



Development Assessment Report

COUNCIL ASSESSMENT REPORT

Panel Reference	PPSWES-210 (PAN-381175)
DA Number	228/2023(1)
LGA	Griffith City Council
Proposed Development	Electricity Generating Works – Proposed construction of a 4.95 MW Solar Farm
Street Address	Lot 363 DP751743 394 Macedone Road BILBUL 2680
Applicant/Owner	Applicant: Cliff Schmidt of PSA Consultants for ATLAS RENEWABLES PTY LTD Owners: <ul style="list-style-type: none"> • Rocco Fattore • Elizabeth Fattore
Date of DA lodgement	13 November 2023
Total number of Submissions Number of Unique Objections	<ul style="list-style-type: none"> • Ten (10) individual submissions • One (1) Griffith City Council submission
Recommendation	Approval subject to conditions
Regional Development Criteria (Part 2.4, Clause 2.19 of the SEPP (Planning Systems) 2021	SEPP (Planning Systems) 2021 – Schedule 6 Regionally Significant Development 5 Private infrastructure and community facilities over \$5 million Development that has a capital investment value of more than \$5 million for any of the following purposes— (a) ..., electricity generating works , ... (b)
List of all relevant s4.15(1)(a) matters	i.e. any: <ul style="list-style-type: none"> • Griffith Local Environmental Plan, 2014 • Griffith Development Control Plan No 1 – Non-Urban Development • Griffith Development Control Plan No. 20: Off Street Parking (2011)
List all documents submitted with this report for the Panel's consideration	i.e. any: <ul style="list-style-type: none"> • Assessment Report • Draft Conditions of Consent
Clause 4.6 requests	<ul style="list-style-type: none"> • N/A
Summary of key submissions	Submitters were concerned about: <ul style="list-style-type: none"> • Solar farm need in this location; • Visual amenity impacts; • Property values being adversely impacted; • The potential of the solar farm increasing temperature in the area; • Risk of battery fire;

	<ul style="list-style-type: none"> • Validity of Land Suitability Report; • Traffic impacts; • Construction and operational noise; • Solar Glint and Glare; • Dust; and • Stormwater and soil erosion impacts from runoff.
Report prepared by	Patterson Ngwira (Senior Development Assessment Planner)
Report date	3 April 2024

Summary of s4.15 matters

Have all recommendations in relation to relevant s4.15 matters been summarized in the Executive Summary of the assessment report? Yes

Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report? Yes

e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP

Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report? Not applicable

Special Infrastructure Contributions

Does the DA require Special Infrastructure Contributions conditions (S7.24)? Not applicable
Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions

Conditions

Have draft conditions been provided to the applicant for comment? **(will be provided prior to determination)** Yes
Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report

Development Assessment Report

PART A: GENERAL ADMINISTRATION

DA No:	DA 228/2023
Property Information:	Lot 363 in Deposited Plan (DP) 751743 – 394 Macedone Road, BILBUL
Proposed Development:	Electricity Generating Works
Brief Description of Proposal	Proposed 4.95 MW Solar Farm and 4 x 2,752 MWh batteries
Type of Development:	Regional Development
Lodgement Date:	13 th of November 2023
Statutory Timeframe:	40 Days
Value of Development:	\$6,800,104.08
Applicant's Details:	Cliff Schmidt of PSA Consulting for ATLAS RENEWABLES PTY Level 11 PO Box 10824, 270 Adelaide Street Brisbane QLD 4000
Land Owner's Details:	Rocco Fattore and Elizabeth Fattore 394 Macedone Road Bilbul NSW 2680
Report Author/s:	Patterson Ngwira, Senior Development Assessment Planner

PART B: EXECUTIVE SUMMARY

- It is recommended that the *Electricity Generating Works* in the form of a 4.95 MW solar farm and 4 x 2,752 MWh batteries at 394 Macedone Road, Bilbul (Lot 363 DP 751743) application be approved based on the details contained in the report.
- The Project meets the criteria for regionally significant development as outlined in the *State Environmental Planning Policy (Planning Systems) 2021* under Section 2.19(1) and Schedule 6(5) therein. According to this section, development listed in Schedule 6 is considered regionally significant if it has an estimated development cost (EDC) of more than \$5 million, and the Project's EDC is approximately \$6.8 million.
- The application has been referred to the Western Regional Planning Panel on the basis of the requirements of *Environmental Planning and Assessment Act 1979* (the Act) and *Environmental Planning and Assessment Regulation 2021*. In this regard, all matters for consideration under section 4.15 of the Act have been addressed.

PART C: PROPOSAL

ATLAS RENEWABLES PTY (referred to as the applicant) intends to establish a solar farm with a capacity below 5 megawatts (MW) (known as the proposal) on the property located at 394 Macedone Road, Bilbul (Lot 363 DP 751743), hereafter referred to as the "subject property." The development site, covering approximately 11.8 hectares (ha) of land, will be the area dedicated to the proposal within the subject property – identified in green at **Figure 1** below in this report.

The proposed development involves the establishment of a new 4.95 MW solar farm and 4 x 2,752 MWh batteries. The Site Layout Plan is shown in **Figure 1**. The proposed solar farm will feed electricity to the public grid, which complements the Federal Government's desire to be net-zero by 2050. At the end of life of the solar farm (approximately 30 years), the solar panels and associated infrastructure can be easily removed, and the site would be rehabilitated to its current state. The proposed solar farm will consist of approximately 12,000 single axis tracking panels, configured in rows running north – south across the site at 4m spacings. The proposed solar panels will track the sun from east to west, maximising exposure and electricity generation throughout the day and will have a maximum height of approximately 4 m. The solar arrays will be installed on metal footings extending between 0.5 – 1.0 m underground and, as such, no change to the current ground levels is required to create an even building pad.

In summary the proposed development will consist of:

- Approximately 12,000 single axis tracking panels, configured in rows running north – south across the site at 4m spacings.
- The proposed solar panels will track the sun from east to west, maximising exposure and electricity generation throughout the day and will have a maximum height of approximately 4 m.
- The solar arrays will be installed on metal footings extending between 0.5 – 1.0 m underground and, as such, no change to the current ground levels is required to create an even building pad.
- Specifically, the proposed development includes the following components:
 - Installation of solar panel arrays with single axis trackers (approximately 12,000 panels).
 - Inverter station.
 - 4 x 2,752 MWh batteries.
 - Connection to the Essential Energy Network.
 - Construction of a new unsealed access track connecting to Macedone Road.
 - A Hardstand for a construction lay down area and unloading of heavy vehicles.

- Security Fencing.
- Landscape Buffer.

Refer to **Figures 2 and 3** for the layout and views of the Inverter and Battery. **Figure 4** shows the security fence, landscaped area and tracking system section view.

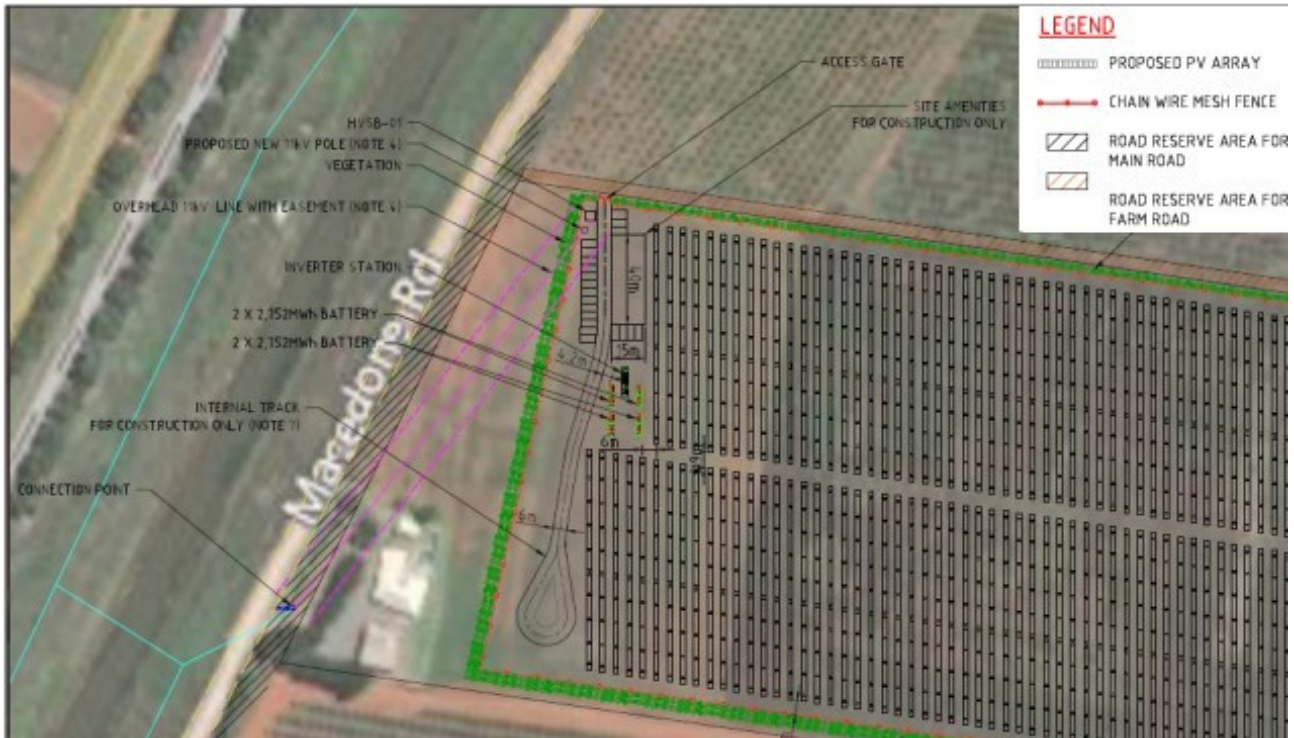


Figure 1 - Subject site and Development Area (illustrated in green) (Source: Application Common Material).

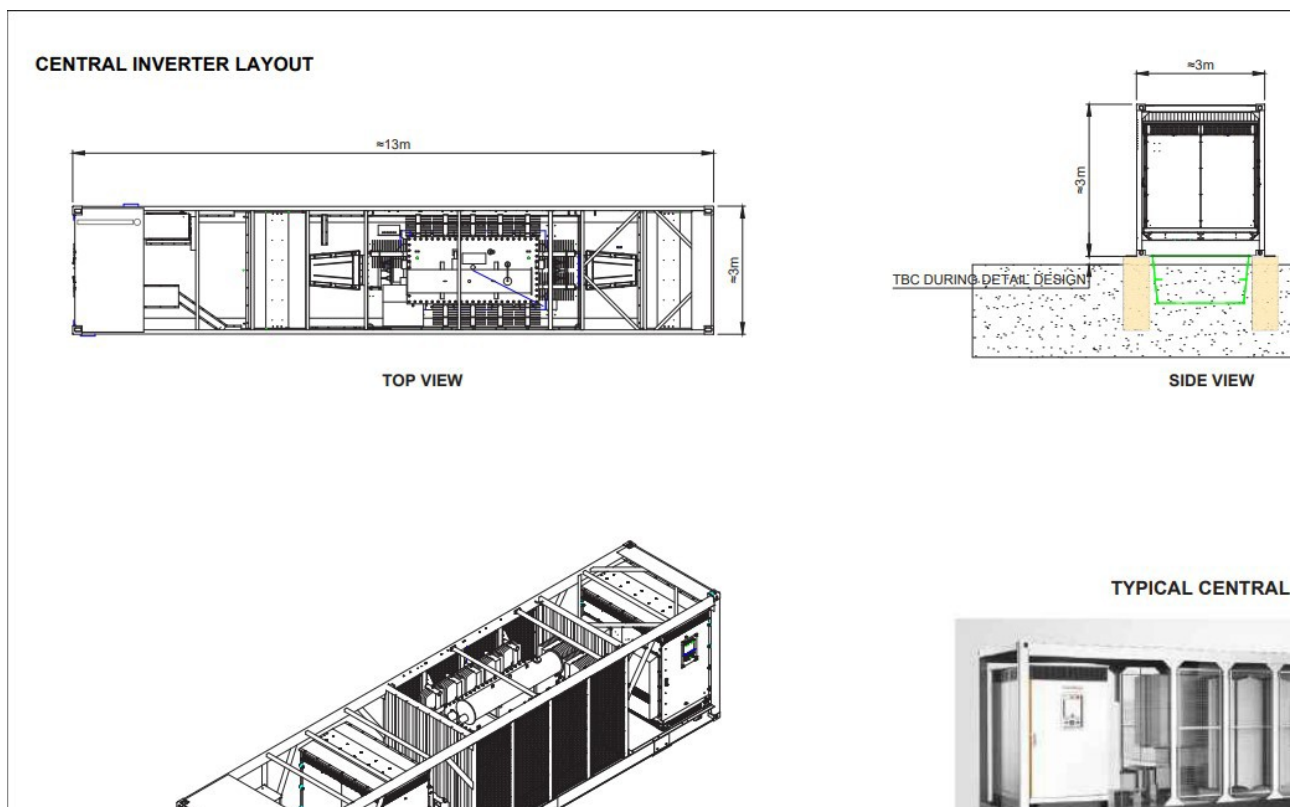


Figure 2 - Layout and View of the Inverter (Source: Application Common Material).

