COUNCIL ASSESSMENT REPORT

Panel Reference	**PPSWES-181 (PAN-333892)**
DA Number	**93/2023(1)**
LGA	**Griffith City Council**
Proposed Development	**Electricity Generating Works – Proposed construction of a SUB-5mW solar system and battery storage system with transmission line to connect to local infrastructure**
Street Address	206/-/DP756035 2773 BERECRY ROAD THARBOGANG 2680
Applicant/Owner	Applicant: Callista Harris for ACENERGY Pty Ltd Owners: • Rino Sator • Lawrence Sator
Date of DA lodgement	24 May 2023
Total number of Submissions Number of Unique Objections	• Eight (8) individual submissions
Recommendation	Approval
Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011	**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: • Griffith Local Environmental Plan, 2014 • Griffith Development Control Plan No 1 – Non-Urban Development
List all documents submitted with this report for the Panel's consideration	i.e. any: • Assessment Report • Draft Conditions of Consent
Clause 4.6 requests	• N/A
Summary of key submissions	• N/A
Report prepared by	**Barnson** (Town Planning contractor to Griffith City Council)
Report date	27 July 2023

Summary of s4.15 matters Have all recommendations in relation to relevant s4.15 matters been summarised 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? *e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP*	Yes
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)? *Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions*	Not applicable

Conditions

Have draft conditions been provided to the applicant for comment? *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*	Yes

Development Assessment Report

PART A: GENERAL ADMINSTRATION

DA No:	DA 93/2023
Property Information:	Lot 206 in Deposited Plan (DP) 756035 – 2773 Berecry Road, Tharbogang
Proposed Development:	Electricity Generating Works
Brief Description of Proposal	Proposed sub-5 Megawatt (MW) solar farm and sub-5 MW Battery Energy Storage System (BESS)
Type of Development:	Local – Regional Development
Lodgement Date: **Statutory Timeframe:**	24th of May 2023
Value of Development:	$6,772,842.00
Applicant's Details:	ACENERGY PTY LTD Level 1 135 Fryers Street Shepparton VIC 2630
Land Owner's Details:	Rino Sartor and Lawrence Andrew Sartor RMB Handwood Handwood NSW 3617
Report Author/s:	Consultant – Barnson Pty Ltd Josh Eagleton Senior Planner Jim Sarantzouklis RPIA No. 8135

PART B: EXECUTIVE SUMMARY

- It is recommended that the *Electricity Generating Works* in the form of sub-5 megawatt (MW) Solar Farm and Sub-5 MW Battery Energy Storage System (BESS) 2773 Berecry Road, Tharbogang (Lot 206 DP 756035) application be approved based on the details contained in report.

- The Project meets the criteria for regionally significant development as outlined in the Planning Systems SEPP (PS SEPP) under Section 2.19(1) and Schedule 6.5. According to this section, development listed in Schedule 6 is considered regionally significant if it has a capital investment value (CIV) of more than $5 million, and the Project's CIV is approximately $6.7 million.

- The application has been referred to the Western Region Planning Panel on the basis of the requirements of Environmental Planning and Assessment Act 1979 and Environmental Planning and Assessment Regulation 2021.

PART C: PROPOSAL

ACEnergy Pty Ltd (referred to as the applicant) intends to establish a solar farm and a Battery Energy Storage System (BESS) with a capacity below 5 megawatts (MW) (known as the proposal) on the property located at 2773 Berecry Road, Tharbogang (Lot 206 DP 756035), hereafter referred to as the "subject property." The development site, covering approximately 20 hectares (ha) of land, will be the area dedicated to the proposal within the subject property – identified in green at **Figure 1**.

The solar farm, operating at a smaller scale, will produce sufficient electricity to power around 1,000 homes in Griffith and the surrounding vicinity. The accompanying BESS will store excess electricity generated during periods of low solar electricity production. By implementing this proposal, the reliance on electricity imports from more distant power plants in the vicinity of Griffith will be reduced.

The transportation of electricity through transmission lines incurs losses in the form of heat (AEMC, 2023). Consequently, the proposal has been strategically situated close to Griffith and the nearby power sub-station. This arrangement ensures efficient delivery of electricity to end-users, with minimal losses during transmission.

In summary the proposed development includes:

- 11,000 solar panels, mounted on single axis tracking arrays.
- One (1) high voltage (HV) kiosk.
- One (1) central inverter, which would be approximately 13 m long, 3 m tall and 3 m wide.
- Four (4) BESS containers, which would be approximately 10 m long, 3 m tall and 2 m wide.
- A 1.8 m high chain mesh fence around the perimeter of the facility, including a double gate positioned on the north-eastern side.
- Landscaping buffer around the perimeter of the facility.
- A 1 m high post-and-wire stock-proof fence around the landscaping buffer.
- Approximately two (2) new poles to connect to the overhead 33 kV power line.

