



COUNCIL ASSESSMENT REPORT WESTERN REGIONAL PLANNING PANEL

PANEL REFERENCE	PPSWES-203	
DA NUMBER	43-24-DA-DM	
LGA	Berrigan	
PROPOSED DEVELOPMENT	Electricity Generating Facility sub-5mW AC Solar Farm and four (4) battery energy storage systems	
ADDRESS	Lot 1 DP702960 at 39 Burkes Road, Finley	
APPLICANT	Kelly McNicol of SKM Planning	
OWNER	Graeme Close	
DA LODGEMENT DATE	3 October 2023	
APPLICATION TYPE	Development Application	
REGIONALLY SIGNIFICANT CRITERIA	Private Infrastructure and community facilities with a CIV greater than \$5m	
CIV	\$6,181,912 (excluding GST)	
CLAUSE 4.6 REQUESTS	Not applicable	
KEY SEPP/LEP	State Environmental Planning Policy (Planning Systems) 2021	
	State Environmental Planning Policy (Primary Production) 2021	
	State Environmental Planning Policy (Resilience and Hazards) 2021	
	State Environmental Planning Policy (Transport and Infrastructure) 2021	
	Berrigan Local Environmental Plan 2013	
	Berrigan Development Control Plan 2014	
TOTAL AND UNIQUE SUBMISSIONS AND KEY ISSUES RAISED	Nil submissions	
DOCUMENTS SUBMITTED FOR CONSIDERATION	 Statement of Environmental Effects Site Plan Drawings: Solar PV Equipment Landscape Plan 	

	 Traffic Impact Assessment Construction Noise and Vibration Impact Assessment Solar Glint and Glare Assessment Aboriginal Cultural Heritage Assessment Preliminary Site Investigation 	
SPECIAL INFRASTRUCTURE CONTRIBUTIONS (s7.24)	Not applicable	
RECOMMENDATION	Approval	
DRAFT CONDITIONS TO APPLICANT	Yes	
SCHEDULED MEETING DATE	12 February 2024	
REPORT PREPARED BY	Lillian Charlesworth, Manager RSD Assessment Department of Planning, Housing and Infrastructure (on behalf of Berrigan shire Council).	
DATE OF REPORT	15 January 2024	

EXECUTIVE SUMMARY

The development application (DA 43-24-DA-DM) seeks consent for electricity generating works (i.e. a solar farm) and battery energy storage system (BESS) with a capacity below 5 megawatts (MW).

The subject site known as 39 Burkes Road (Lot 1 DP702960), Finley has single road frontage to Burkes Road. The site comprises a 14ha area within a 40.5ha property. Existing development on the property consists of a detached dwelling and various ancillary agricultural structures to the north of the development site. The property is currently used for rotational cropping. The site is located approximately 2.5km south of Finley. The locality comprises rural properties used for medium to large scale farming operations with scattered residential dwellings.

The site is located in the RU1 Primary Production Zone pursuant to Clause 2.3 of the *Berrigan Local Environmental Plan 2013* (the LEP). While electricity generating works are not permissible in the RU1 zone, the use is permissible with consent on any land in a prescribed non-residential zone under clause 2.36(1)(b) of State Environmental Planning Policy (Transport and Infrastructure) 2021 (the SEPP). As the RU1 Primary Production zone is a prescribed non-residential zone under the SEPP, the proposed development is permissible with consent.

The principal planning controls relevant to the proposal include *State Environmental Planning Policy (Planning Systems), State Environmental Planning Policy (Primary Production)* 2021, *State Environmental Planning Policy (Transport and Infrastructure)* 2021, *State Environmental Planning Policy (Resilience and Hazards)* 2021, *Berrigan Local Environmental Plan 2013* and *Berrigan Development Control Plan 2014.* The proposal is generally consistent with the relevant provisions of the above planning controls.

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 was sent to Essential Energy who raised no concerns.

The application was placed on public exhibition from 13 October 2023 to 27 November 2023, with no submissions being received.

The application is referred to the Western Regional Planning Panel (the Panel) as the development is '*regionally significant development*', pursuant to Section 2.19(1) and Clause (5)(a) of Schedule 6 of *State Environmental Planning Policy (Planning Systems) 2021* as the proposal is development for *private infrastructure* with a CIV over \$5 million. No briefings on this DA have previously been held with the Western Regional Planning Panel.

Assessment of the application under section 4.15(1) of the Environmental Planning and Assessment Act 1979 ('EP&A Act') considered that there are unlikely to be any significant adverse impacts of the development on the natural and built environments, subject to the recommended conditions.

The key assessment matters identified included:

- Loss of agricultural land the land is identified as State significant agricultural land under the Department of Primary Industries draft State Significant Agricultural Land map, although the mapping is known to have data limitations. The site is located within the Murray Irrigation Area, although the soil is predominantly class 4 (moderate to severe limitations) under the Soil Capability Mapping for NSW. Also, as grazing is expected to continue on the site during the operational phase and the development will eventually be decommissioned and returned to agricultural use, the loss of agricultural land is not considered significant.
- Traffic, access and parking the matters considered include advice from Council's Development Engineer, existing and proposed conditions along the heavy vehicle route and key intersections, traffic generation, the adequacy of the Traffic Impact Assessment, site access and car parking provision. Following consideration of all relevant matters, the proposal is satisfactory subject to conditions.
- Noise there will be some exceedances of the adopted standards at the two nearest residential dwellings, largely for construction noise which are short-term, however impacts will be minimised by the recommended conditions of consent.
- Visual impact a Solar Glint and Glare Assessment was undertaken that concluded there will be no impact of the solar farm on the nearby Finley Airport. The SEE included a visual assessment of the need for screening of the solar farm from six adjoining properties and recommended a landscaping buffer along the Burkes Road frontage and part of the southern boundary. This measure is considered adequate to address visual impacts and is included in the recommended conditions.
- Earthworks sedimentation within adjoining irrigation channels could lead to raising the bed of the channel, thereby reducing capacity. Therefore, erosion and sediment controls are included in the recommended conditions.
- Decommissioning the site will be decommissioned in 30 years at the end of its useful life. It is important to ensure that all above and below ground solar farm infrastructure

is removed and either recycled, reused or appropriately disposed of in order to return the site to its current agricultural potential and prevent site contamination (particularly from the BESS). This provision is included in the conditions of consent.