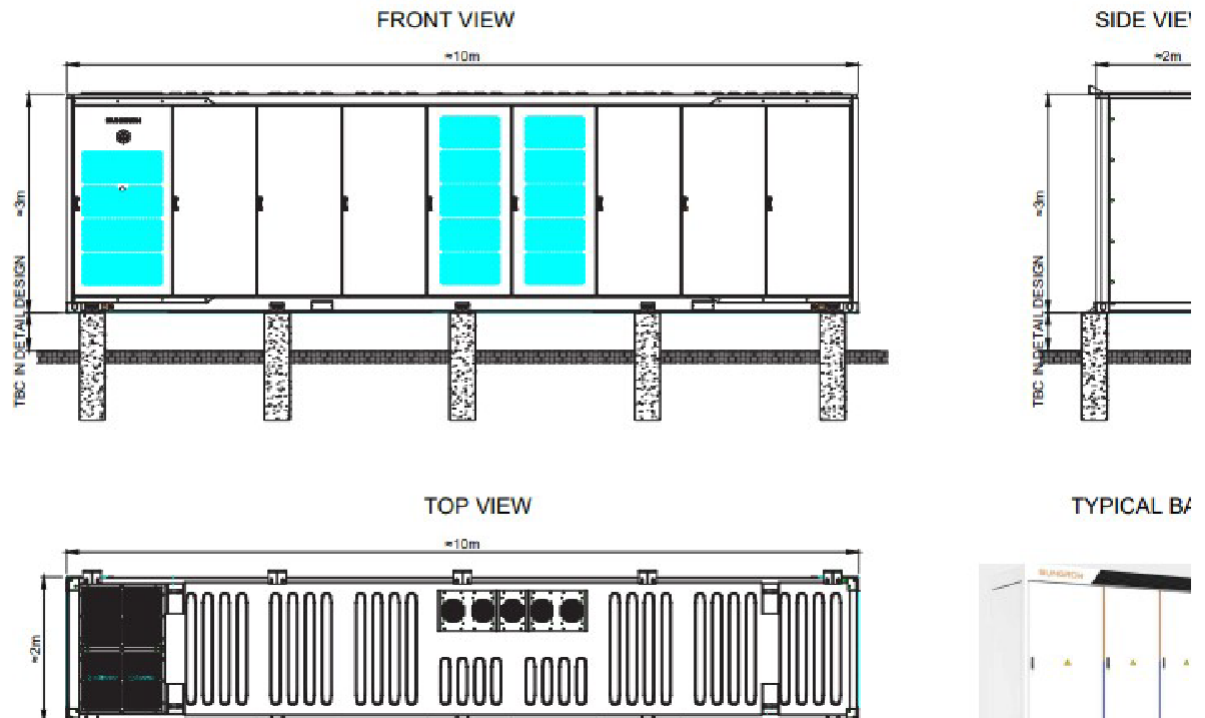
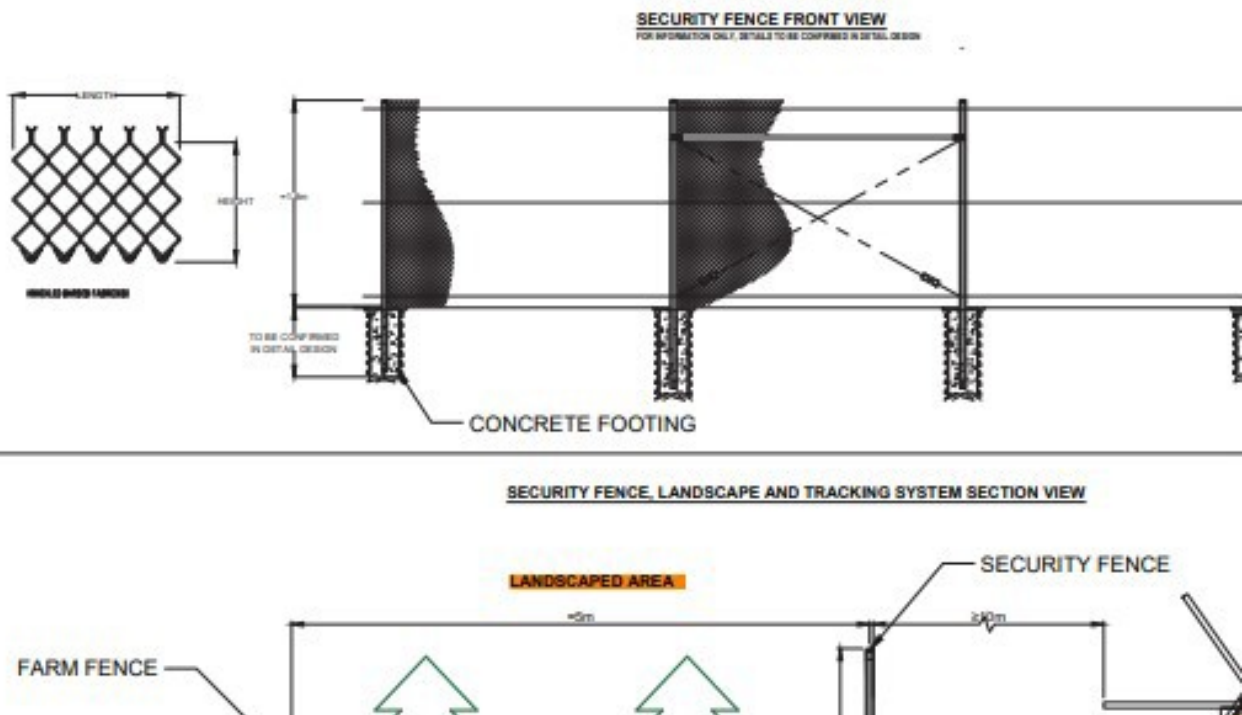


Figure 3 - Inverter and Battery Container (Source: Application Common Material).



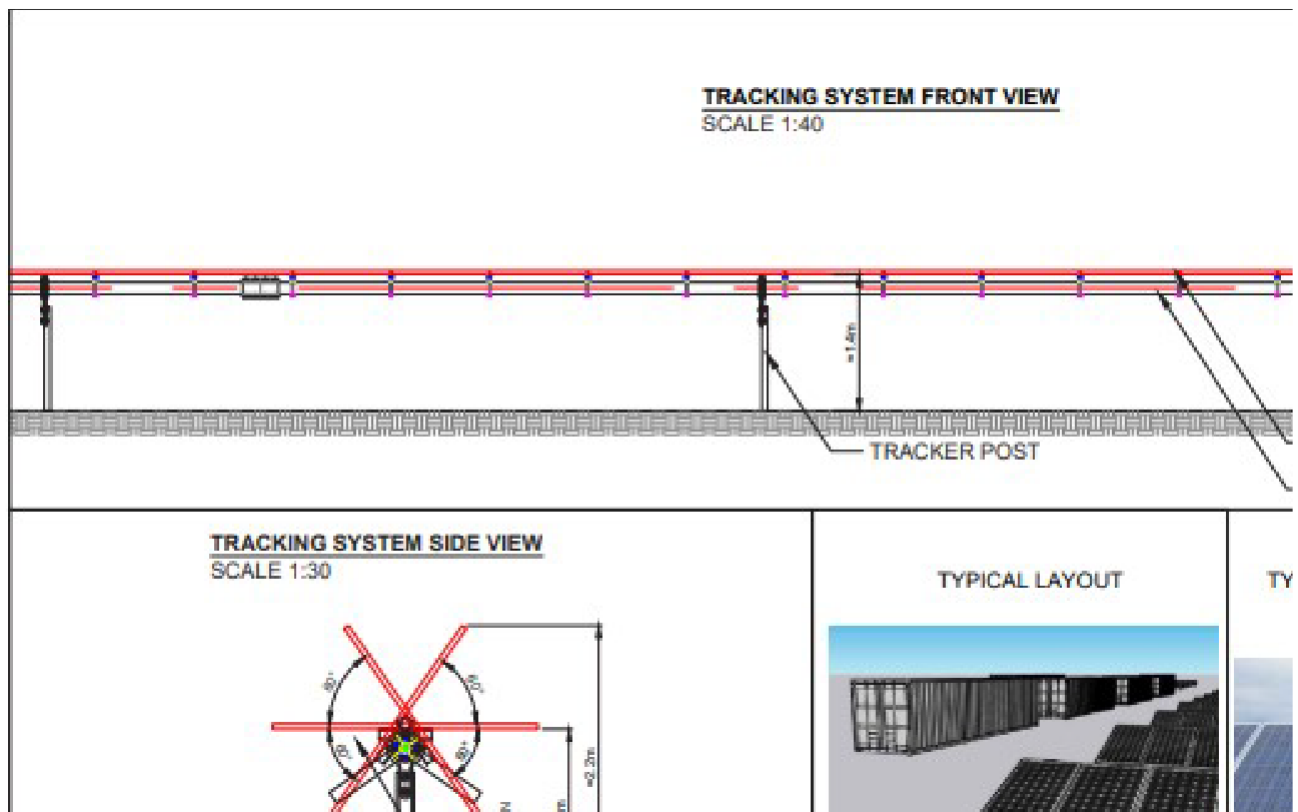


Figure 4 - Security fence, landscaped area and tracking system section view (Source: Application Common Material)

PART D: SITE DESCRIPTION AND LOCALITY

The Site

The subject property, known as 394 Macedone Road, Bilbul (Lot 363 DP 751743), encompasses an area of approximately 11.8 hectares (ha). The proposed project will utilise most of the subject property – illustrated in green at **Figure 1**. The site also contains a dwelling house with associated swimming pool and two (2) outbuildings.

Topographically, the subject site is generally flat and has frontage to Macedone Road along the western boundary. A portion of the eastern boundary also has frontage to Rossetto Road. Due to the use of the site for orcharding, it has historically been cleared and is considered Category 1 – excluded land for the purposes of the *Local Land Services Act 2013* and the *Biodiversity Conservation Act 2016* (BC Act). No native vegetation would be impacted by the proposal.

The Locality

The subject property is situated in the rural area of the Griffith Local Government Area (LGA), approximately 6 km north-east of Griffith (refer to **Figures 5 and 6**). The surrounding locality is predominantly consisting of rural cropping activities including citrus orchards and grape vineyards. The Beelbanger Substation is located approximately 295m south-west of the site at 440 Rossetto Road. Essential Energy's overhead 11 kV powerlines run along Macedone Road, which the proposed project would connect to via underground cables.



Figure 5 – Site Locality (Source: Council's Intramaps).



Figure 6 - Development Site (in red) and Surrounding Landuses (Source: Application Common Material)

PART E: BACKGROUND INFORMATION AND HISTORY OF THE SITE

Pre-Lodgement

Prior to the application being lodged with Griffith City Council, the proponent for the development held a pre-lodgement discussion with Council Officers on the 26th of May 2023. During the pre-lodgement discussion, the following issues were raised verbally (or in writing):

- Permissibility of the proposed development to be based on its own merits and no in-principle support could be given.
- Traffic Impact assessment: Outlining traffic movements both during construction and operation of the solar farm.
- Glint and Glare Assessment.
- Aboriginal Cultural Heritage Assessment.
- Noise Impact Assessment: Factoring in impacts on surrounding sensitive receptors i.e., residential dwelling.
- Agronomist report.

Development Assessment Panel

The matter was considered at the Council's Development Assessment Panel meeting on 4th of November 2023 and the following matters were raised during the preliminary assessment of the application which are potential issues or where further information from the applicant was required:

- Contaminated Land Assessment was required due to change of use of the land from likely irrigated land used for growing citrus in 2008 and vines in 2016 to the proposed non-agricultural use (i.e., solar farm) of arable land.
- Consideration should be given to pre-lodgement comments (as stated above).