Refer to **Figure 2 and Attachment A** for an overview of the development concept within the specified boundaries.

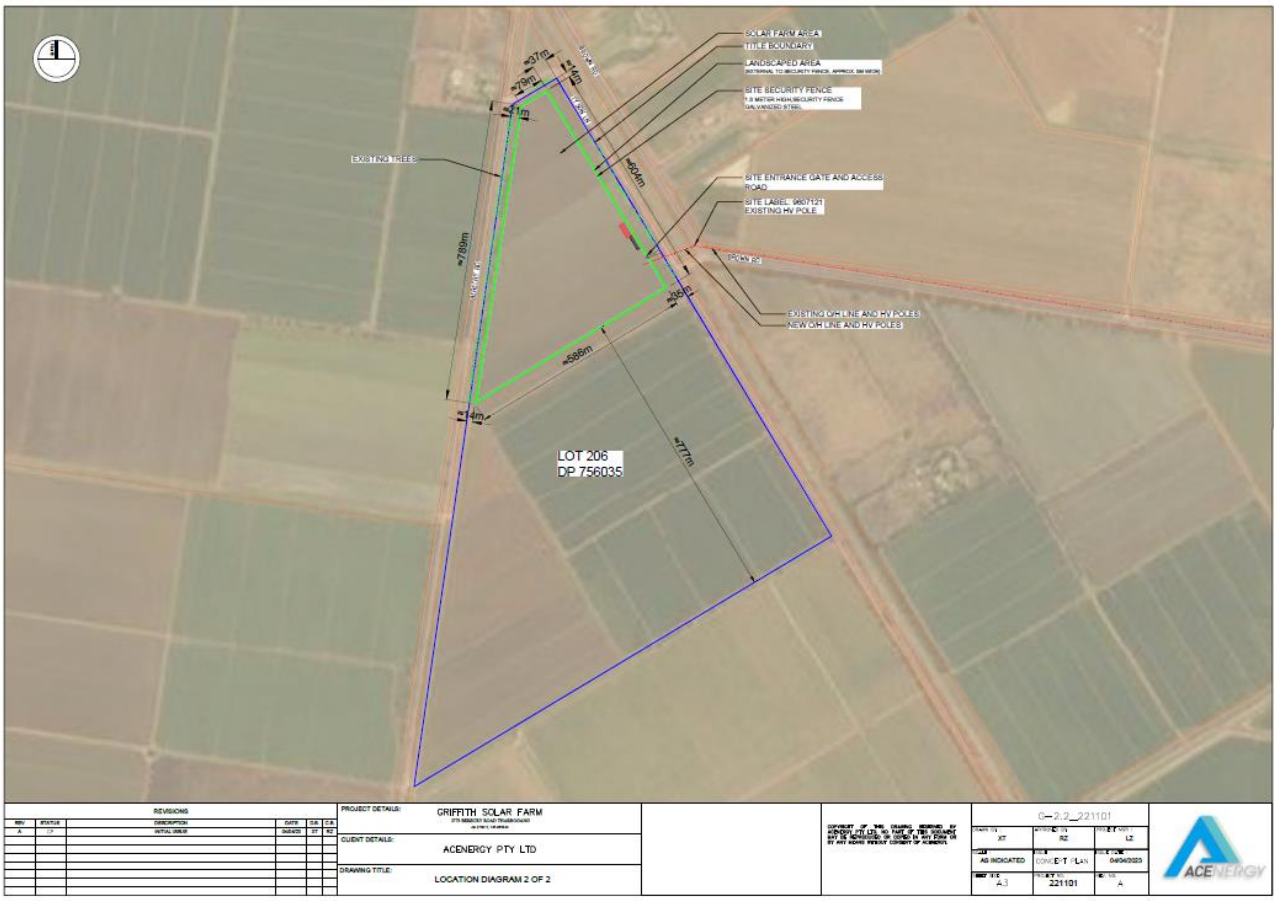


Figure 1: Subject site and Development Area (illustrated in green)