The suitability of the site for the development is seen as satisfactory and the development is considered to be in the public interest in terms of providing renewable energy and reducing reliance on fossil fuels.

It is recommended that DA 43-24-DA-DM for an electricity generating works (solar farm) and battery energy storage system at 39 Burkes Road, Finley be APPROVED pursuant to Section 4.16(1)(a) of the *Environmental Planning and Assessment Act 1979* subject to the conditions of consent attached to this report at **Attachment A**.

1. THE SITE AND LOCALITY

1.1 The Site

The site is described as Lot 1 DP702960, at 39 Burkes Road, Finley (**Figure 1**). The property area is approximately 40.5ha, whilst the development site within the property is approximately 14ha (**Figure 2**). The site is currently used for the cultivation of rotational crops and includes a dwelling and farm buildings. The landowner is leasing the development site to the applicant and will continue to utilise the remainder of the site for cropping or grazing. The site has been laser levelled for cropping and is devoid of vegetation, therefore there is no native vegetation (including trees, shrubs or grasslands) on the development site that will be impacted by the proposal. The site has a frontage to Burkes Road (an unsealed road) and is bounded by a decommissioned railway line to the east. The site is within the Murray Irrigation Area and is connected to raw water via irrigation canals to the west and east of the site. The site predominantly class 3 agricultural land and is not mapped as bush fire prone. It is relatively flat, not mapped as flood prone land and drains to a drainage channel to the east of the site under the rail corridor.

1.2 The Locality

The site is located approximately 2.5km to the south of Finley (**Figure 3**) within a rural area comprising predominantly medium to large scale farming operations on lots between 40ha and 200ha. The adjoining farming operations involve rotational crops, including wheat, canola and barley. The Newell Highway is located 1km to the west and is accessed via Burkes Road, Plumptons Road and Tongs Street. A 22kV overhead transmission line is located adjoining the eastern boundary. There are seven (7) dwellings scattered within a distance of approximately 1km from the site. Finley Airport is located approximately 645m to the north-west.



Figure 1 – The site viewed from Burkes Road (source: SEE)



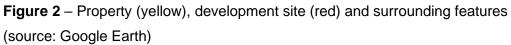




Figure 3 – Locality map (source: SEE)

2. THE PROPOSAL AND BACKGROUND

2.1 The Proposal

The proposal seeks consent for a solar farm and battery energy storage system (BESS) with a capacity below 5 megawatts (MW) on land at 39 Burkes Road, Finley. Overhead wires will connect the facility to a nearby substation.

In summary the proposed development includes (Figure 4):

- 11,664 solar panels (ground mounted single access trackers allowing east to west tracking)
- a central inverter
- underground cabling 0.5 to 1m below ground (using open trenching excavation) to connect the solar arrays, inverters and batteries via a new power pole to the overhead 22kV power line (with a new easement in favour of Essential Energy)
- 4 DC-coupled Battery Energy Storage Systems (BESS)
- a chain mesh security fence with barbed wire around the perimeter of the facility
- a 3m wide landscaped buffer comprised solely of "Old Man Saltbush" plants located along the Burkes Road frontage to the solar farm and along part of the southern boundary
- temporary parking, site offices and amenities, an all-weather materials laydown area and internal access road along the northern boundary with a turning area sized for the movement of heavy vehicles (these features are temporary, for the construction period only)
- new site access from Burkes Road

The solar farm is proposed to be constructed over a six to ten month period, utilising 20 to 30 construction staff on site at any one time. If local contractors are unavailable, temporary workers would utilise short-term accommodation in Finley and possibly Tocumwal and the applicant would provide a bus service to pick up and drop off

workers. The operational phase will not require staff permanently on-site. A program of inspections and monitoring will be prepared for local maintenance staff.

The development is proposed to be decommissioned within 30 years, at the end of the expected lifespan of the solar panels. The decommissioning of the solar farm and subsequent rehabilitation of the land will include removal of all infrastructure, followed by on-site works, so that the property can be returned to agricultural uses.

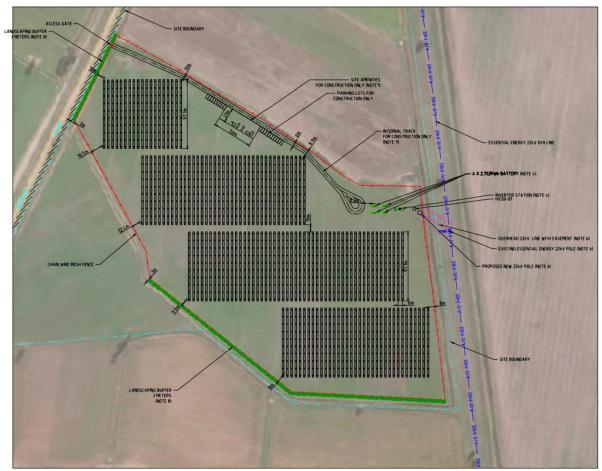


Figure 4 – Development Site Plan (source Allied Consulting Engineers)

There are no specific numerical development controls that apply, although key development data is provided in **Table 1**.

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Control	Proposal
Site area	14ha
Clause 4.6 requests	Not applicable
Max height	Panel height of 2.2m at maximum rotation and 3m height for the inverter and BESS

Landscaping	A 3m wide landscape strip comprised of Old Man Saltbush along the Burkes Road frontage and part of the southern boundary
Car parking spaces	20 temporary spaces during the construction period and no permanent spaces for the operational phase
Setbacks	 Solar panel arrays will be setback a minimum of: approximately 14m from the Burkes Road boundary 10.7m from the northern boundary, and 9.7m from the southern boundary

2.2 Background

A pre-lodgement meeting was held prior to the lodgement of the application on 18 May 2023 where the following key issues were identified by Council:

- biodiversity impacts
- noise
- glare
- loss of agricultural land
- landscape screening

The applicant has submitted a Construction Noise and Vibration Impact Assessment, a Solar Glint and Glare Assessment, a Landscape Plan and SEE that address each of the issues identified. These issues are discussed in further detail within this report.

The development application was lodged on 3 October 2023. A chronology of the development application since lodgement is outlined in **Table 2**.