Council had also sent a request on 9 January 2024 to the applicant to respond to the issues raised in the ten (10) submissions received through the notification period. The applicant's response to public submissions was received on 8 February 2024 and it has been assessed in **Table 2** in Part G below in this report.

Development History of Site

The development history of the subject site has been established following research of Council's electronic data management system and research of Council's physical archives. Based on the information available the following can be established:

- The land is located within the Murrumbidgee Irrigation Area and has been used for irrigation to citrus and vines.

PART F: STATUTORY REFERRALS

The following statutory referrals were considered as part of the assessment of the application:

AGENCY	LEGISLATION	APPLIES
DPI	Fisheries Management Act 1994 Mines Subsidence Compensation Act 1961 Mining Act 1992 Petroleum (Onshore) Act 1991	No
EE&S	National Parks, & Wildlife Act 1974 Protection of the Environment Operations Act 1997	No

	Water Management Act 2000	
NSW Heritage	Heritage Act 1977	No
Transport for NSW	Roads Act 1993	No
RFS	Rural Fires Act 1997	No
Transport NSW	SEPP Infrastructure – Division 5 Subdivision 2	No

Referral	Date Sent	Date Received
Essential Energy (SEPP Transport & Infrastructure 2021)	17 November 2023	7 December 2023
Civil Aviation Safety Authority (CASA)	5 December 2023	6 December 2023

Submissions received in response to the abovementioned referrals are addressed in **Part G – Table 2.:** Matters for Consideration, s4.15(1)(d) – any Submissions Made in Accordance with the Act or Regulation.

PART G: SECTION 4.15 EVALUATION

In determining a development application, a consent authority is to take into consideration Section 4.15 of the *Environmental Planning and Assessment Act 1979*. The following matters are of relevance to the assessment of this development application.

SECTION 4.15(1)(a)(i) any environmental planning instrument.

Griffith Local Environmental Plan 2014

(a) Permissibility

The proposed development is for the establishment of a 4.95 megawatt (Mw) solar farm and installation of 4 x 2,752 MWh Battery Energy Storage System (BESS) and this falls under the definition of *Electricity Generating Works* in the Dictionary of *Griffith Local Environmental Plan 2014*, which is defined as:

Electricity Generating Works – Means a building or place used for the purpose of –

- a) Making or generating electricity, or
- b) Electricity storage.

The subject land is zoned RU1 Primary Production and under Part 2 Land Use Table of *Griffith Local Environmental Plan 2014* and *Electricity Generating Works* is not listed as a development that is permitted with the consent of the Council. Nonetheless, Electricity Generating Works and, in this case, Solar Energy Systems are permitted within Part 2.3, Division 4 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021*.

(b) Aims and Objectives

The proposed development has been considered with regard to the aims of *Griffith Local Environmental Plan 2014* as set down in Part 1, clause 1.2(2) which states:

- (a) to prevent unnecessary urban sprawl by promoting business, industrial, rural and residential uses within and adjacent to existing precincts related to those uses,
- (b) to minimise land use conflict in general by creating areas of transition between different and potentially conflicting land uses,

- (c) *to provide a variety of development options to meet the needs of the community with regard to housing, employment and services,*
- (d) *to manage and protect areas of environmental significance,*
- (e) *to recognise the historical development of the area and to preserve heritage items associated with it.*

The objectives for Zone RU1 Primary Production set down in the Land Use Table are as follows:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To permit a range of activities that support the agricultural industries being conducted on the land and limit development that may reduce the agricultural production potential of the land.*
- *To permit tourist facilities that promote an appreciation of the rural environment and associated agricultural and horticultural activities, while ensuring the continued economic viability of the land.*

The proposed solar energy system (solar farm) complies with the objectives of the RU1 – Primary Production land zoning outlined in the *Griffith Local Environmental Plan 2014*. By harnessing renewable energy resources to generate electricity, the solar farm supports the promotion of sustainable primary industry production. This not only helps preserve and improve the natural resource base but also reduces reliance on fossil fuels, in accordance with the first objective.

Moreover, the proposed solar farm will feed electricity directly into the existing electrical network and in particular, the Beelbanger Substation which is located approximately 295m from the site to the south-west.

The development of the solar farm has minimal impact on the surrounding resource lands and can coexist with existing agricultural practices. The solar farm development does not contravene the land use regulations in the neighbouring zones, and it does not compromise the agricultural production potential of the land. Overall, the solar farm's development application satisfies the objectives of the RU1 – Primary Production land zoning and represents an environmentally-friendly initiative for the region.

(b) Principal Development Standards & other LEP Provisions

Clause	Clause Requirement & Assessment Comment
5.21 Flood Planning	Assessment Comment: Addressed Below
7.1 Earthworks	Assessment Comment: Addressed Below
7.3 Terrestrial Biodiversity	Assessment Comment: Addressed Below
7.10 Essential Services	Assessment Comment: Connecting power is the key

Clause	Clause Requirement & Assessment Comment
	essential service, which is addressed in the proposal.

Clause 5.21 Flood Planning

- (1) *The objectives of this clause are as follows—*
- (a) *to minimise the flood risk to life and property associated with the use of land,*
 - (b) *to allow development on land that is compatible with the flood function and behaviour on the land, taking into account projected changes as a result of climate change,*
 - (c) *to avoid adverse or cumulative impacts on flood behaviour and the environment,*
 - (d) *to enable the safe occupation and efficient evacuation of people in the event of a flood.*
- (2) *Development consent must not be granted to development on land the consent authority considers to be within the flood planning area unless the consent authority is satisfied the development—*
- (a) *is compatible with the flood function and behaviour on the land, and*
 - (b) *will not adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties, and*
 - (c) *will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood, and*
 - (d) *incorporates appropriate measures to manage risk to life in the event of a flood, and*
 - (e) *will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.*

Comment:

(2)(a)

The Griffith Main Drain J & Mirrool Creek - Yenda Flood Mapping Update 2021 (Torrent Consulting) details that the subject allotment is flood prone for the 1% Annual Exceedance Probability (1 in 100 year event). Due to the nature of the subject development as a solar farm with no habitable buildings, Council's Engineers are satisfied that the development is compatible with land that is flood prone.

(2)(b)

The Griffith Main Drain J & Mirrool Creek - Yenda Flood Mapping Update 2021 (Torrent Consulting) details that the subject allotment is flood prone for the event larger than 1% Annual Exceedance Probability (1 in 100 year event). The proposed development is for the construction of a 4.95MW solar farm and 4 x 2,752 batteries. The installation includes 12,000 solar panels mounted on tracker posts, one high voltage kiosk, one central inverter, 4 Battery Energy Storage System containers and hardstand parking and loading areas. The tracker posts for the solar panel installation will have a small cross-sectional area. As such the solar panel installation will have a negligible effect on the flood behaviour of the land (refer **Figures 2, 3 & 4** above).

In Section 3.2 of the Statement of Environmental Effects, the applicant has stated that *"The site is not located within Council's Flood Planning area and there are no watercourses mapped on the State Government Hydro line database within 40m of the subject site."* However, Council's Engineering Design Coordinator (the Engineer) has confirmed that the subject site is flood prone land for events larger than 1% AEP and that there is no flood indication for a 1% AEP event.

The Engineer noted that *floor levels are subject to Council's Flood Management Policy. The floor level for habitable room areas is to be 410mm above the existing natural ground level. Council does not have sufficient accurate ground level information. A registered surveyor may be able to assist in determining the required floor height. The applicant is advised to obtain a survey plan of the allotment.*

Given that the development does not involve habitable buildings/structures it is considered that the additional stormwater discharge resulting from the development will be insignificant in relation to the overall catchment area for the site and given the size of the lot and surrounding farmland.

Stormwater is not permitted to cross property boundaries unless easements are created in accordance with Section 88B of the Conveyancing Act. Council is satisfied that the proposed development will not result in the detrimental increases in the potential flood affectation of other developments or properties.

(2)(c)

The proposed development does not include the construction of habitable rooms. As such Council is satisfied that the development will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood.

(2)(d)

The proposed development does not include the construction of habitable rooms. As such Council is satisfied that there will be no increase in the potential risk to life from flooding onsite or downstream of the subject development.

(2)(e)

Construction works will be required for the installation of the solar panels and footings for the high voltage kiosk, central inverter, 4 Battery Energy Storage System containers, loading and parking area. As such conditions shall be imposed on the development to ensure erosion and sediment controls are implemented to Council's satisfaction prior to the issue of a Construction Certificate. This will ensure the proposed development does not cause avoidable erosion or siltation.

The subject site is currently developed with dwelling and outbuilding and there is no riparian vegetation on the area of land to be developed. As such, through the conditions of consent, Council is satisfied that the proposed development will not significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.

- (3) *In deciding whether to grant development consent on land to which this clause applies, the consent authority must consider the following matters—*
- (a) *the impact of the development on projected changes to flood behaviour as a result of climate change,*
 - (b) *the intended design and scale of buildings resulting from the development,*
 - (c) *whether the development incorporates measures to minimise the risk to life and ensure the safe evacuation of people in the event of a flood,*
 - (d) *the potential to modify, relocate or remove buildings resulting from development if the surrounding area is impacted by flooding or coastal erosion.*

Comment:

Section 4.6.3 of the Statement of Environmental Effects states that the ‘... site has not been identified as flood prone land in any Council flood study or management plan. The proposal is compatible with the flood function of the land as it is an unmanned facility that is extremely permeable in the event of a flood.’ However, Council’s Engineering Design Coordinator has stated that according to the Griffith Main Drain J & Mirrool Creek Flood Study 2021 the subject site is Flood Prone Land for events larger than 1% AEP but there is no flood indication for a 1% AEP event. The applicant’s assessment that the proposal involves an unmanned facility which is extremely permeable in the event of a flood is acceptable and supported in terms of Clause 5.21 of the *Griffith Local Environmental Plan 2014*, specifically regarding flood behaviour.

An advisory condition indicating the proposed development is on flood prone land (1% AEP) is recommended to ensure all electrical infrastructure which can be damaged due to flood water is to be installed above the 1% water level of 127.78m (Australian Height Datum). Taking into account the nature of the solar farm development, it is considered that the proposed development will not result in the detrimental increases in the potential flood affectation of other developments or properties. It is recommended that stormwater is not permitted to cross property boundaries unless easements are created in accordance with Section 88B of the *Conveyancing Act 1919* (as amended).

Clause 7.1 Earthworks

- (1) *The objective of this clause is 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.*
- (2) *Development consent is required for earthworks unless—*
 - (a) *the earthworks are exempt development under this Plan or another applicable environmental planning instrument, or*
 - (b) *the earthworks are ancillary to development that is permitted without consent under this Plan or to development for which development consent has been given.*

Comment: Development consent is required.

- (3) *In deciding whether to grant development consent for earthworks (or for development involving ancillary earthworks), the consent authority must consider the following matters—*
 - (a) *the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,*
 - (b) *the effect of the development on the likely future use or redevelopment of the land,*
 - (c) *the quality of the fill or the soil to be excavated, or both,*
 - (d) *the effect of the development on the existing and likely amenity of adjoining properties,*
 - (e) *the source of any fill material and the destination of any excavated material,*
 - (f) *the likelihood of disturbing relics,*
 - (g) *the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,*
 - (h) *any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

Note—

The National Parks and Wildlife Act 1974, particularly section 86, deals with harming Aboriginal objects.

Comment: The proposed development will require a Construction Certificate prior to commencement of any earthworks because it includes ancillary earthworks which are associated

with the construction of the solar farm and the installation of the inverter, battery Container and tracking system. These works include.

- Construction of the new vehicle access from Macedone Road.
- Installation of the solar panels (approximately 12,000 panels) on metal footings extending between 0.5 – 1.0m underground.
- Placement of footings for the tracking system, inverter and battery container.
- Installation of the security fence posts.
- Trenching for underground infrastructure.
- Landscape buffer.
- Hardstand for a construction lay down and unloading of heavy vehicles.

The earthworks shall be minimal and should not alter any existing drainage patterns or be detrimental to the soil stability in the area. Any potential erosion and sediment control concerns will be addressed as part of the construction works and as part of any conditional consent.