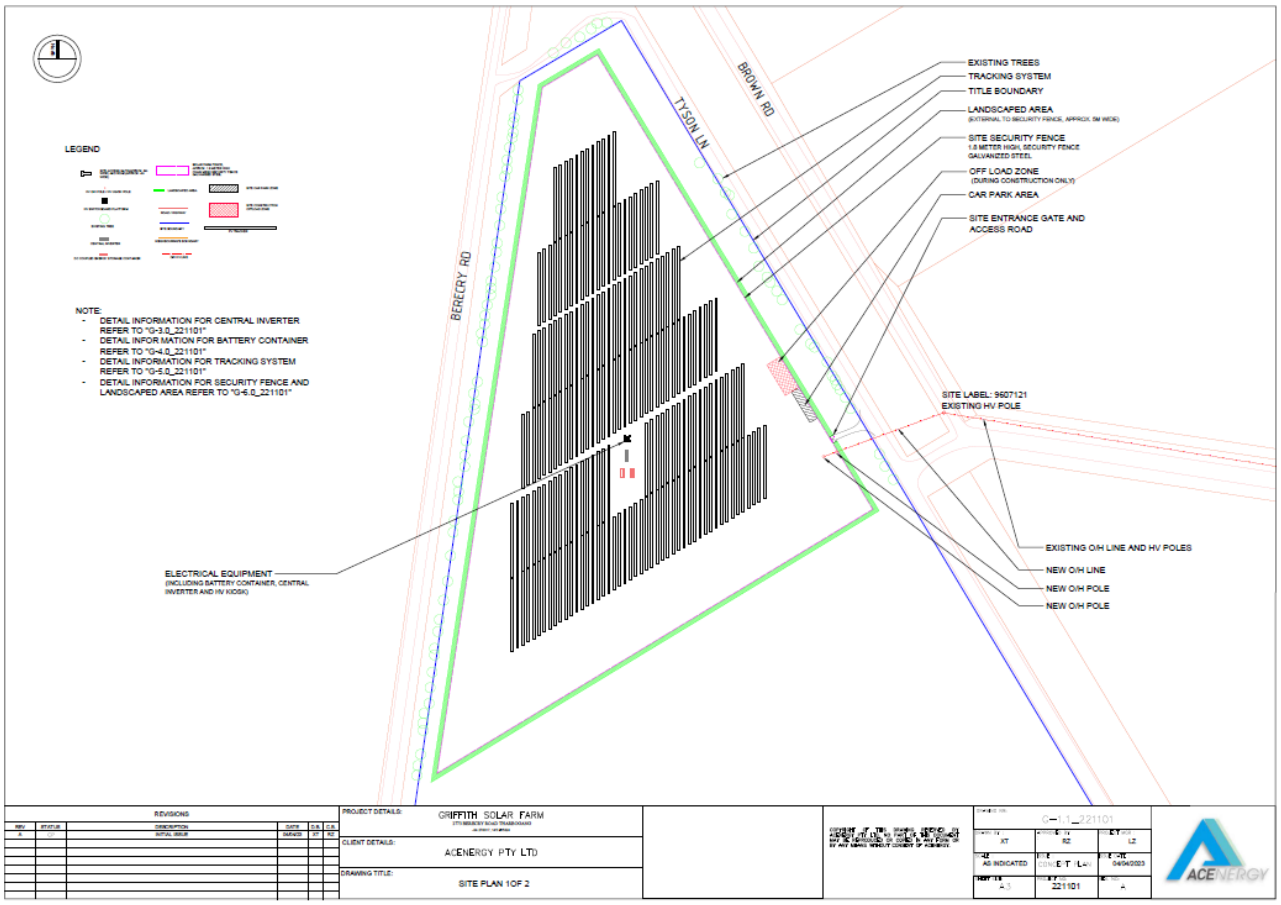


Figure 2: Development Site.

PART D: SITE DESCRIPTION AND LOCALITY

The Site

The subject property, known as 2773 Berecry Road, Tharbogang (Lot 206 DP 756035), encompasses an area of approximately 98 hectares (ha). The proposed project will utilise around 20 ha of the subject property – illustrated in green at **Figure 3**.