Date	Event
3 Oct 2023	DA lodged
9 Oct to 6 Nov 2023	Exhibition of the application
3 Nov 2023	Essential Energy referral response received
7 Nov 2023	Internal traffic response received
17 Nov 2023	RFI issued
15 Dec 2023	Further RFI issued
22 Dec 2023	Final RFI response

Table 2: Chronology of the DA

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
 - (i) any environmental planning instrument, and
 - (ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and
 - (iii) any development control plan, and
 - (iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and
 - (iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),
 - that apply to the land to which the development application relates,
- (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)
- Requiring concurrence/referral (s4.13)
- Crown DA (s4.33)

3.1 Environmental Planning Instruments, proposed instrument, development control plan, planning agreement and the regulations

The relevant environmental planning instruments, proposed instruments, development control plans, planning agreements and the matters for consideration under the Regulation are considered below.

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

A summary of the key matters for consideration arising from the relevant EPIs are outlined in **Table 3** and considered in more detail below.

Table 3: Summary of Key Matters in the Relevant Environmental Planning Instruments

EPI	Matters for Consideration	Comply (Y/N)
State Environmental Planning Policy (Planning Systems) 2021	Section 2.19(1) declares the proposal regionally significant development pursuant to Clause 5(a) of Schedule 6 as it comprises private infrastructure (electricity generating works) with a CIV of more than \$5m.	
State Environmental Planning Policy (Primary Production) 2021	Chapter 2: Primary production and rural development	
SEPP (Resilience &	Chapter 4: Remediation of Land	Yes
Hazards) 2021	Section 4.6 Contamination and remediation to be considered in determining development application.	
State Environmental	Chapter 2: Infrastructure, Part 2.3 Development controls	Yes
Planning Policy (Transport and	Section 2.36 Development permitted with consent.	
Infrastructure) 2021	Section 2.42 applies to a regionally significant development application for electricity generating works in a regional city – not applicable as the site is not located in the Renewables Zone of a regional city.	
	Section 2.48(2) (Determination of development applications—other development) – as the development is in proximity to existing electricity infrastructure and may influence the electricity network including capacity at the substation, Essential Energy has been consulted. See section 4 of this report for further details.	
	Section 2.98 Development adjacent to rail corridors – not applicable as the development adjoins a disused, decommissioned rail corridor.	
	Section 2.119 Development with frontage to classified road - not applicable as the development does not have frontage to a classified road.	
	Section 2.122 Traffic generating development – referral to TfNSW is not required. Further details are provided below.	
Proposed Instruments	Although Berrigan LEP 2013 is under review, a draft instrument has not been exhibited.	N/A
Berrigan Local Environmental Plan 2013	Clause 2.3 Permissibility and zone objectives Clause 5.10 Heritage conservation Clause 6.1 Earthworks Clause 6.3 Terrestrial biodiversity	

Clause 6.10 Essential services	

State Environmental Planning Policy (Planning Systems) 2021

Chapter 2: State and Regional Development

Development for the purpose of private infrastructure (a solar farm is defined as "electricity generating works" which is private infrastructure) is considered regionally significant if it has a capital investment value (CIV) of more than \$5 million, and the project's CIV is \$6,181,912, therefore it is 'regionally significant development'.

Accordingly, the Western Regional Planning Panel is the consent authority for the application.

State Environmental Planning Policy (Primary Production) 2021

Chapter 2: Primary Production and Rural Development

The proposal is not for the purposes of primary production and electricity generating works are not specifically mentioned in the policy. However, the proposal is consistent with the broad aims of the policy, particularly regarding the use of land for primary production, reducing land use conflict and sterilisation of rural land and the protection of native vegetation and biodiversity.

The proposal has a limited life span of 30 years, after which it is proposed to decommission the solar farm by removing all infrastructure relating to the approved development from the site. At that time, the land would again be suitable for primary production purposes.

It is unlikely that the development as proposed will result in any land use conflicts or sterilise the land for future primary production purposes.

The development area on the site has been previously cleared of any native vegetation and used for cropping and grazing purposes. Given the historical use of the property there will be insignificant impacts on native vegetation and biodiversity.

Clause 2.8 State Significant Agricultural Land

In Section 2.8 of the SEPP, it is established that land is deemed State significant agricultural land if it is listed in Schedule 1. However, Schedule 1 has yet to be finalised and does not identify any lands. Although the proposal is therefore consistent with the SEPP, the Department of Primary Industries has exhibited a draft State Significant Agricultural Land map that identifies the site as State significant agricultural land, although the mapping is in an early draft stage and subject to data limitations that may limit the accuracy of the information. The site comprises predominantly class 4 (moderate to severe limitations) land under the Land and Soil Capability Mapping for NSW, which conflicts with its identification as potential State significant agricultural land. The SEE indicates that class 4 land is only suitable for intermittent cultivation with specialised practices. Although, the site lies within the Murray Irrigation Area, which enhances its value as agricultural land.

Given the relatively small size of the development site (14ha), it is not anticipated that its use for a solar farm would significantly impact agricultural production at a local or regional level.

The non-permanent nature of the solar farm (up to 30 years) and eventual decommissioning (where the site would be returned to its current state suitable for agricultural purposes), will result in break in the use of the land for agriculture, rather than a loss of agricultural land. Furthermore, the SEE indicates that sheep grazing will be undertaken to reduce fuel loads and therefore the land will potentially continue to be partially utilised for agricultural purposes. The recommended conditions include measures to ensure that the land is suitably decommissioned and returned to its current state.

The proposal is considered to be consistent with the aims of SEPP (Primary Production) 2021.

State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 3: Hazardous and Offensive Development

Under Berrigan LEP 2013, the definition of "industry" includes a place used to carry out an industrial activity and the definition of "industrial activity" includes the production of goods/products for commercial purposes. The proposed solar farm is therefore classified as "industry" given it's a place where electricity will be produced for commercial purposes. A potentially hazardous industry or storage establishment under the SEPP would, without measures to reduce impact, pose significant risk to human health, life, property or the biophysical environment. If the SEPP applies, a Preliminary Hazard Analysis (PHA) is required.

Hazardous and Offensive Development Application Guidlelines – Applying SEPP 33 (2011) (the Guideline) assist to identify development to which the SEPP applies. The Guideline includes risk screening tests for potentially hazardous industry that refer to the Australian Dangerous Goods Code 2020. The only dangerous goods associated with the proposal are lithium batteries which are classified as under the Code as a class 9 dangerous good. Class 9 dangerous goods are excluded from risk screening under the Guideline as they pose little threat to people or property. The facility is therefore not classified as potentially hazardous and a PHA under the SEPP is not required.

