in that:

- The zoning of the site permits the proposed uses;
- The design and architectural elements conform to the natural landform;
- The size and dimensions of the land are appropriate for accommodating the proposal;
- It will deliver a development that positively responds to the streetscape and is compatible in size and sighting with surrounding existing developments; and
- The site is considered suitable for that development as it satisfies the need for a variety of industrial uses in the area.

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

These submissions are considered in Section 5 of this report.

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

The proposal will facilitate development of the site by providing a new high-quality industrial development which achieves good design. It is in the public interest to reinforce the importance of this location for additional industrial supply. Generally, the proposal provides the following public benefits:

- The development has been designed so that it enhances and responds sensitively to its setting, creating spaces that reflect the desired scale and significance of the immediate area;
- The proposed development provides a built form that presents a high-quality design that first within the envisaged character of the area and responds to the site attributes and development controls applicable;
- The development is located within close proximity to a range of services, amenities and public transport; and
- There are no significant adverse impacts on surrounding properties in terms of sunlight access, views, visual and acoustic amenity and privacy.

4. REFERRALS AND SUBMISSIONS

4.1 Agency Referrals and Concurrence

The development application has been referred to various agencies for comment/concurrence/referral as required by the EP&A Act and outlined below in Table 5.

There are no outstanding issues arising from these concurrence and referral requirements subject to the imposition of the recommended conditions of consent being imposed.

Table 5: Concurrence and Referrals to agencies

Agency	Concurrence/ referral trigger	Comments (Issue, resolution, conditions)	Resolved
Concurrence Requirements (s4.13 of EP&A Act)			
Environment, Energy & Science Group within DPIE	S149 of the Roads Act	Council staff indicated that the proposal will not require a lease on the public road. Concurrence is therefore not required.	Y
Referral/Consultation Agencies			
RFS	S4.14 – EP&A Act Development on bushfire prone land	Whilst it is noted that the development site is not bushfire prone land, nor is it integrated with the RFS, there are standard construction bushfire risk reduction and management measures including availability of fire-suppression equipment, access and water and appropriate bushfire emergency management planning outlined in the NSW RFS Planning for Bushfire Protection.	Y
Environment Protection Authority		Proposal is a non scheduled activity under POEO Act. Electricity works don't include solar farms.	Y
Essential Energy	Section 2.48	No objection. Subject to Conditions. Agency Advice located within the NSW Planning Portal.	Y
CASA		CASA does not consider the Moama Solar Farm to be a hazard to aircraft navigation and has no objection to the proposal.	Y

		CASA notes that the Moama Solar Farm will be located approximately 12km from Echuca airport and approximately 3km from the Moama Airstrip. CASA has considered that the panels will track the sun and will have anti-glare coating.	
LLS		Local Land Services notes that the proposal is located on "General Industrial" land as zoned under the LEP. As there is a Development Application associated with the activity, Part 5A of Local Land Services Act 2013 and Land Management (Native Vegetation) Code 2018 does not apply. LLS is not a consent authority in this case relating to the removal of native vegetation and for this reason, LLS does not have an opinion on the matter.	Y
Crown Lands	S1.4 Crown Lands Management Act 2016	No objections as no impact to Crown Land has been identified.	Y
Integrated Development (S 4.46 of the EP&A Act)			
RFS	S100B - <i>Rural Fires Act 1997</i> bush fire safety of subdivision of land that could lawfully be used for residential or rural residential purposes or development of land for special fire protection purposes	N/A – Not proposed.	N/A
Transport for NSW	Section 2.118	No objection. Subject to Conditions. Agency Advice located within the NSW Planning Portal.	Y
Heritage NSW	Non-Statutory Aboriginal Cultural Heritage Referral.	This referral has not been accepted as the application does not include the information required for heritage assessment. Further information on the reason for rejection is available on the Heritage NSW website – local council resources webpage.	Y
Water NSW		Works under the Water Management Act are Exempt under Schedule 1- Excluded works 3 - Dams solely for the capture,	Y

		containment and recirculation of drainage and/or effluent, consistent with best management practice or required by a public authority (other than Landcom or the Superannuation Administration Corporation or any of their subsidiaries) to prevent the contamination of a water source, that are located on a minor stream.	
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4.2 Council Referrals (internal)

The development application has been referred to various Council officers for technical review as outlined **Table #6**.

Table 6: Consideration of Council Referrals

Officer	Comments	Resolved
Engineering	<p>Council's Engineering Officer reviewed the proposed development and makes note of the following:</p> <ul style="list-style-type: none"> - A Culvert Application is required for access; - A Rural Address Number is required to be applied for; - The SEE states that no reticulated water is proposed to be connected; - The SEE states that sewer is not proposed to be connected; - A Stormwater Draining Plan will be required to be provided prior to construction (this can be suitably conditioned); - Section 64 Contributions not applicable (no connections); - 7.11 Contributions (existing ET sufficient for proposed development); - Driveway is to be sealed from boundary to edge of Hillside Road bitumen; <p>Propose power connection must not impact traffic movement (height of power over Hillside Road must be adequate).</p>	Yes
Traffic	As above.	Yes
Building	No comments received.	N/A
Health		N/A
Waste		N/A
Public Domain/		N/A

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

4.3 Community Consultation

The proposal was notified in accordance with the DCP from 2 December 2021 until 18 January 2022A total of zero (0) unique submissions, comprising zero (0) objections and zero (0) submissions in favour of the proposal.

The notification included the following:

- Notification on NSW Planning Portal;
- Notification letters sent to adjoining and adjacent properties (a rough estimate of the number of letters sent);
- Notification on the Council's website.