Clause 7.3 Terrestrial Biodiversity

- (1) *The objective of this clause is to maintain terrestrial biodiversity by—*
 - (a) *protecting native fauna and flora, and*
 - (b) *protecting the ecological processes necessary for their continued existence, and*
 - (c) *encouraging the conservation and recovery of native fauna and flora and their habitats.*
- (2) *This clause applies to land identified as “Biodiversity” on the Terrestrial Biodiversity Map.*

Comment:

Clause 7.3 of *Griffith Local Environmental Plan 2014* does not apply to the proposed development (refer **Figure 7** below).



Figure 7 - Development Area (RED) and Terrestrial Biodiversity overlay (GREEN) (Source: Council's Intramaps)

- (3) *In deciding whether to grant development consent for development on land to which this clause applies, the consent authority must consider—*
 - (a) *whether the development is likely to have—*
 - (i) *any adverse impact on the condition, ecological value and significance of the fauna and flora on the land, and*

- (ii) *any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and*
- (iii) *any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and*
- (iv) *any adverse impact on the habitat elements providing connectivity on the land, and*
- (b) *any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

Comment: Clause 7.3 of *Griffith Local Environmental Plan 2014* does not apply to the proposed development.

- (4) *Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that—*
 - (a) *the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or*
 - (b) *if that impact cannot be reasonably avoided by adopting feasible alternatives—the development is designed, sited and will be managed to minimise that impact, or*
 - (c) *if that impact cannot be minimised—the development will be managed to mitigate that impact.*

Comment:

Clause 7.3 of *Griffith Local Environmental Plan 2014* does not apply to the proposed development.

Clause 7.10 Essential Services

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.*

Comment:

This development requires a water supply but not connection to a sewer system. The applicant is to make their own arrangements with the service provider for an adequate connection to water supply and electricity for the proposed development. All costs are to be borne by the applicant.

Council's Traffic and Development Coordinator (Coordinator) has assessed the proposed development with regard to the Griffith Main Drain J & Mirrool Creek - Yenda Flood Mapping Update 2021 (Torrent Consulting) and confirmed that the subject allotment is flood prone for the 1% Annual Exceedance Probability (1 in 100-year event). The Engineer noted the insignificant change to the ground level or increase in the concentration of stormwater flows resulting from the construction of the development and as such negligible change to the existing stormwater flows across the site are expected.

The development site currently sustains a single dwelling and ancillary farm sheds in the south western corner of the lot. The remainder of the lot was previously used for agricultural purposes which (as per the submitted Statement of Environmental Effects) has not sustained agricultural productivity for at least a decade (however this length of time has not been confirmed). Access to the lot is currently gained by an existing 12m (approximately) wide gravel accessway on the south western corner adjacent to the dwelling (refer **Figure 8** below in this report). This accessway is situated approximately 230 metres north of the intersection of Macedone and Rossetto Roads. A new accessway is being proposed approximately 450 metres north of the Macedone Road and

Rossetto Road intersection, and, approximately 220 metres north of the existing accessway to the lot. A suitable all-weather access track will be constructed off Macedone Road to facilitate all solar farm traffic during construction and for ongoing operations.

The proposed development will generate peak traffic to the site of approximately 40 light vehicle trips per day over a 6 month construction period. In addition, there will be (at peak) 6 heavy vehicle trips per day across the 3-6 month delivery period. The largest vehicle proposed to access the site is a 19 metre B-double.

Post construction, the development will attract 2-3 light vehicles per week for maintenance purposes. An internal unsealed road (which links via a gate to a road reserve area for the farm road) within the fenced boundary of the site is also being proposed. No details have been given in relation to the connection of the road reserve area to Macedone Road and as such it is recommended that a detailed accessway design is to be submitted to Council for assessment prior to the issue of a Construction Certification.

The proposal will be conditioned that the accessway is to be an all-weather access and be constructed from 200mm of compacted road gravel including a concrete culvert with concrete headwalls and guideposts to delineate the accessway.

An on-site access gate to be situated at the north western corner of the site approximately 40 metres east of Macedone Road will be installed and will provide ample storage space for a 19m B-double vehicle in the event where the gate is closed at the time of delivery. The proposal will be conditioned that the proposed gate be set back a minimum of 40 metres from the edge of Macedone Road and that access to the gate from Macedone Road must remain unrestricted.

The Coordinator has assessed the Safe Intersection Sight Distance (SISD) and concluded that sight distances to the north and south along Macedone Road from the proposed accessway site satisfies the SISD requirements for a 100km/h speed zone as specified in Austroads Guide to Road Design Part 4A provided road side vegetation is maintained. For this reason, it is recommended that the proposal be conditioned that the road reserve is to be maintained to provide safe sight distance for motorists entering and exiting the site and minimise conflict.

In summary, it is considered that through the conditions of consent suitable vehicular access will be available to the proposed development.



Figure 8 - Existing Accessway at 394 Macedone Road Bilbul (Source: Application Common Material).

State Environmental Planning Policies

The following is a list of State Environmental Planning Policies that apply to the Griffith City Council area. The table also identifies the applicability of the policy with respect to the subject development proposal. Where a policy has been identified as being applicable, further assessment is provided.

SEPP TITLE	APPLIES
Design Quality of Residential Apartment Developments	No
BASIX 2004	No
Exempt and Complying Codes 2008	No
Biodiversity and Conservation 2021	No
Housing 2021	No
Industry and Employment 2021	No
Planning Systems 2021	Yes
Primary Production	Yes
Resilience and Hazards 2021	No
Transport and Infrastructure 2021	Yes
Resources and Energy 2021	No
Sustainable Buildings 2022	No

State Environmental Planning Policy – Planning Systems 2021

Clause 2.19 of SEPP – Planning Systems

2.19 Declaration of regionally significant development: section 4.5(b)

(1) Development specified in Schedule 6 is declared to be regionally significant development for the purposes of the Act.

- (2) *However, the following development is not declared to be regionally significant development—*
- (a) complying development,*
 - (b) development for which development consent is not required,*
 - (c) development that is State significant development,*
 - (d) development for which a person or body other than a council is the consent authority,*
 - (e) development within the area of the City of Sydney.*

Schedule 6 of SEPP – Planning Systems

5 Private infrastructure and community facilities over \$5 million

Development that has an estimated development cost (EDC) of more than \$5 million for any of the following purposes—

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

Comment:

The Project meets the criteria for regionally significant development as outlined in the Planning Systems SEPP (PS SEPP) under Section 2.19(1). According to this section, development listed in Schedule 6 is considered regionally significant if it has a EDC of more than \$5 million, and the Project's EDC is approximately \$6.2 Million (exclusive of GST).

State Environmental Planning Policy – Primary Production (Chapter 2 – Primary production and rural development)

The aims of this Chapter are as follows—

- (a) to facilitate the orderly economic use and development of lands for primary production,*
- (b) to reduce land use conflict and sterilisation of rural land by balancing primary production, residential development and the protection of native vegetation, biodiversity and water resources,*
- (c) to identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,*
- (d) to simplify the regulatory process for smaller-scale low risk artificial waterbodies, and routine maintenance of artificial water supply or drainage, in irrigation areas and districts, and for routine and emergency work in irrigation areas and districts,*
- (e) to encourage sustainable agriculture, including sustainable aquaculture,*
- (f) to require consideration of the effects of all proposed development in the State on oyster aquaculture,*
- (g) to identify aquaculture that is to be treated as designated development using a well-defined and concise development assessment regime based on environment risks associated with site and operational factors.*

Comment:

In Section 2.8, it is established that land is deemed State significant if it is included in Schedule 1. However, as of time of lodgement of the Development Application, Schedule 1 to this SEPP has yet to be finalised. Therefore, the development is not located on State significant agricultural land.

State Environmental Planning Policy – Transport and Infrastructure 2021**Part 2.3 Development Controls****Division 4 Electricity Generating Works and Solar Energy Systems****2.36 Development permitted with consent**

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

Comment:

The guidelines for the development of *electricity-generating works* and *solar energy systems* are outlined in Division 4 of Part 2.3. According to Section 2.35:

solar energy system -means any of the following systems—

- (a) *a photovoltaic electricity generating system used for the primary purpose of generating electricity for a land use—*
 - (i) *carried out on the land on which the system is located, or*
 - (ii) *carried out by the owner of the system on adjoining land,*
- (b) *a solar hot water system,*
- (c) *a solar air heating system.*

electricity generating works means a building or place used for the following purposes, but does not include a solar energy system—

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

As a result, the classification of "electricity generating works" is more appropriate for the project. The electricity generating works is also being undertaken on land zoned RU1 – Primary Production, which falls under the category of “prescribed non – residential zone” or “prescribed rural zone” under Section 2.35 of the SEPP.

- (2) *Development for the purpose of a back-up electricity generating plant that operates for not more than 200 hours in any year may be carried out by any person with consent on any land [section 2.36(2)].*

Comment: Not applicable.

- (3) *Development for the purpose of the expansion of existing electricity generating works may be carried out by or on behalf of a public authority with consent on any land that is adjacent to the existing works.*

Comment: Not applicable.

- (4) *Consent is not required to carry out any such development on land if the development could, but for subsection (3), be carried out on that land without consent.*

Comment: Not applicable.

- (5) *Development for the purpose of, or resulting in, a change of fuel source of an existing coal or gas fired generating works by a proportion of more than 5 per cent in any 12 month period may only be carried out with consent.*

Comment: Not applicable.

- (6) *If, under any environmental planning instrument (including this Chapter), development for the purpose of—*
(a) *industry, or*
(b) *a waste or resource management facility,*
may be carried out on land with consent, development for the purpose of electricity generating works that generate energy from waste, or from gas generated by waste, may also be carried out by any person with consent on that land.
Note—Thermal energy from waste development is regulated by Division 28.

Comment: Not applicable.

- (7) *Without limiting subsection (1), development for the purpose of a small wind turbine system may be carried out by any person with consent on any land.*

Comment: Not applicable.

- (8) *However, subsection (7) only applies in relation to land in a prescribed residential zone if—*
(a) *the small wind turbine system has the capacity to generate no more than 10kW, and*
(b) *the height of any ground-mounted small wind turbine in the system from ground level (existing) to the topmost point of the wind turbine is no more than 18m.*

Comment: Not applicable.

- (9) *Solar energy systems Development for the purpose of a solar energy system may be carried out by any person with consent on any land.*

Comment: Not applicable.

Division 5 Electricity Transmission and Distribution Networks

Part 2.3, Division 5 lists the general planning requirements for 'electricity transmission or distribution'. Section 2.43 to Division 5 defines an 'electricity transmission or distribution network' as including any of the following:

electricity transmission or distribution network includes the following components—

- (a) *above or below ground electricity transmission or distribution lines (including related bridges, cables, conductors, conduits, poles, towers, trenches, tunnels, access structures, access tracks and ventilation structures) and telecommunication facilities that are related to the functioning of the network,*
(b) *above or below ground electricity switching stations or electricity substations, feeder pillars or transformer housing, substation yards or substation buildings,*
(c) *systems for electricity storage associated with a component specified in paragraphs (a) and (b).*

Comment: The development includes the construction of underground hiv cable that will connect the electricity generating works to the existing line in Macedone Road (refer **Figure 9** below).