Chapter 4: Remediation of Land

Under the SEPP a preliminary investigation is required if development would involve a change of use on any land specified under clause 4.6(4), including where development for a purpose referred to in Table 1 of the Managing Land Contamination - Planning Guidelines (1998) is being, or is known to have been carried out. As Table 1 in the Guideline includes the previous use of the site for agricultural/horticultural activities and the proposal involves a change of use to electricity generating works, a preliminary investigation was undertaken.

The Preliminary Investigation consisted of an assessment that included consideration of current and historical uses, historical titles and aerials (dating back to 1945), development approvals, a search of the EPA contaminated land register (the site was not listed as a contaminated site notified under the Contaminated Land Management Act 1997) and a grid walk throughout the site. The investigation found that previous uses were rotational crops (lucerne and wheat) and sheep grazing, with no evidence of farm buildings, infrastructure or chemical storage on the subject site part of the property. The only potential source of contamination identified was glyphosate (a herbicide for weed control, with no pesticides or chemical fertilisers used in the past 20 years), although this has a half-life of 60 days.

Section 4.6 of the SEPP 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. On the basis of the available information, the subject site in its current state is considered to be suitable for the proposed development, which is not a sensitive land use, does not require significant excavation and will not involve staff permanently on site, except during the construction phase.

The proposal is considered to be consistent with SEPP (Resilience and Hazards) 2021.

State Environmental Planning Policy (Transport and Infrastructure) 2021

Part 2.3 Development Controls

Division 4 Electricity Generating Works and Solar Energy Systems

Division 4, section 2.36(1)(b) of the SEPP enables electricity generating works to be carried out with consent on any land in a prescribed non-residential zone. As the subject site is zoned RU1 Primary Production, it is permissible with consent under the SEPP. These provisions prevail over any inconsistency in any other planning instruments, inclusive of the Berrigan LEP 2013.

Division 5 Electricity Transmission or Distribution Networks

Division 5, section 2.48 requires development near an electricity distribution pole, easement, substation or power line to be referred to the electricity supply authority for the area for comment. As the application involves erecting and connecting a new power pole to the overhead power line, the application was referred to Essential Energy for comment. Essential Energy indicated that there may be a safety risk as the plans do not indicate the distances from Essential Energy's infrastructure. The response does not object to the development and outlines certain safety risks that can be included as advice attached to the conditions of consent.

Division 17: Roads and traffic

Electricity generating works are not identified in Schedule 3 of the SEPP as traffic-generating development and as such would be classified in the schedule as 'any other purpose' which requires referral to TfNSW if it involves a development that generates:

- 50 or more motor vehicles per hour in the case of it having access to classified road or to a road that connects to classified road (if access within 90m of connection, measured along alignment of connecting road)', or
- 200 or more motor vehicles per hour if the site has access to a road.

The application was not referred to TfNSW as Burkes Road is not a classified road, nor is the proposed access within 90m of connection to a classified road and the proposal will not generate the traffic volumes indicated above.

The proposal is considered to be consistent with SEPP (Transport and Infrastructure) 2021.

Berrigan Local Environmental Plan 2013

The relevant local environmental plan applying to the site is *Berrigan Local Environmental Plan 2013* ('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 development that complements and enhances the unique character and scenic values of Berrigan, offering a diverse economy, significant natural resources and an attractive rural lifestyle,
- (b) to provide for a range of development opportunities that contribute to the social, economic and environmental resources of Berrigan in a way that allows the needs of present and future generations to be met by implementing the principles of ecologically sustainable development,
- (c) to recognise and manage valued environmental and cultural heritage, landscape and scenic features of Berrigan,
- (d) to promote the efficient and equitable provision of public services, infrastructure and amenities.

The proposal is consistent with aim (b) above as it will contribute to the economic resources of Berrigan by providing sustainable renewable energy for 30 years.

Zoning and Permissibility

The site is located within the RU1 Primary Production Zone pursuant to clause 2.3 of the *Berrigan Local Environmental Plan 2013* (the LEP) (**Figure 5**). The proposal for electricity generating works is not permissible in the zone under the LEP, although is permissible with consent on any land in a prescribed non-residential zone under clause 2.36(1)(b) of *State Environmental Planning Policy (Transport and Infrastructure) 2021* (the SEPP). As the RU1 Primary Production Zone is a prescribed non-residential zone under the SEPP, electricity generating works are therefore permissible with consent within the zone.



Figure 5 – RU1 Primary Production Land Use Zone of the Property (yellow) and Surrounding Area (source: NSW Planning Portal Spatial Viewer) The zone objectives (pursuant to the Land Use Table in clause 2.3) include the following. To:

- encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- encourage diversity in primary industry enterprises and systems appropriate for the area.

- minimise the fragmentation and alienation of resource lands.
- minimise conflict between land uses within this zone and land uses within adjoining zones.
- permit development that enhances the agricultural and horticultural production potential of land in the locality.
- permit low-key tourist and visitor accommodation that is compatible with the scenic amenity, and promotes the character, of the area.
- enable function centres to be developed in conjunction with agricultural uses.

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

- The proposal will provide renewable energy and enhance the natural resource base
- The facility will be decommissioned and all infrastructure removed at the end of its effective life (approximately 31 years), so permanent alienation of land for primary industry will not occur
- The development of the solar farm will have minimal impact on the surrounding land uses during the operational phase and can coexist with existing agricultural practices.

5.10 Heritage conservation

The site is not identified as, or located near, any items of environmental heritage significance listed in Berrigan LEP 2013. An Aboriginal Cultural Heritage Assessment was undertaken by ACHM and included a search of the Aboriginal Heritage Information Management System (AHIMS), the National Native Title Register and the consultant's archives and register as well as an assessment under the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (the Code). The search found no Aboriginal sites or places on or within proximity of the site (the nearest site being 6.2km away). Aboriginal objects are unlikely to occur on the site given the site is disturbed land having been laser levelled and utilised for agricultural purposes. Procedure in the event of any unexpected find is included in the recommended conditions.

Clause 6.1 Earthworks

The proposed development includes minor earthworks associated with the construction of the solar farm. These works include:

- construction of new vehicle access from Burkes Road and an internal access road
- footings for the solar infrastructure
- open trenching for underground cables, and
- installation of fence posts, gate posts and a power pole

Clause 6.1 includes the following matters for consideration:

(a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,

<u>comment</u>: the proposed excavation will not alter the existing drainage patterns and soil stability is addressed in the recommended conditions.