5. 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:

5.1 Noise and Vibration

The potential for noise and vibration to impact on adjoining properties is an important consideration given the extent of works proposed and the construction methods likely to be utilised. The application was accompanied by a Noise and Vibration Assessment within the Statement of Environmental Effects which considered this issue.

The Noise and Vibration Report considered the noise and vibration impacts arising from the proposed construction and ongoing use of the site.

The report concluded that in assessing feasible and reasonable mitigation measures, the noise created represents a minor impact that is considered barely perceptible to the average person. Council has considered this report and following a detailed assessment, concluded the report was satisfactory notwithstanding the likely noise exceedance which could be addressed in recommended conditions of consent, which is supported.

Based on the equipment and activities proposed for the construction and operation of the proposed development, it is anticipated that vibration will be limited to construction activities.

Works are to be carried out during standard construction work hours.

Appropriate machines for each task will be selected and all machines utilised are to be in good condition. All plant, equipment and vehicles movements are to occur in a forward direction to minimise any motion alarms when in reverse.

Resolution: The issue has been resolved through recommended conditions of consent as outlined in **Attachment A**.

5.2 Visual Glare

Design principles including, siting, access, layout will directly influence the appearance of the proposed development. In order to reduce visual impact, the following design considerations have been implemented:

- The design will retain the existing boundary planting along the eastern boundary of the site;
- Consideration is given to colours and materials of ancillary structures to ensure minimal contrast and to help blend into the surrounding landscape as practical; and
- Existing vegetation within the environmental exclusion zones will be retained and protected to maintain the existing level of screening.

Resolution: The issue has been resolved through recommended conditions of consent as outlined in **Attachment A**.

5.3 Traffic and Transport

A Construction Traffic Management Plan (CTMP) is to be prepared and approved by Council. It shall outline details pertaining to construction activities at the site and the traffic control measures and protocols to be implemented to manage impacts associated with the works. It will also contain details for any oversize vehicles required as part of construction.

Resolution: The issue has been resolved through recommended conditions of consent as outlined in **Attachment A**.

5.4 Hydrology and Flooding

Implementation of the Preliminary Stormwater Management Strategy, including the development of an on-site basin and perimeter drain surrounding the proposed works is to be prepared.

Resolution: The issue has been resolved through recommended conditions of consent as outlined in **Attachment A**.

5.5 Air Quality

Implementation of mitigation measures during construction are considered to minimise any potential impacts, and are outlined as:

- Limit areas of soil disturbance at any one time.
- Maintain all disturbed areas, stockpiles and handling areas in a manner that minimises dust emissions.
- If required, undertake strategic watering to achieve dust suppression.
- When required, minimise vehicle movement and speed.
- Avoid any activities that create dust during windy and dry conditions.
- Ensure all construction plant and equipment are operated and maintained to manufacturer specifications to minimise exhaust emissions.
- Restrict vehicle movement and ground disturbance to minimum area.

Resolution: The issue has been resolved through recommended conditions of consent as outlined in **Attachment A**.

5.6 Hazards

Implementation of the following mitigation measures during construction will minimise potential bushfire risks (note site is not bushfire prone land);

- Contact local RFS and discuss construction schedule prior to construction starting.
- Static water supplies dedicated exclusively for firefighting purposes will be located strategically around the site and appropriately plumbed for the duration of the construction.
- The fuel load over the site prior to and during construction will be monitored and reduction measures implemented as required.
- No burning of vegetation or any waste material proposed.
- Fire extinguishers made readily available in all vehicles.
- During bushfire season, all vehicles and plant movements beyond formed roads and trafficable hard stand areas will be restricted to diesel, not petrol vehicles.
- Bushfire status will be monitored daily through the RFS website.
- Total fire ban rules will be adhered to.
- Implementation of farm specific bushfire mitigation measures in accordance with the PBP 2019 as outlined in this report earlier.
- A Bushfire Emergency Management and Operations Plan is to be prepared for the life of the development.

Resolution: The issue has been resolved through recommended conditions of consent as outlined in **Attachment A**.

5.7 Waste

Implementation of the following mitigation measures during construction will minimise potential impacts to waste.

- The work site will be kept free of rubbish and cleaned up at the end of each working day.
- All waste that cannot be recycled will be disposed at a licensed facility.
- No waste will be burnt or buried.
- All recycling opportunities will be implemented.
- All waste will be classified in accordance with the EPA's waste classification guidelines and stored and handled in accordance with its classification.
- All wastes removed from the site will be recorded.

Resolution: The issue has been resolved through recommended conditions of consent as outlined in **Attachment A**.

6. 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 proposed development for a 4.95MW solar farm for the purposes of electricity generating works is considered a suitable development for the subject lot. During the construction process, the development is considered to positively contribute to the economic and social benefit of the community.

The development is compliance with the controls set out in the Murray LEP 2011 and achieves the objectives outlined in the Murray DCP 2012. The subject development comprises suitable setbacks, and the materials are compatible with the topography of the land.

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**.

7. RECOMMENDATION

That the Development Application DA No 10.2021.291.1 for the construction of a 4.95MW Solar Farm for the purposes of electricity generating works at Hillside Road, Moama 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: Approval from Transport for NSW for imposition of Conditions
- Attachment C: Approval from Essential Energy for imposition of Conditions
- Attachment D: Architectural Plans
- Attachment E: Statement of Environmental Effects
- Attachment F: Capital Investment Value (CIV) Report
- Attachment G: 7.12 Contributions Fee Invoice