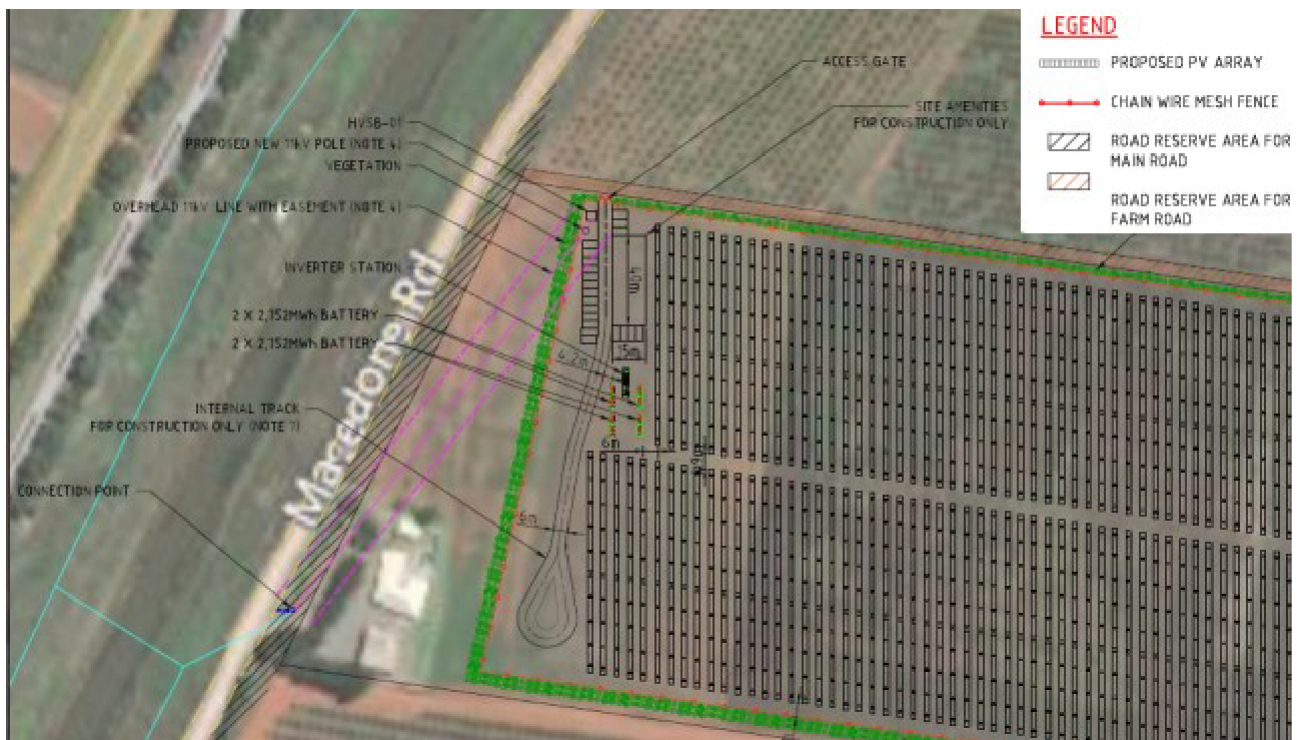


Figure 9 - Underground HV Work in Purple (Source: Application Common Material).

2.48 Determination of development application – other development

- (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,
 - (c) installation of a swimming pool any part of which is—
 - (i) within 30m of a structure supporting an overhead electricity transmission line, measured horizontally from the top of the pool to the bottom of the structure at ground level, or
 - (ii) within 5m of an overhead electricity power line, measured vertically upwards from the top of the pool,
 - (d) development involving or requiring the placement of power lines underground, unless an agreement with respect to the placement underground of power lines is in force between the electricity supply authority and the council for the land concerned.

Comment: Section 2.48 further determines that the consent authority must 'give written notice to the electricity supply authority for the area in which the development is to be carried out, inviting comments about potential safety risks, and take into consideration any response to the notice that is received within 21 days after the notice is given', when determining whether to approve a DA.

On 5 December 2023, Council notified Essential Energy of the Development Application. A response was received from Essential Energy on 6 December 2023 and has been included as **Attachment 1** in this report. The response does not object to the development and outlines certain safety risks.

- (2) *Before determining a development application (or an application for modification of a consent) for development to which this section applies, the consent authority must—*
- (a) *give written notice to the electricity supply authority for the area in which the development is to be carried out, inviting comments about potential safety risks, and*
 - (b) *take into consideration any response to the notice that is received within 21 days after the notice is given.*

Comment: Council notified Essential Energy of the Development Application. A response was received from Essential Energy on the 6 December 2023. The response does not object to the development and outlines certain safety risks. Council also notified the Civil Aviation Safety Authority which had no concerns.

SECTION 4.15(1)(a)(ii) any draft environmental planning instrument.

There are no Draft Environmental Planning Instrument that apply to this development.

SECTION 4.15(1)(a)(iii) any development control plan.

The following is a list of development control plans that apply to the Griffith City Council area. The table also identifies the applicability of the policy with respect to the subject development proposal. Where a policy has been identified as being applicable, further assessment is provided.

DCP No.	DCP TITLE	APPLIES
DCP No. 1	Non-Urban Development	Yes
DCP No. 3	Industrial Development	No
DCP No. 11	Urban Subdivision	No
DCP No. 19	Mixed Development	No
DCP No. 20	Off Street Parking Policy	No
DCP 2020	Residential Development Control Plan	No

Table 1: DCP No.1 Non Urban Development

Design Element	Minimum Development Standard	Assessment
(a) Bulk, scale, setbacks and general amenity issues	- The structure is to be setback a minimum of ten (10) metres from the front boundary or setback a minimum of one hundred (100) meters from the front boundary where the lot has frontage to an “arterial road” or “proposed by-pass route”. (Refer to DCP 28 – Land Use Buffer Controls)	<p>The site front boundaries include Macedone Road (full length of western side) and Rossetto Road (partial south east side). The development sits more than 10m from these boundaries.</p> <p>The development does not sit adjacent to an arterial road.</p> <p>Note: The subject site was zoned 1(b) under the <i>Griffith Local Environmental Plan 2002</i>)</p>

Design Element	Minimum Development Standard	Assessment
b) Open space, additional buffer areas	- A minimum buffer distance (by way of an easement) of fifty (50) metres shall apply from natural watercourses.	N/A – there are no natural watercourses within the site's boundary.
	- A minimum buffer distance (by way of an easement) of twenty (20) metres shall apply over drainage lines and canals.	The indication is that the development is likely to be situated more than 20m from the canal running along the eastern boundary.
	- A minimum buffer distance (by way of an easement) of forty (40) metres shall apply from adjoining agricultural lands (Refer to DCP 28 - Land Use Buffer Controls).	N/A –
	- All buffer areas are to be planted out using tree species and shrubs that are suitable to the area. The above information shall be incorporated in the Management Plan to be submitted to Council.	The proposal involves the establishment of a 5m wide vegetation buffer around the perimeter of the subject site. This vegetation buffer will be watered by automatic irrigation facilities. This requirement will form part of the recommended conditions.
(c) Landscaping	- The required setback area in sub clause (a) to all boundaries is to be soft landscaped to a minimum of 90% of that part of the lot.	<p>The vegetation buffer areas, will include a 5m landscape buffer to the northern and southern boundaries and an increased 7m buffer to the eastern and western boundaries which will make use of the increased offset of the solar panels from these boundaries.</p> <p>The development will incorporate a taller large shrub species within the landscape plant matrix to the southern boundary with a mature height of 5m (Crimson Kunzea). Attachment 6 gives a detailed landscape specification document prepared by Site Image Landscape Architects.</p> <p>It is considered that the proposed landscaping will</p>

		<p>increase the environmental quality of the site and to mitigate visual impacts.</p> <p>Notably the site will benefit from the proposed native vegetation along the perimeter of the development area.</p>
--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Design Element	Minimum Development Standard	Assessment
	<ul style="list-style-type: none"> - No more than 10% of the front yard is to be paved or sealed. Note: Soft landscaping can be trees, gardens, lawns and the like of the applicant/owners choice but does not include improvements such as driveways, parking areas, swimming pools (including coping decking and development ancillary to the pool) and ancillary dwelling structures/sheds/garages and the like. 	N/A
(d) Site access	<ul style="list-style-type: none"> - Where the access way connects to a sealed road, the access way and suitable tapers are to be bitumen sealed or equivalent hard surface between the property boundary and the road carriageway. - Where the access connects to a gravel road, the access way and suitable tapers are to be constructed to gravel road standard, between the property boundary and the road carriageway. - Concrete pipe culvert with standard headwalls is to be constructed at a suitable location relative to the table drain and clear of the edge of the road carriageway. Design and construction is to be to Council's standard. - Existing channel crossings are to be used to service all existing and proposed structures on the allotment. Only one channel crossing per road frontage shall be permitted to be used to access allotments. Where 	<p>The proposed vehicle access to Macedone Road will be implemented as an all-weather access road. The construction of this access will adhere to the standards required for gravel roads, extending from the proposed boundary to the road carriageway.</p> <p>There is lack of details regarding width and construction of the proposed accessway. For this reason, the proposed development will be conditioned to provide details of accessway and associated tapers connecting to the Macedone Road carriageway for approval.</p>

Design Element	Minimum Development Standard	Assessment
	<p>additional channel crossings are proposed consent shall be obtained from Murrumbidgee Irrigation and Council prior to construction.</p> <ul style="list-style-type: none"> - In 1(a) Rural and 1(b) Rural Agricultural Protection zones, where the access connects to a sealed Council road (except arterial roads) and there is no change to the agricultural utilization and/or no additional access points to existing dwellings and the access ways are well constructed and maintained, bitumen sealing will not necessarily be imposed. (Note: Should the development change, then the situation should be reviewed.) Driveways shall be a minimum of six (6) metres wide between the edge of the road carriageway and the property boundary. Internal driveways shall be a minimum of three (3) metres wide. 	
(f)(i) Fire management – All structures where a fire threat has been Identified on Council's 'Environmental and Bushfire Threat' map	<ul style="list-style-type: none"> - Adequate provision is to be made for the access of fire fighting - and emergency service vehicles. - An adequate supply of water is to be made available for fire fighting purposes. A minimum supply of twenty thousand (20 000) litres of water shall be provided solely for fire fighting purposes. A suitable connection is to be made available for the purpose of the Rural Fire Service. (Reference Planning NSW 'Planning for Bushfire Protection', 2001, Chapter 4: Bushfire Provisions – Development Stage, Chapter 5: Construction 	The site has not been identified to be Bushfire Prone Land (refer Figure 10 below). In addition, the risk of a bushfire in the immediate area is low as a result of the existing land uses around the site and the land having maintained and low fuel loads.

Design Element	Minimum Development Standard	Assessment
	<p>Standards for Bushfire Protection)</p> <ul style="list-style-type: none"> - Consultation required with the NSW Rural Fire Service. - Developments shall also incorporate measures to promote bushfire protection through site selection, building design and materials and garden vegetation management. - Rural residential design is encouraged to have a single asset protection zone. - Consideration should be given to grouping rural residential developments into clusters that allow for the establishment of Asset Protection Zones around a group of dwellings rather than having to ensure individual protection for a large number of scattered dwellings. • The provision of adequate and independent static water supplies where mains water is not available shall be made. 	
(f)(ii) Fire management – fire access trails and firebreaks are to be sensitively sited within the landscape especially in steep terrain	<p>Mowing and slashing is the preferred method of construction of firebreaks. Recommendations for this include:</p> <ul style="list-style-type: none"> - $\frac{3}{4}$ Mowing a strip up the back of the table drain will help to prevent fires. - $\frac{3}{4}$ Avoiding any rare or significant plants during firebreak construction. - $\frac{3}{4}$ Avoid construction of unnecessary firebreaks. - $\frac{3}{4}$ Avoiding areas where there are native shrubs and trees or revegetated zones when constructing firebreaks. - $\frac{3}{4}$ Minimisation of damage to native vegetation. <p>Consultation is required with the Rural Fire Services</p>	N/A.



Figure 10 - Development Site (in red) and Bush Fire Prone Land (in yellow) Overlay (Source: Council's Intramaps)

The majority of the subject land is not bush fire prone land except at the tip of the north eastern corner (refer to **Figure 10** above in this report) where the site is affected by the Vegetation Buffer category. As such, this application has not been assessed under the provisions of Planning for Bushfire Protection.

SECTION 4.15(1)(a)(iiia) any planning agreement.

N/A at this stage.

SECTION 4.15(1)(a) (iv) the regulations.

Section 4.15(1)(a)(iv) requires Council to take into consideration the provisions of clauses 61-63 of the *Environmental Planning and Assessment Regulation 2021*. No demolition or erection of buildings requiring fire safety measures are proposed.

SECTION 4.15(1)(b) the likely impacts of the development.

In taking into consideration section 4.15(1)(b) of the *Environmental Planning and Assessment Act 1979* Council must evaluate the likely impacts of the development on both the natural and built environments, and the social and economic impacts in the locality.

a) Impact on Built Environment

In terms of assessing and evaluating the impact on the built environment, the following matters have been taken into consideration:

Bulk, scale and character

The proposed solar farm project is located in Bilbul which forms part of the Griffith Local Government Area agricultural lands. In order to preserve the character of the area, great care has been taken in the design of the solar farm development to ensure its harmonious integration with the natural environment. The project has been strategically planned to maintain a considerable

distance from neighbouring properties (refer to **Figure 6** above in this report), and extensive landscaping will be implemented to minimise any negative effects on the surroundings.