(b) the effect of the development on the likely future use or redevelopment of the land,

<u>comment</u>: the facility will be decommissioned at the end of its useful life and returned to its former condition therefore not altering the likely future use of the land.

(c) the quality of the fill or the soil to be excavated, or both,

comment: the proposal doesn't require the importation of fill.

(d) the effect of the development on the existing and likely amenity of adjoining properties,

<u>comment</u>: the potential impact of earthworks on adjoining properties regarding noise and dust is addressed in the recommended conditions.

(e) the source of any fill material and the destination of any excavated material,

<u>comment</u>: the proposal doesn't require the importation of fill and material resulting from minor earthworks will not be removed from the site.

(f) the likelihood of disturbing relics,

<u>comment</u>: An Aboriginal Cultural Heritage Assessment has identified a low likelihood of disturbing relics, although this is addressed in the recommended conditions.

(g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,

<u>comment</u>: The site is not in proximity to any of these features, although there is potential to impact the adjoining irrigation channel to the east of the site as this is where stormwater runoff (and therefore potential sediment resulting from excavation) is directed. To address this, conditions are recommended to ensure erosion and sediment controls are implemented prior to the issue of a Construction Certificate and that stormwater is not permitted to cross property boundaries unless easements are created in accordance with section 88B of the Conveyancing Act.

(h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

<u>comment</u>: The recommended conditions include measures to address the potential impacts of excavation.

6.3 Terrestrial biodiversity

The site is cleared and levelled agricultural land that does not include or directly adjoin any land mapped as terrestrial biodiversity. Therefore the development will not have a significant adverse environmental impact in terms of terrestrial biodiversity.

6.10 Essential services

This clause requires that:

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 development are available or that adequate arrangements have been made to make them available when required:

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

It is intended to use the water supply from the farm as needed during the construction phase. The applicant has indicated in an RFI response that a water truck/ute with a generator and gerni would be used for cleaning solar panels during the operational phase. The site has access to electricity, a transportable toilet with built in septic tank will be used and there will be no change to stormwater drainage. A new access point from Burkes Road and an internal access road is proposed. Council's Development Engineer has considered the access arrangements and has no objection subject to suitable conditions.

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

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

There are no exhibited draft environmental planning instruments relevant to this development application.

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

*Berrigan Development Control Plan 2014 (*the DCP) applies. Under the LEP, the definition of "industry" includes a place used to carry out an industrial activity and the definition of "industrial activity" includes the production of goods/products for commercial purposes. The proposed solar farm is therefore classified as "industry" given it's a place where electricity will be produced for commercial purposes. Part 3 of the DCP applies to all forms of industrial development within the Shire and does not stipulate that the development must be within an industrial zone.

Table 4 below provides an assessment of those controls within the DCP which are applicable.

Design Element	Minimum Development Standard	Assessment	Complies
Part 3 Industrial Development 3.1 Appearance	Objective: Sites to make a positive contribution to the streetscape	The development proposes a 3m landscape buffer fronting Burkes Road which will screen the infrastructure from view and make a positive contribution to the streetscape.	Yes

Table 4: Summary of Key Matters in Berrigan Development Control Plan 2014

3.2 Landscaping	A landscape plan is required indicating a range of plant species of various heights, low maintenance, preferably drought tolerant native species.	A landscaping plan has been submitted that only includes one species of drought tolerant native plant. This is discussed further below under "Visual impact."	No
3.4 Parking and Access	Parking spaces must be separated from accessways, loading, unloading and manoeuvring areas. Parking areas are to be constructed to allow for the catchment and disposal of stormwater to an agreed discharge point. All parking, loading and unloading is to be carried out on-site. There must be sufficient turning areas to enable vehicles to enter and exit the site in a forward direction.	Requirements for the number of parking spaces to be provided relate to GFA and are not applicable. Parking is discussed further below under "Traffic, parking and access." An internal access road with sufficient turning circle for heavy vehicles is proposed that will enable all vehicles to exit in a forward direction. The requirements of clause 3.4 are addressed in the recommended conditions.	Yes
3.5 Outdoor areas	Outdoor storage and work areas are to be substantially screened from public roads and adjoining lots by landscaping, fencing etc. Outdoor areas must be suitably surfaced to prevent dust.	There will be no outdoor storage other than an all-weather temporary laydown area required during construction that will be located a substantial distance from the road. Dust control measures are included in the recommended conditions.	Yes
3.6 Amenity	Outdoor areas must be treated and maintained to minimize the impacts of dust. All stormwater is to be appropriately managed. Land uses or development considered by Council to potentially have a detrimental impact on adjoining properties through noise or air emissions (e.g. dust or odour) are to provide information in respect to the likely impacts and proposed mitigation measures of these impacts.	Potential dust, stormwater and noise impacts can be managed through appropriate conditions of consent. Noise is further considered below under "noise."	Yes
Part 12 Notification	Notification requirements are identified.	The proposal has been notified in accordance with the DCP. Refer to 4.3 Community consultation below for further details.	Yes

The proposal is consistent with the provisions of the DCP with the exception of landscaping, which is discussed below under s.4.15 considerations.

(b) 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.

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

Section 61 of the 2021 EP&A Regulation contains additional matters that must be taken into consideration by a consent authority in determining a development application, although none of the matters are relevant to the proposal. It is considered the application is consistent with the objectives of the regulations.

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

Under section 4.15(1)(b) of the *Environmental Planning and Assessment Act 1979*, the likely impacts of the development on both the natural and built environments, and the social and economic impacts in the locality must be considered. Potential impacts related to the proposal that have not been considered above in response to SEPPs, LEP and DCP controls are assessed below.

Glint and Glare

Atlas Renewables has prepared a Solar Glint and Glare Assessment (the report) on behalf of the applicant. Glint is defined as a momentary flash of light and glare is a continuous excessive brightness potentially caused by reflection from solar panels. Solar panels are designed to absorb rather than reflect sunlight and generally have an anti-reflective coating. The proposed use of a solar tracking system will further reduce the potential for glare. The report considered the potential for glare impacts to affect the nearby Finley Airport and surrounding dwellings. The airport runway is located approximately 1.2km to the NW of the site boundary. There is no air traffic control tower at the airport, although the report considered the eye level of pilots on the arrival and departure flight paths and found that the solar farm would not create glare or glint impacts on the flight paths. Furthermore, the report considered nine (9) residential dwellings in proximity to the solar farm and found there would be no glare or glint impacting the dwellings. The report also indicated a negligible risk of glint and glare impacting road users, due to either distance from the solar arrays, existing vegetation or the proposed 3m high landscaping buffer.

It is considered that, provided an adequate landscaping buffer is implemented (as per the recommended conditions), the proposed development will not generate a significant glint or glare impact on Finley Airport, nearby dwellings or local road users.

Visual Impact

The mounted solar panels reach a maximum height of 2.2m and the inverter has a maximum height of approximately 3m. The SEE indicates that due to the relatively flat topography, the location of irrigation channels with 1m high banks and existing vegetation surrounding residential receivers, the likelihood of negative visual impact is low.

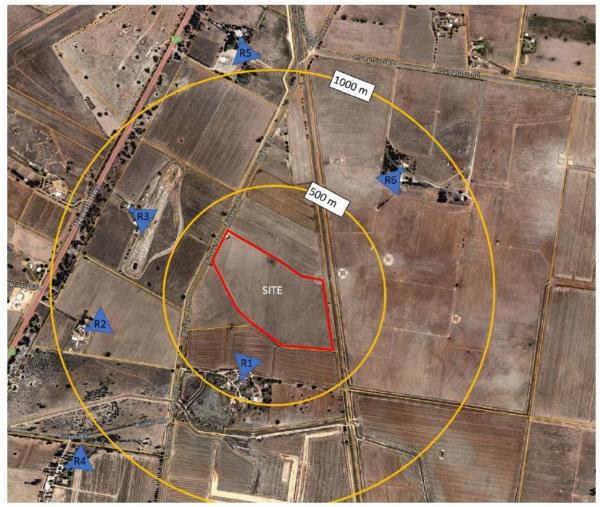


Figure 6: Six primary dwellings considered in the SEE visual assessment (source: SEE)

The SEE identifies six (6) residential receivers located within a 1km visual catchment of the site (**Figure 6**). It has excluded the dwelling located on the subject property (39 Burkes Road) to the north of the development site. The six residential receivers represent more than six dwellings as Google Earth indicates that several of the properties within the 1km catchment also contain one or two ancillary dwellings. Based on visits to the site and surrounding area, review of aerial imagery and pictures the SEE has concluded the visual impact of the solar farm on five of the six identified primary dwellings to be low. It has indicated a medium visual impact at R1 due to view corridors between existing vegetation at the receptor property. In response to the SEE visual assessment, the applicant has proposed a limited landscape buffer of 3m wide comprising a single row of Old Man Saltbush along the Burkes Road frontage and along part of the southern site boundary (**Figure 7**).

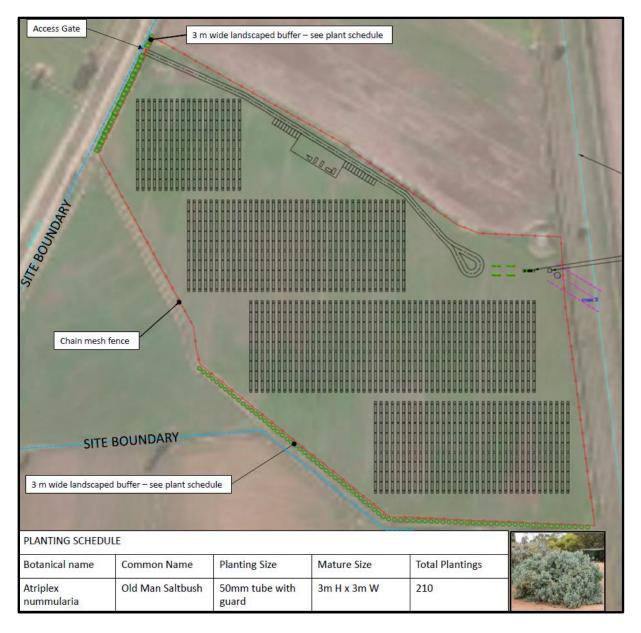


Figure 7: Landscaping Plan

The following comments are made in relation to the applicant's visual assessment and the proposed landscape screening:

- The visual assessment undertaken on behalf of the applicant has only considered views from surrounding primary dwellings and did not consider the visual impact to the multiple ancillary dwellings within the locality.
- The proposed landscaping relies on existing vegetation on other landowners properties to provide an adequate visual buffer, rather than ameliorating impacts within the development site. Neighbouring landowners are therefore potentially burdened with the cost of screening the development site should any existing vegetation screening on their properties die or need to be removed for their own development purposes.
- The development proposes a 1.8m high, steel chain mesh security fence around the entire perimeter. Due to the irregular shape of the development site and a lack of

landscaping along the side boundaries, the views of motorists approaching the site from either direction along Burkes Road will be towards this security fencing that extends to within 3m of the road reserve. Therefore, the landscape buffer should ideally screen not only the solar arrays and other infrastructure, but also the security fencing when viewed by motorists along Burkes Road (which is currently only screened where the site frontage directly adjoins the street boundary). Although, the views of motorists are technically considered low sensitivity and low visual impact.

Full perimeter planting along all boundaries of the proposed solar farm would address the above issues (as well as potential visual impact on any new residential receptors within the 30 year lifespan of the project), although given solar farms are a relatively new form of development, most DCP's across NSW have not yet included any controls (including landscape buffer requirements) specifically for solar farms. Therefore, the partial screening proposed by the applicant is considered acceptable, although the quality and effectiveness of the proposed screening should be improved. The proposed 3m wide vegetation buffer consisting of a single row of planting and utilising a single species is inadequate in terms of:

- Clause 3.2 Landscaping within the DCP that requires a landscape plan to include a range of plant species of various heights, low maintenance, preferably drought tolerant native species, and
- Technical Supplement Landscape and Visual Impact Assessment Large Scale Solar Energy Guideline prepared by DPE and dated August 2022, recommends that a landscape screen should comprise a mix of vegetation of various heights. Although the proposal is not a large-scale energy development, the guidelines are still considered to be relevant in the absence of any other guidelines.