Additionally, the design of the solar farm takes into account the site's unique topography and the presence of any vegetation, both within the development area and its immediate surroundings. By capitalising on these existing natural features, the project aims to eliminate any potential disruptions to neighbouring properties or the wider area, thus preserving the overall amenity. Griffith is identified as a suitable location for solar development in the Department of Planning and Environment's *Draft Energy Policy Framework Overview (2023)*. It is therefore considered that the selection of the subject site as suitable location for solar energy development is supported.

Aboriginal Heritage

A Cultural Heritage Assessment Report by Australian Cultural Heritage Management (Victoria) Pty Ltd (refer **Application Common Material**) uncovered the following from the Desktop Study:

- A long history of Aboriginal settlement exists within the Activity Area and the wider surrounding landscape.
- Previous disturbances exist throughout the Activity Area in the form of potential laser levelling and historic agricultural and cropping practices.
- **It is likely that these significant previous disturbances have removed any likelihood for potential Aboriginal cultural heritage to be present.**
- **The Activity Area does not contain any previously recorded Aboriginal sites; however, 58 known sites have been recorded within a 10 km buffer zone. The closest recorded site is located 2.07 km west of the Activity Area.**
- The Activity Area does not contain any previously undisturbed archaeologically sensitive landforms, which have likely been removed through previous disturbances, including laser levelling, which is a common practice in this region.
- The results of the desktop assessment have determined there is no requirement for a pedestrian site inspection of the Activity Area as there is a low likelihood that unidentified Aboriginal cultural heritage will be present.
- The Unanticipated Finds Protocol for Aboriginal Heritage (Appendix B) should be followed throughout the project in that event that previously unidentified Aboriginal heritage is encountered.

European Heritage

The site does not accommodate any local or state heritage items nor is it part of a heritage conservation area. Notably, there are no heritage items located within close proximity to the site. Therefore, the development will not have any impact on any European Heritage items.

Transport and Traffic

During the 6-month construction phase it is anticipated that 40 construction staff vehicles will access the site daily resulting in 20 light vehicle movements per day. In addition, it is anticipated that at the peak of the construction delivery period up to 3 heavy vehicles, being a 19m B-Doubles, will access the site per day.

Once operation, traffic to and from the solar farm is minimal and will consist of a maximum of 2 – 3 light vehicles per week, as well as maintenance staff accessing the site on an as needed basis. No heavy vehicles are expected to be required to access the site during the operational phase. Operational traffic will be generated from the following sources:

- Electricians and operators (as required).
- General delivery of replacement equipment and parts (as required).

- Labour for PV module cleaning (routine).
- Labour for general maintenance (routine).

The Traffic Impact Assessment (TIA) prepared by Pavey Consulting Services, dated 26 September 2023 states that during operation the solar energy facility will have remote monitoring, allowing for surveillance of the operation without the need for staff on site. As such, it is expected that up to 2 light vehicles will attend the site every 6 months for general maintenance of the facility.

The above traffic assessment identifies the local haul and access routes (refer **Figure 11** below in this report). The site is connected to the Kidman Way and Burley Griffin Way via Rossetto Road. The most logical haul route is to utilise existing 19m b-double routes until Bilbul Road as follows:

- Travel north via Kidman Way through Hanwood;
- Right turn Thorne Road;
- Continue on Kurrajong Avenue (3rd exit at roundabout);
- Continue straight Burley Griffin Way;
- Left turn Rossetto Road;
- Left turn Bilbul Road;
- Left turn Macedone Road.

All the heavy vehicle traffic will arrive at the subject site from Sydney or Melbourne and access the subject site via the designated route. Due to the type of operations proposed and based on the above information including the very low volumes of traffic that currently use Rossetto Road, Bilbul Road and Macedone Road this development will have little impact on the surrounding road network as far as traffic flow capacity is concerned. In peak construction delivery times, it may be advisable to provide some warning or directional signs along these access routes. This development will be conditioned to submit to Council for approval, the Construction Traffic Management Plan prior to site works commencing.

In relation to safe intersection sight distance, the Coordinator concluded that sight distances to the north and south along Macedone Road from the proposed accessway site satisfies the SISD requirements for a 100km/h speed zone as specified in Austroads Guide to Road Design Part 4A – provided roadside vegetation is maintained. The proposed development will be conditioned to maintain roadside vegetation. It is also considered that the location of the proposed accessway is satisfactory and that suitable vehicular access will be available to proposed development.

The TIA identifies that a total of 15 car parking spaces will be required during the 6-month construction period. Only 2 parking spaces will be required during the operational period of the solar farm. The site plans identify an area allocated for parking, but provides no further details of the size or number of parking spaces available.

It is considered that through the conditions of consent, the development will comply with the requirements of AS 2890:2004, Part 1: 'Off-street car parking' and Part 2: 'Off-street commercial vehicle facilities' and Council's Development Control Plan 20 Off-Street Parking 2011.

b) Impact on Natural Environment

In terms of assessing and evaluating the impact on the natural environment, the following matters have been taken into consideration:

Soil

The Geotechnical Report prepared by GTS Geotechnical Testing Services and dated 15 January 2024 (refer **Application Common Material**) contains recommendations (especially sections 5 and 6.2) which will form part of the conditions if the proposed development is approved.

In addition, the Agricultural land use Report dated 28 September 2023 and prepared by Nutrien Ag Solutions the development site has agricultural value covering purely the land size and the water/if any attached to this land. Such smaller holdings are highly sought after for hobby farms or acreage dwelling. The above report states that agricultural activities that may be undertaken on this site would include permanent plantings (e.g., grapes, citrus, nuts) or annual cropping (e.g., summer or winter crops) or livestock production. The report also identified that the constraints to the site for agricultural production are high and particularly, the main factor being the size of the site for agricultural production.

The report assessed that it would not be commercially viable or sustainable for the land to be used solely for production of agricultural goods and noted that the site has not been farmed for several years. The property is also bounded by a number of small-scale vineyards which would impede the site's ability to grow certain crops due to the close proximity to neighbours which would be carrying out spray drift.

The report concludes that the site once developed would have the ability to adapt to Agri Solar farming practices, namely grazing of small carcase animals (e.g., goats / sheep).

Conditions have been added to the determination that are required to be upheld prior and during construction to manage soil and erosion of soils across the site. In addition, a decommissioning condition has been included which addresses the site to be returned, as far as practicable Cal, to its condition prior to the commencement of construction in consultation with relevant landowners.



Figure 11 – Proposed Haul Route (Source: Application Common Material).

Air Quality

Any temporary air quality issues that may arise during the construction phase including vehicles using the unsealed portion of Macedone Road, such as dust, can be effectively managed through the implementation of a Construction and Environment Management Plan. Measures have been

included as specific conditions in the determination notice to ensure their implementation and to safeguard air quality throughout the project.

Biodiversity

The site does not contain any land that is mapped and identified as “Biodiversity” on the Terrestrial Biodiversity Map (refer **Figure 7** above). The Statement of Environmental Effects states that the solar farm is proposed to be located on a cleared land which has been historically used for orcharding and that the site is free from mapped environmental constraints which may inhibit development of a solar farm.

As the site was cleared of native vegetation as at 1 January 1990 and has been continually used for agriculture production since this time, the land is classified as Category 1 Exempt Land under the Biodiversity Assessment Method (BAM). In accordance with Section 6.8(3) of the *Biodiversity Conservation Act 2016*, the BAM is to exclude the clearing of vegetation on Category 1 Exempt Land and further assessment or the preparation of a BDAR is not required. Due to the location of the project within the Category 1 Exempt Land, the ongoing cultivation of the site, no substantive vegetation clearing is required and minimal impacts on significant flora and fauna are anticipated because of the development.

Waste

Waste materials during construction should be considered in the Construction Environmental Management Plan. All waste materials should be collected and disposed to an appropriate landfill site.

Bushfire

The risk of uncontrolled fire damaging the solar farm is not considered significant as a result of land in and around the solar farm being maintained with low fuel levels. Nonetheless, Asset Protection Zones will be established to further protect the development.

Acoustic

A Noise and Vibration Impact Assessment was prepared by SoundIN and identified potential sensitive receivers that may be affected by noise from and in particular during construction activities (refer **Attachment 3**). The document has been prepared by an experienced and suitably qualified acoustic engineer and a member of the Australian Acoustical Society. A number of mitigation measures have been recommended including the measures identified in the Construction Noise and Vibration Management Plan (refer **Attachment 4**) if implemented and will be included in the conditions of consent. The assessment recommends the standard hours in terms of construction noise management levels of Monday to Friday (7am to 6pm), Saturday (8am to 1pm) and no work on Sunday or Public Holidays. Furthermore, the assessment considered construction vibration criteria and human conflict. In summary, consideration has been given to construction activities and their impacts on the sensitive receivers including noise management and mitigation which will include measures, training, complaint handling procedures and monitoring.

Visual

ATLAS RENEWABLES PTY LTD (the applicant) conducted a Sound Glint and Glare Assessment using the simulation process followed by the Federal Aviation Administration guideline due to the lack of Australian regulations.

The assessment determined that for the proposed PV array system:

- There was no glare of any kind on the ATCT of Griffith Airport.

- There was no glare of any kind on the surrounding residential dwellings.
- The proposed PV array system had no green for after-image glare on flight paths.
- The proposed PV array system has no yellow glare or red glare.

The applicant concluded that the PV panels are designed to absorb light hence the reflectivity of the surface of the solar panel is very low. Compared with the reflectivity of common objects found in the environment, the reflectivity of the panels is considerably low.

In addition, the Solar Glare Hazard Analysis Tool was utilised to determine the potential for glare occurrence and the resulting glare intensity. The glare receivers investigated by this research included two runway ends, and the flight paths originated from the existing main runway at the Griffith Airport.

Furthermore, it was identified that the proposed PV system does not result in any glare of any kind on any of the established flight paths, surrounding residential dwellings and the ATCT of the Griffith Airport. As such, the installation of this system is fully compliant with aviation policy for potential solar glare.

A Construction Environmental Management Plan should include detailed measures for managing and monitoring to prevent any impacts on receivers, as specified in the report prepared by the applicant and Geotechnical Testing Services. As part of the project, landscaping will be implemented along the perimeter of the site, serving as a visual screen between the solar farm and the neighbouring rural dwellings and roads. This planting will contribute to further mitigating any potential visual impacts and ensuring the integration of the solar farm into the surrounding environment. Once the screen planting is sufficiently established to obstruct the line of sight to the solar farm, there will no longer be a need to monitor the potential glare hazard.

The development application was referred to CASA which responded by advising that *“Glint and Glare have proven to not be a hazard to aircraft on approach or departing an aerodrome. CASA’s concern lies with potential impact on any air traffic control tower (ATCT) and the ability of the controllers to conduct their work. As Griffith Airport does not have any ATCT facility, the solar farm as proposed will not be a hazard to aircraft operations and CASA has no objection to the proposal as presented”*.

The development Application was also referred to Essential Energy which advised that:

Strictly based on the documents submitted, Essential Energy has no comments to make as to potential safety risks arising from the proposed development.

Essential Energy makes the following general comments:

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

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”.

Energy

The proposed development involves a renewable source of power to support the energy requirements of Griffith which is considered a positive economic impact.

c) Social Impact in the Locality

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

d) Economic Impact in the Locality

The primary goal of the project is to introduce an additional renewable energy source to the Griffith area, thereby providing sustainable power to the local community. The proposed project has the capacity to generate electricity that can meet the needs of homes as it aims to promote affordable renewable energy solutions.

The project offers advantages to the landowner as well, allowing for diversification of income streams by utilising the land for renewable energy production. Furthermore, it brings economic benefits to the area through the creation of job opportunities during both the construction and operation phases. This not only supports local employment but also contributes to the growth of the local economy.

e) Cumulative Effects

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 design and location of the project have been strategically planned to specifically address any potential cumulative impacts. The project's small scale, remote location from vulnerable areas, and the absence of similar facilities in the region contribute to its limited capacity to generate significant cumulative effects.

Furthermore, the project's environmentally sensitive design, the ability to decommission it if needed, and its location further minimise the likelihood of cumulative impacts emerging. By implementing measures to prevent or mitigate any potential cumulative effects, the project aims to ensure that its development is sustainable and in harmony with the preservation of the natural environment and the overall well-being of the local community.

SECTION 4.15(1)(c) the suitability of the site.