A condition is therefore included that requires landscaping in the location shown on the landscaping plan to consist of a 3m wide buffer consisting of locally native, drought resistant species planted in a double row and including a range of plant species of various heights up to 3m. This improved landscaping buffer will create a more natural looking appearance that will blend with the landscape, limit views through the screen, improve the effectiveness of the screen if one species fails and will enhance biodiversity.

Traffic, parking and access

There is an existing vehicle access point to the property along Burkes Road, to access a residential dwelling and farm structures (**Figure 2**). The proposal includes a new vehicle access to the development site off Burkes Road as shown in **Figure 4**. An internal all-weather access road will also be constructed with an adequate turning head so that heavy vehicles can exit the site in a forward direction. The Traffic Impact Assessment (TIA) prepared by Pavey Consulting Services and dated 4 September, 2023 (revision 4), indicates there are adequate sight lines at the proposed site access point and at each intersection along the vehicle route.

The SEE and plans indicate that the site would be secured by a 1.8m high, metal chain wire security fence with locked gate. The location of security fencing along the Burkes Road frontage is to be 3m from the property boundary behind a 3m wide landscape buffer. A condition is recommended that the gate be setback a minimum of 20m from the Burkes Road property boundary to ensure adequate on-site storage space for a 19m semi-trailer in the event that the gate is closed at the time of delivery. Council's Operations Manager Transport has reviewed the access arrangements, considers that the sight lines from the proposed access point are adequate and raises no objections.

Heavy vehicles travelling from Melbourne will utilise an access route to the site leaving the Newell Highway, then entering Tongs Street, Plumptons Road and Burkes Road (**Figure 8**). Plumptons Road and Tongs Street are both sealed local roads, whereas Burkes Road is an unsealed local road. The intersection of Plympton Road and Burkes Road is sealed for approximately 20m into Burkes Road.

During the 6-to-10-month construction phase, it is anticipated that a maximum of 20 construction staff will access the site daily resulting in up to 40 light vehicle movements per day. In addition, it is anticipated that at the peak of the construction delivery period up to 3 heavy vehicles (semi-trailers and heavy rigid vehicles) will access the site per day, resulting in 6 heavy vehicle movements per day. Traffic generation during the operational phase is estimated at 2 to 3 light vehicles per week or as needed, with maintenance staff not required to attend the site on a daily basis.

The TIA indicates that due to the very low traffic volumes that currently use Burkes Road, Plumptons Road and Tongs Street, the development will have little impact in terms of traffic capacity along the access route, although it recommends warning or directional signs along the access route (particularly at the intersection of Burkes Road and Plumptons Road as the placement of the intersection is not ideal) during peak construction delivery times. Council's Operations Manager Transport has recommended a speed limit of 60kmph at this intersection during construction hours for 200m from the intersection. The TIA does not recommend any upgrade works along the access route, although the Operations Manager Transport has recommended that conditions be applied requiring the upgrade of Burkes Road from the intersection with Plumptons Road and that the applicant be responsible for any damage from heavy vehicles to the route along Plumptons Road and Burkes Road during the construction period.



Figure 8 – proposed heavy traffic route (source: Google Maps)

A vehicle parking area with 20 spaces will be provided to cater for construction staff. The TIA indicates that the parking area will be located adjacent to the site office and laydown/storage areas, or where construction activities are concentrated at any given time.

Access, traffic and parking arrangements are considered satisfactory and Council's Operations Manager Transport has raised no objections subject to conditions.

Noise and vibration

A Construction Noise and Vibration Impact Assessment (the acoustic report) was prepared by SoundIn that considered the potential noise and vibration impacts on nine surrounding dwellings shown at **Figure 9**. The acoustic report concluded that during construction, recommended noise levels will be exceeded at R2 (with exceedances ranging from 1 dBA during assembly up to 8 dBA during piling works) and R3 (with exceedances ranging from 4 dBA during trenching/earthworks up to 7 bDA during piling works), being the closest dwellings located south of the site. Noise will not exceed the highly affected level of 75 dBA at any sensitive receivers. Noise during the operational period would be limited to occasional repair or replacement activities as needed, as part of ongoing maintenance. The acoustic report recommends that a Construction Noise and Vibration Management Plan be prepared but also notes that even with implementation of all reasonable and feasible mitigation measures, noise impacts at R2 and R3 may still exceed the recommended levels.

The anticipated noise impacts are considered acceptable (subject to the imposition of a condition requiring the preparation and implementation of a Construction Noise and Vibration Management Plan), for the following reasons:

- the relatively short-term nature of construction noise impacts over a six-to-10-month period;
- construction noise will only occur during the day and not impact evenings or sleep;
- the SEE indicates that construction period is likely to overlap with sowing and harvesting periods on adjoining farms that would create noise levels above the expected construction noise levels. Therefore rural receivers should not have their normal amenity impacted by the proposal; and
- no objections were received from residents that will be impacted by noise.

In terms of vibration, the acoustic report indicates that vibration impacts during construction (resulting from use of a piling rig) will be negligible as there are no residences within the 2m safe working distance for cosmetic damage to buildings or 20m safe working distance for human comfort (as per the TfNSW *Construction Noise and Vibration Strategy* as amended April 2020). R3 is the nearest residential dwelling, located at approximately 170m from the southern site boundary. Therefore vibration is unlikely to have a significant impact on the adjoining dwellings and their occupants.

The acoustic report did not consider noise during the operational phase, although it's considered that with no permanent staff based on site, no regular traffic movements and noise limited to infrequent repairs or replacement activities, operational noise impacts are likely to be negligible.



Figure 9: location of sensitive receivers regarding noise and vibration (source: Construction Noise and Vibration Impact Assessment)

Dust

Dust will occur during the construction and decommissioning phases resulting from earthworks, excavation and vehicle movements. Temporary air quality impacts can be effectively managed using a consent condition requiring identification and implementation of mitigation measures within an approved Construction Management Plan.

Waste

The project will generate most waste during the construction and decommissioning phases with waste only anticipated during operation if the replacement of infrastructure is required. Construction waste generated will likely consist of packaging and construction waste including plastics, recyclable cardboard, off-cut metals and steel as well as excess materials including cable.

To comply with NSW legislation and polices, waste will need to be removed from the site and recycled or re-used where possible and only disposed of if no alternative is available. This is addressed in the recommended conditions via a Waste Management Plan to be approved by Council.

Decommissioning

The useful life of the solar farm infrastructure is estimated at 30 years. After this time, the site is to be decommissioned to return the land to its former state, ensuring its suitability for agricultural purposes. Decommissioning would include disconnection from the Essential Energy substation, removal of all solar panels, associated infrastructure, BESS, security fencing and any other infrastructure or structures relating to the proposed development. Decommissioning needs to also include removal of all underground infrastructure and works, including cabling and footings as well as rehabilitation of access tracks and site works to refill and laser level the site. To address this issue, a condition can be imposed requiring implementation of a Decommissioning Plan to be prepared and submitted to council for approval at least 12 months prior to the end of the life of the facility. This condition will be associated with a s.88B Positive Covenant for registration on the title of Lot 2 DP881219. The Decommissioning Plan is to include measures to maximise the recycling or reuse of waste materials and to ensure the BESS is disposed of safely without contaminating the site.

Social Impact

The proposed development is unlikely to pose any significant social impact in the locality. The proposal is to support the electricity needs of homes within the Berrigan Local Government Area.

Economic Impact

The project will introduce an additional renewable energy source, providing sustainable power to support the energy requirements of Berrigan. The project will reduce dependence on electricity imports from distant power plants, thereby enhancing the energy self-sufficiency and resilience of the area.

The project brings economic benefits to the area through the creation of employment opportunities. Most jobs will be generated during the six-to-ten-month construction phase, but there will also be a few ongoing maintenance jobs during the 30 year operation phase to undertake scheduled inspections and monitoring.

Cumulative Impact

The potential impacts of the development on both the built and natural environments, as well as the social and economic aspects of the local area, have been carefully considered, taking into account the cumulative effects that may arise. The project's design, location, relatively small scale for an energy facility, limited lifespan and eventual decommissioning reduce the potential for cumulative impacts. Measures to prevent or mitigate any potential cumulative effects have been incorporated as conditions of any consent.

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

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

The subject site is considered suitable for the proposed development, subject to the recommended conditions, for the following reasons:

- with regard to potential hazards, the site is not bushfire prone, flood affected or contaminated
- agricultural use for grazing purposes is expected to occur during the operational phase

- the site is cleared of vegetation due to previous agricultural uses and the development will have no significant adverse effects on flora or fauna
- the proposal incorporates a landscape buffer as a mitigation measure to reduce visual impact on the surrounding area
- the site is located a considerable distance from residential dwellings and as such impacts from the development are expected to be adequately managed with minimal impacts on adjoining properties during the construction phase, and
- given the passive nature of the proposal, as well as its limited life and eventual decommissioning, it is unlikely that there will be any significant long-term adverse impacts.

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

There were no public submissions received.

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

It is considered that the public interest is best served by the application of the requirements of the relevant legislation, environmental planning instruments and development control plan to ensure that any adverse effects on the surrounding area and the environment are avoided. On the basis of a thorough review and analysis of the proposed development, it has been determined that the proposal is generally consistent with the relevant planning controls that apply to land use and development in the Berrigan region. In light of this comprehensive assessment, it is concluded that the proposed development is unlikely to give rise to any significant adverse impacts that are contrary to the public interest, subject to the recommended conditions of consent to adequately mitigate potential impacts.

Furthermore, the proposal will provide positive public benefits including:

- providing renewable energy to the State grid, which will reduce reliance on existing fossil fuel fired power stations, consistent with the principles of ecologically sustainable development and mitigating climate change in the wider public interest; and
- employment opportunities for the local community during the construction phase and a number of permanent local jobs during the operation phase.

In view of the above, on balance, it is considered that the proposal is consistent with the local and wider public interest.

4. **REFERRALS AND SUBMISSIONS**

4.1 Agency Referrals and Concurrence

The development application has been referred to Essential Energy as required by SEPP (Transport and Infrastructure) 2021 and outlined below in **Table 5**. There are no outstanding issues arising from the referral requirements.

Table 4: Concurrence and Referrals to agencies

Agency	Concurrence/ referral trigger	Comments (Issue, resolution, conditions)	Resolved
Concurrence R	equirements (s4.13 of EP&A Act)		N/A
Referral/Consul	tation Agencies	-	
Essential Energy	Section 2.48 – State Environmental Planning Policy (Transport and Infrastructure) 2021. Development near electrical infrastructure	No objections raised by Essential Energy, only general comments regarding safety. These comments are included as advice in the recommended conditions.	Yes
Transport for NSW	Section 2.121 – State Environmental Planning Policy (Transport and Infrastructure) 2021. Development that is deemed to be traffic generating development in Schedule 3.	The proposal is not deemed "traffic generating development and was not referred to TfNSW.	N/A
Integrated Development (S 4.46 of the EP&A Act)			
		The applicant has not nominated the proposal as integrated development.	N/A

4.2 Council Officer Referrals

The development application was referred to Council's Operations Manager – Transport for technical review as outlined **Table 4**.

Table 4: Consideration of Council Referrals

Officer	Comments	Resolved
Traffic	Council's Operations Manager – Transport reviewed the proposal and raised no objections subject to conditions.	Yes

4.3 Community Consultation

The proposal was notified in accordance with the DCP from 9 October until 6 November 2023.

The notification included the following:

- notification letters sent to adjoining and adjacent properties
- notification on the Council's website, and
- exhibited on the NSW Planning Portal

At the conclusion of the notification period, no submissions were received by council.

5. CONCLUSION

The development application has been considered in accordance with the requirements of the EP&A Act and the associated Regulations as outlined in this report. Following a thorough assessment, the proposal is considered to be generally consistent with the relevant planning objectives and controls. Where non-compliance with a development control has been identified (landscaping), this has been addressed by way of a condition of consent. The proposed development is unlikely to have any unreasonable impact on the environment or the locality and no public submissions or agency objections were received. The key issues of construction noise, construction traffic, access and parking, visual impact and decommissioning have been resolved satisfactorily in the recommended draft conditions at **Attachment A**. The proposal is suitable for the site, compatible with the locality and is considered to be in the public interest. Given the above factors, it is considered that the application can be supported.

6. **RECOMMENDATION**

That the Development Application [DA No. 43-24-DA-DM) for an electricity generating works (solar farm) and battery energy storage system at 39 Burkes Road, Finley 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**.

7. ATTACHMENTS

The following attachments are provided:

• Attachment A: Draft conditions of consent