The chosen site for the proposed 'electricity generating works' development has been carefully evaluated and deemed suitable for accommodating the intended project with its proximity to the existing Beelbangera Substation. The development has been meticulously planned with a design that is responsive to the unique characteristics of the location, such as its proximity to sensitive receptors, the topography, and the surrounding environmental conditions. This approach ensures that the development seamlessly integrates into the surrounding landscape and community, while also safeguarding the quality of life for residents in the area.

The design of the development adheres to best practices in construction and operation, minimizing any potential adverse impacts on neighbouring land uses and transport infrastructure. Furthermore, the project has been economically assessed as viable and is expected to make a valuable contribution to the electricity requirements of the Griffith area.

Careful consideration has also been given to selecting a location for the development that has minimal environmental impact. Measures have been put in place to mitigate any potential negative effects, including the utilization of environmentally sensitive design principles, the incorporation of the development's removability, and the meticulous selection of its location. Additionally, the project has undergone a thorough assessment to ensure that it aligns with the objectives of the underlying RU1 Primary Production land zone and does not expose the development to unmanageable or unmitigated natural hazards.

Based on the assessment under this and other sections within this report it is considered that the site is suitable for the proposed development.

SECTION 4.15 (1) (d) any submissions made in accordance with the Act or the Regulation

The provisions of the *Environmental Planning and Assessment Act 1979* the *Environmental Planning and Assessment Regulation 2021* and *Community Participation Plan* set down consultation, concurrence and advertising requirements for specific types of development applications and taking into consideration any submissions received in response to the notification process.

In addition to the statutory referral process identified in Part F of this report, the notification of the development included the following:

Notification Description	Required	Submission Period
Publication in Council Catchup and on Facebook	YES	24 th of November to the 21 th of December 2023
Letters to Neighbours	YES	24 th of November to the 21 th of December 2023

External Referrals	Date Sent	Date Received
Essential Energy	17 th of November 2023	6 th of December 2023
Civil Aviation SA	5 th of December 2023	6 th of December 2023

As a result of the public participation process, Council received eleven (11) submissions being 10 individual submission in response to the notification of the development application and a submission from the elected Council to the panel Chair supporting the submissions. The applicant prepared a response to each of the concerns raised over the ten submissions. A summary of the concerns raised over the ten submissions have been detailed below in **Table 2** and how the applicant has addressed each of the concerns.

Table 2: Submissions	
ISSUE	Council and Applicant's Assessment of Submissions
Project Need in this location	Submitters' Concerns: Submitters referenced that whilst they are not opposed to renewable energy projects in general, they are concerned that the subject site is not an appropriate location for a solar farm and questioned the need for this particular project.
	Applicant's Response:

	<ul style="list-style-type: none"> - <i>The site meets critical operational criteria for a sub 5MW solar farm including close proximity of an existing substation (i.e., within 300m of the Beelbanger Substation) that has existing ability to receive and manage the input for a 5MW solar farm and charging / discharging of a 10MW battery. These factors are all considered as part of Essential Energy final connection agreement process. In addition, the site needs available for lease or purchase, and free from constraints that would preclude development. There are few properties within Griffith which meet these unique criteria which would enable this development.</i> - <i>Based on Essential Energy's Annual Planning Report, there are 5 zone substations within the Griffith Area (excluding the Transgrid substation at Yoogali) which would suggest one sub 5MW solar farm project per zone substation. Again, the potential for delivery of each of these projects would be subject to identification of a site free from development constraints, site acquisition, Essential Energy connection approvals, and development approvals all being obtained.</i> - <i>It is worth noting that a precedent was set for this scale of development in the RU1 Zone with the approval of a sub 5MW solar farm at 2773 Berecra Road, Tharbogang (93/2023 Ref PPSWES-181). In that case, a sensitive receiver (dwelling house) was located approximately 75m from proposed solar farm.</i> - <i>Renewable energy projects, when approved by the electricity distribution network provider, provided more stability and quality in the local electricity network, particularly when a solar farm is coupled with a battery to provided additional supply during peak periods. In addition, the provider also leverages projects such as this to upgrade parts of the network, which avoids such costs being passed on to the customer.</i> <p><u>Officer's Assessment:</u> The development site has merit due to:</p> <ul style="list-style-type: none"> • its proximity to the existing Beelbanger Substation; • the design of the proposal is responsive to the unique characteristics of the location, such as its proximity to sensitive receptors, the topography, and the surrounding environmental conditions; • the development is designed to integrate into the surrounding landscape and community, while also safeguarding the quality of life for residents in the area; and • the proposed development will have minimal environmental impact.
Visual amenity impacts	<p>Submitters' Concerns: Submitters are concerned that the proposed solar farm will adversely affect the visual amenity of the locality including scenic rural - In response to this matter, a detailed Landscaping Plan has been prepared which includes a species register and typical section of the buffer planting. They consider the proposed vegetation buffer planting to be insufficient.</p> <p><u>Applicant's Response:</u></p>

	<ul style="list-style-type: none"> - In response to this matter, a detailed Landscaping Plan has been prepared ... which includes a species register and typical section of the buffer planting. 8 February 2024 3 values and that the proposed 1.8m high vegetation buffer planting is insufficient. - As shown on the Landscaping Plan, the planting will consist of a minimum 5m wide buffer comprised of range of species with a maximum height of 3m. - As per the development conditions applied to the recently approved sub 5MW solar farm at 2779 Berecra Road, Tharbogang, Council can condition a mature vegetation buffer around the development to be at least 5 metres deep and comprising at least two rows of staggered trees. - The Griffith Solar Farm (36MW) is almost seven times larger than the proposed solar farm and is set amongst rural landholdings with residences. It demonstrates that a solar farm can be appropriately screened from view and integrate well into the surrounding rural landscape.
	<p><u>Officer's Assessment:</u> The proposal will be conditioned in relation to landscaping involving a 5m wide Landscape Buffer with a mature design height of 3m which is considered adequate to minimise adverse visual amenity impacts provided the conditions can be implemented accordingly.</p>
Property values	<p>Submitters' Concerns: Submitters are concerned that property values will be adversely impacted in the immediate area by the proposed solar farm.</p>
	<p><u>Applicant's Response:</u> - Property values can be affected (positively and negatively) by a range of variables and factors. Whilst this is not considered to be a valid planning consideration for assessment, it is unlikely that a small-scale solar farm would detrimentally affect property prices in the locality.</p> <p>- As demonstrated in this submitted development application material and in the additional information provided in this response, the proposed development is not forecast to result in any unacceptable amenity or safety impacts and will be visually screened from public vantage points. Accordingly, the project is expected to operate in a manner consistent with the expectation for the RU1 Zone, and with less impact than other rural activities which could ordinarily be expected in a rural area.</p>
	<p><u>Officer's Assessment:</u> Change in property values is not a valid planning consideration and as such is considered beyond the scope of this development application.</p>
Increased temperature	<p>Submitters' Concerns: Submitters are concerned that the solar panels will increase the ambient air temperature of the surrounding area by up to 5% or three to four degrees which will impact surrounding farms, dwellings and gardens.</p>

	<p>Applicant's Response:</p> <ul style="list-style-type: none"> - Solar panels work by absorbing sunlight to generate electricity through the photovoltaic effect. While they may warm up slightly during operation, they are not designed to radiate heat into the surrounding environment. The heat generated by solar panels is generally dissipated through conduction and convection, not significantly affecting the air temperature. - Solar industry experts and engineers generally agree that the heat generated by solar panels is insignificant compared to the heat from other sources, such as buildings, roads, and natural sunlight. Solar panels are designed to efficiently convert sunlight into electricity, not to produce heat. - The National Renewable Energy laboratory (NREL), a U.S. government research laboratory, conducted a study on the thermal effects of large-scale photovoltaic (PV) systems (solar farms). They found that solar panels absorb sunlight to convert it into electricity but do not significantly contribute to local temperature increases. In some cases, solar panels can even have a cooling effect on the surrounding area due to shading and reflective properties. (https://www.nrel.gov/docs/fy13osti/56290.pdf) - Grassed areas will be maintained between the solar panel rows (5-6m spacing) which will assist in regulating the microclimate and maintain the opportunity for the landowner to run sheep on the site for grass/weed control
	<p>Officer's Assessment:</p> <p>On the basis of Atlas Renewables' conclusion, the proposed PV system will not result in any glare on surrounding residential dwellings. This is also due to solar panels tending to absorb sunlight and not radiate heat into the surrounding environment but when they produce heat it is insignificant compared to heat from other sources.</p>
Risk of battery fire	<p>Submitters' Concerns:</p> <p>Submitters are concerned about the potential risk of fire or explosion of the battery storage units. There are concerns about potential risks to adjoining people and property as well as health risks from toxic smoke if a fire were to break out.</p>
	<p>Applicant's Response:</p> <ul style="list-style-type: none"> - Fires in Battery Energy Storage Systems are very rare and have a very low risk level due to the design of units and inbuilt protections. - Please refer to the attached excerpt from the Technical Specifications for the proposed Battery Energy Storage System (Attachment 2). As per Section 6.4 of the document, the proposal has an inbuilt, automatic fire protection system in place. This system uses water as an extinguishing medium to protect the energy storage unit of this project. It includes an open sprinkler head, pipe and water supply facilities. - The batteries will be constructed, installed and operated in accordance with all applicable Australian Standards to ensure they are safely functioning at all times. 24-7 monitoring and regular maintenance will also be undertaken to ensure all components of the solar farm are

	<p><i>operating appropriately.</i></p> <ul style="list-style-type: none"> - <i>The site will also have a site manager on-call 24-7 with surveillance systems in place to pick up on any abnormalities.</i> <p>Officer's Assessment: The applicant's response regarding proposed technical specifications especially the internal heat insulating layer, liquid cooling system and the automatic fire suppression system (to be monitored by the operator of the development) are considered adequate and will be conditioned accordingly.</p>
Validity of Land Suitability Report	<p>Submitters' Concerns: The validity of the Land Suitability Report has been called into question by submitters who believe it is an opinion and not factually correct. Submitters believe the land is viable as an agricultural farm.</p> <p>Applicant's Response: - <i>An addendum to the Land Suitability Report has been prepared by Nutrien Ag Solutions dated 31 January 2024 (see Attachment 3).</i></p> <ul style="list-style-type: none"> - <i>The constraints to the site for agricultural production are high. With the main factor being the size of the site for agricultural production. It would not be commercially viable or sustainable for the land to be used 8 February 2024 5 solely for production of agricultural goods. It is also noted that the site has not been farmed for several years in response this situation.</i> - <i>The property is also bounded by a number of small-scale vineyards which would impede the site's ability to grow certain crops due to the risk of spray drift.</i> - <i>In addition, the site, once developed would have the ability to adopt to Agri Solar farming practices, namely grazing of small carcase animals (goats / sheep), which assists in maintaining grass cover.</i> <p>Officer's Assessment: In its Addendum to the Land Suitability Report dated 31 January 2024, Nutrien Ag Solutions (refer Attachment 2 below in this report) identified that the small size of the site is a major constraint which limits agricultural production attributing to negatively to commercial and sustainable viability of the site.</p>
Traffic impacts	<p>Submitters' Concerns: Submitters are concerned that the construction of the project will generate excessive traffic movements for the local road network. There are concerns that B Double traffic movements will cause damages to unsealed roads. Submitters have questioned the validity of the findings of the traffic survey with nearby residents asserting that there are significantly more traffic movements along Macedone Road in any given day.</p> <p>Applicant's Response: - <i>Regardless of the current baseline of traffic movements on Macedone Road, the construction vehicle traffic (consisting of 20 cars per day and</i></p>

	<p><i>300 trucks across a 3 – 6 month period will have negligible impacts on the operation of the local road network. will be negligible in the context of the usage of the road.</i></p> <p><i>- It is also noted that Macedone Road currently caters for farm vehicles and heavy machinery, beyond what is forecast during the construction phase of the project, particularly during harvest periods. With respect to any damage caused, Council can condition a pre-construction survey and road maintenance, and repair of damage be undertaken by the developer to ensure that the road is maintained in a trafficable state</i></p> <p><u>Officer's Assessment:</u> The Coordinator has reviewed the submissions and the applicant's response has assessed that:</p> <ul style="list-style-type: none"> • The proposal will have manageable traffic movements and that it will be conditioned with regard to any damage to property which would include unsealed roads; • the Construction Traffic Management Plan is required to be submitted to Council for approval prior to site works commencing; • a suitable all-weather access track will be constructed off Macedone Road to facilitate all solar farm traffic during construction and for ongoing operations; • the accessway is to be an all-weather access and be constructed from 200mm of compacted road gravel including a concrete culvert with concrete headwalls and guideposts to delineate the accessway; • the sight distances to the north and south along Macedone Road from the proposed accessway site satisfies the SISD requirements for a 100km/h speed zone as specified in Austroads Guide to Road Design Part 4A – provided roadside vegetation is maintained; • the proposed development will be conditioned to maintain roadside vegetation; and • the location of the proposed accessway is satisfactory and that suitable vehicular access will be available to proposed development. <p>The applicant has confirmed that a Period Permit from the National Heavy Vehicle Regulator to enable temporary access for 19m B-Doubles during the equipment delivery phase of the development. In the unlikely event that a Period Permit is not granted, alternate access is possible via Bilbul and Macedone Roads via Rossetto Road. An additional alternative would be to break down to semi-trailers at an off-site transport depot before delivery to the site.</p> <p>During construction, it is anticipated that heavy vehicles (19m B-Doubles) will peak at 3 vehicles per day accessing the site to unload components within a 2-3 months period.</p>
Construction and operational noise	<p>Submitters' Concerns: Submitters expressed concern regarding construction noise from heavy vehicle movements and civil works and operational tonal noise from the inverter station and battery containers. Submitters indicate that closer sensitive receivers were missed from the acoustic assessment</p>

	<p>Applicant's Response:</p> <ul style="list-style-type: none"> - <i>An amended Noise and Vibration Impact Assessment has been prepared by SoundIN to address the public submissions (see Attachment 4).</i> - <i>The residential dwelling to the north of the subject site that was missed in the original assessment has now been included as Receiver 10 in the amended assessment (refer to Figure 2-1 of the assessment).</i> - <i>In response to concerns expressed in submissions regarding tonal noise, the amended assessment has included operational noise sources and sound power levels associated with the inverter station, battery container and panel tracking motor. There is potential for the inverter station and battery container to exhibit tonal noise. In accordance with the NPfl, the SWL for these sources in Table 6-5 of the assessment include 5 dBA corrections to account for additional annoyance caused by tonal noise characteristics. The results of the updated assessment (Table 6-6) indicate that predicted noise levels at all nearby receivers will maintain compliance with the noise trigger levels at all times.</i> <p>Officer's Assessment:</p> <p>The measures and recommendations contained within and particularly in Part 7 of the Noise and Vibration Impact Assessment prepared by SoundIN Pty Ltd and dated January 2024 (refer Attachment 3 to this report) will be placed on the consent if the development is approved. The longest period for construction work will be 6 months with standard construction hours being limited to 7.00am – 6.00pm Monday to Friday and 8.00am - 1.00pm on Saturday. It has been recommended that if the proposed development is approved it will be conditioned that during construction the impacts from noisy construction activities, such as piling, be limited to 9.00am to 12.00pm Monday to Saturday and 2.00pm to 5.00pm Monday to Friday to provide respite to surrounding residents. There will be no construction work on Sundays or Public Holidays. A Construction Noise and Vibration Management Plan (covering noise and vibration from the construction and operational works) will identify all reasonable and feasible measures which are considered adequate to reduce and or avoid excessive noise levels at the sensitive receivers which have been identified in Figure 12 below in this report.</p>
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Glint and Glare	<p>Submitters' Concerns: Submitters are concerned that the Glint and Glare Assessment is not an independent study as it was conducted by Atlas Renewables. Submitters are concerned about potential impacts to aviation traffic, especially crop spraying which is actively undertaken in the area. Submitters are also concerned about glare impacts to the dwelling house on the site.</p> <p>Applicant's Response: <i>- The original Glint and Glare Assessment prepared by Atlas Renewables and submitted with the application adequately demonstrates that the proposed PV system does not result in glare impacts on the surrounding residential dwellings, Griffith Airport operations or established flight paths. To provide additional comfort, it is recommended that Council impose a similar condition of approval to the recently approved solar</i></p> <p>Officer's Assessment: The proposed development will be conditioned in relation to recommendations in the Solar Glint and Glare Assessment report (see Attachment 4 to this report) which are considered to be sufficient to reduce and or avoid adverse impacts from glint and glare on the surrounding environment. Furthermore, the conditions imposed on this proposal are consistent with those issued for a similar proposal under Development Application DA 93/2023 Ref: PPSWES-181.</p>
Dust	<p>Submitters' Concerns: Submitters are concerned about dust impacts to human health as a result of increased construction traffic along Macedone Road</p> <p>Applicant's Response: <i>- A Construction Management Plan will be prepared prior to the commencement of works which will include dust mitigation measures including covering of stockpiles, watering down of exposed areas, and maintenance of vehicle movement areas to minimise dust generation. This is a reasonable expectation and can be conditioned accordingly.</i></p> <p><i>It is recommended that the Planning Panel will likely impose a specific condition for dust control in line with the conditions which were included in the recently approved solar farm in Tharbogang (93/2023 Ref: PPSWES-181).</i></p> <p>Officer's Assessment: The proposed development will be conditioned adequately.</p>
Stormwater and soil erosion impacts from runoff	<p>Submitters' Concerns: Submitters are concerned about water reaching the battery storage units and are also concerned about soil erosion caused by concentrated solar panel stormwater runoff.</p> <p>Applicant's Response: <i>- The site is not located within Council's Flood Planning area. Regardless, the proposed battery cabinets will be appropriately bunded to prevent flooding of the battery units.</i></p> <p><i>- Due to the cleared and level nature of the development site, minimal earthworks are required to construct the solar farm and the solar arrays will be installed on metal footings with no change to the current ground level. As per the current situation and stormwater will continue to sheet flowing across the grassed paddock.</i></p>

	<p>- As no significant change to the ground level or concentration of stormwater flows are required to construct the solar farm, negligible change to the existing stormwater flows across the site are expected.</p> <p>Standard Erosion and sediment control measures will be adopted for the project during both the construction and operational phases, and can be conditioned accordingly by Council (sic).</p> <p><u>Officer's Assessment:</u> The proposed development will be conditioned adequately.</p>
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

It is noted that several objections were already addressed in the submitted documentation. Furthermore, several submissions and issues raised have not been specifically addressed in the above table as they did not warrant consideration under the *Environmental Planning and Assessment Act 1979* or the *Environmental Planning and Assessment Regulations 2021*.

SECTION 4.15 (1) (e) the public interest

The provisions of section 4.15(1)(e) of the *Environmental Planning and Assessment Act 1979* provides an overarching requirement to take into account the public interest. It is considered that the public interest is best served by the consistent application of the requirements of the relevant Commonwealth and State government legislation, environmental planning instruments,

development control plan, Council policy, and by Council ensuring 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 plan, it has been determined that the plan is in alignment with various crucial planning policies and instruments that govern land use and development in the Griffith region. Specifically, the proposed development is consistent with the aims and objectives of *Griffith Land Use Strategy: Beyond 2030*, *Griffith Local Environmental Plan 2014*, and other relevant environmental planning instruments, development control plans, or policies.

Since the application was lodged with Council, Council has prepared a draft policy pertaining to solar farms and battery storage systems. On 14 May 2024, the Griffith City Council at its Ordinary Council meeting resolved to place the Draft *Griffith Solar Energy Farms and Battery Energy Storage Systems (BESS) Policy* on public exhibition for a period of 28 days and seek public submissions. The submission period closed on 26 June 2024. Any submissions received will be analysed and reported back to Council in coming weeks

Griffith Solar Energy Farms and Battery Energy Storage Systems (BESS) Policy	Assessment
	<p>The draft policy will apply to all land within the Griffith local government area. At its current stage no weight or regard can be given to it as it has not been adopted by Council to date as a public policy. As such this draft policy is not considered relevant to the assessment of this development application relating to:</p> <ul style="list-style-type: none"> the electricity generating works involving solar photovoltaic systems (solar farms) with a capacity of more than 1.0 MW which are not co-located with a large-scale electricity user such as an industry; and all development applications for electricity generating works involving Battery Energy Storage Systems (BESS). <p>However, it is intended that the policy will not to apply to electricity generating works which can be installed under State Environmental Planning Policy (Transport and Infrastructure) 2021 or State Environmental Planning Policy (Exempt and Complying Development) 2008 as exempt or complying development.</p>

In light of this comprehensive assessment, it can be concluded that the proposed development is unlikely to give rise to any issues within the jurisdiction of the *Environmental Planning and Assessment Act 1979* that are contrary to the public interest. The development plan adheres to the highest standards of responsible land use and development, and as such, it is expected to benefit the community by providing necessary infrastructure and services while preserving the natural



Figure 12 – Distance of Sensitive Receivers to the Subject Site (Source: Mapping from Council's Intramaps)

PART H: MONETARY CONTRIBUTIONS

Section 7.12 Contributions (Environmental Planning & Assessment Act 1979)

Section 7.12 of the Environmental Planning and Assessment Act 1979 states that if a consent authority is satisfied that development is likely to require the provision of or increase the demand for public amenities and public services within the area, it may grant the development consent subject to a condition requiring the payment of a monetary contribution in accordance with an approved contributions plan.

The calculations associated with the section 7.12 contributions payable at 1% of the cost of works being \$6,800,104.08 (excluding consultant fees) - \$68,001.04.

Section 64 Contributions (Local Government Act, 1993)

The effect of section 64 of the Local Government Act 1993 is to give the functions of the Water Management Act 2000 to Council in the same way it applies to a water supply authority. Section 306(2) of the Water Management Act 2000 enables a water supply authority to require the applicant to do either or both of the following:

- (a) *to pay a specified amount to the water supply authority by way of contribution towards the cost of such water management works as are specified in the notice, being existing works or projected works, or both,*
- (b) *to construct water management works to serve the development.*

This land does not benefit from water or sewage supply – these contributions are not levied on this application.

PART I: INTERNAL REFERRALS

As part of the assessment process, the following internal referrals were also undertaken.

DISCIPLINE	ADVICE, COMMENTS & CONDITIONS	DATE
Building	See attached Building assessment	21 November 2023
Engineering	See attached Engineering assessment	24 January 2024
Environment	No comments	
Health	No comments	
Heritage	No comments	
Urban Design	No comments	
Street/Rural No	No comments	

The comments received in response to the internal referral place have been addressed in the assessment of the application and where applicable incorporated into the recommendation.

PART J: CONCLUSION AND RECOMMENDATION

Conclusion

The development application has been analysed and evaluated with regard to the matters for consideration listed in Section 4.15 of the *Environmental Planning and Assessment Act 1979*. The assessment has identified that:

- The proposed development is permissible within the zone under SEPP – Transport and Infrastructure 2021 and is consistent with the aims, objectives and special provisions of that environmental planning instrument.
 - The proposed development is consistent with the provision the relevant SEPP that apply.
 - The proposed development is considered satisfactory with regard to the objectives and controls set down in the relevant development control plans.
 - That where non-compliance with a development control has been identified, the proposed variation can be supported in the circumstances of the case, or has been addressed by way of a condition of consent.
 - The proposed development is unlikely to have any unreasonable impact on the environment, and where an adverse impact has been identified appropriate conditions have been imposed to mitigate the effects.
 - The subject site is suitable for the proposed development.
-
- Where submissions were received they have been taken into consideration and where appropriate have been addressed by way of amended plans or conditions of consent.
 - The proposed development does not raise any matter contrary to the public interest.

On this basis it is considered that the proposal has merit and can be supported.

Recommendation

- a) That Western Regional Planning Panel as the consent authority pursuant to section 4.16 of the *Environmental Planning & Assessment Act 1979* grant consent to Development Application No: 228/2023(1) for Sub- 4.95MW at 394 Macedone Road, Bilbul (Lot 363 in DP 751743).

ASSESSING OFFICER

Name: Patterson Ngwira

Date

28/06/2024



228/2023(1) / PPSWES-210

Position:

Senior Development
Assessment Planner

Signature:

.....

REVIEWING OFFICER

Name:

Carel Potgieter

Position:

Planning and Environment
Manager

Signature:

Attachment 1: Essential Energy Response

(23/162799)

Attachment 2: Agricultural Land Use Report

(23/161996)

Attachment 3: Noise and Vibration Impact Assessment

(It is Attachment 4 in 24/14860)

Attachment 4: Construction Noise and Vibration Management Plan

(24/72010)

Attachment 5: Solar Glint and Glare Assessment

(23/133174)

Attachment 6: Landscape Plan, Details and Specifications

(24/72011)