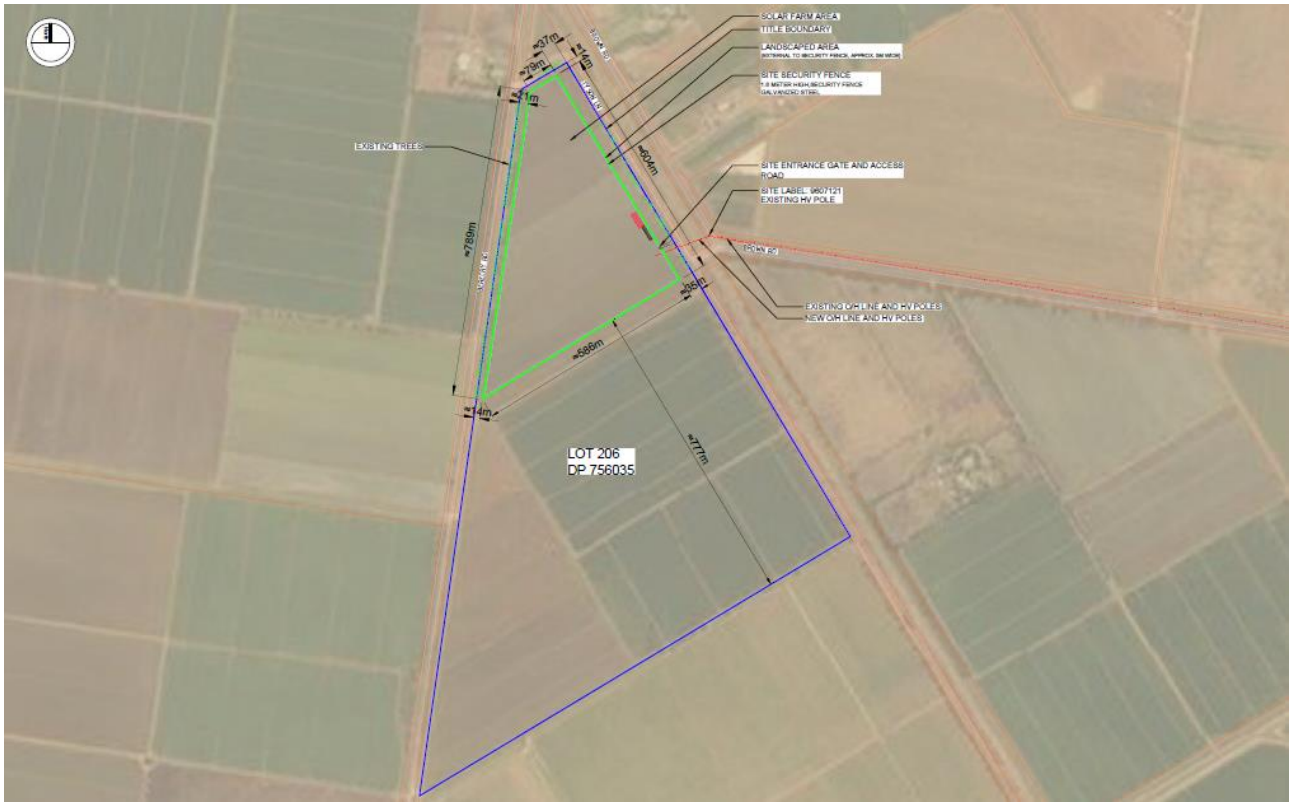


Figure 3: Development Site

The subject property has frontage along both Berecry Road and Tyson Lane, featuring two informal vehicle access points onto Tyson Lane. Tyson Lane is an unpaved, two-way road with a default rural speed limit of 100 km/hr. It runs in a northwest-southeast direction, commencing at Walla Avenue in the southeast and concluding just north of the subject property. Tyson Lane intersects with Berecry Road immediately north of the subject property.

The development site is situated at the northern end of the landowner's land. Previously used for crop cultivation, the development site has undergone clearing. Some planted native vegetation exists adjacent to the boundary of the development site, but this vegetation is not remnant indigenous vegetation, however it is to be retained. The southern portion of the subject property is currently utilised for rice farming. The development site is relatively flat, with existing gradients of approximately 0.1%, sloping from the south towards the northern boundary – **Figure 4**.

Figure 4: Development area and slope.

At present, stormwater flows towards the northern boundary and is collected by shallow swale drains that run alongside the eastern and western boundaries of the property (refer to **IMAGE 1**). These swales discharge offsite near the northeast corner of the site and ultimately into Main Drain J. Additionally, a swale on the southern side of the development site captures any external catchment flows and redirects them around the solar farm via the aforementioned swales.

Image 1: Drainage Lines

Two irrigation channels are located in proximity to the development site:

- The Mirrool Creek Branch Canal runs between the subject property and Berecry Road.
- The Main Drain J follows Tyson Road on the opposite side of the subject property.

The Locality

The subject property is situated in the rural area of the Griffith Local Government Area (LGA), approximately 5.5 km west of Griffith (refer to **Figure 5**). The surrounding locality is predominantly characterised by irrigation farms and associated infrastructure such as water supply and drainage channels, as well as irrigation bridges over roads. The primary land uses in this area include irrigated horticulture, poultry farming, irrigated cropping, and non-irrigated cropping.

Figure 5 – Site Locality.

The development site falls within the Murrumbidgee Irrigation Area (MIA), an extensive agricultural landscape spanning 378,911 ha, with up to 190,000 ha dedicated to irrigation. Services in this region are provided by Murrumbidgee Irrigation.In terms of topography, the locality is mostly flat, with an elevation of approximately 119 m AHD. Vegetation within the area has been predominantly cleared, with the presence of established trees mainly limited to hedgerows, landscaping along road reserves, and around residential properties. Native trees can be found in the road reserves along Tyson Lane and Berecry Road, as indicated in the Landscape Plan.

A 33 kV transmission line runs along Brown Road, which the proposed project would connect to. The Tharbogang Zone substation, located near the Griffith Saleyards, is approximately 3.4 km east of the development site. The Location Diagram showcases the five closest dwellings to the development site, which are also depicted in **Figure 6**.

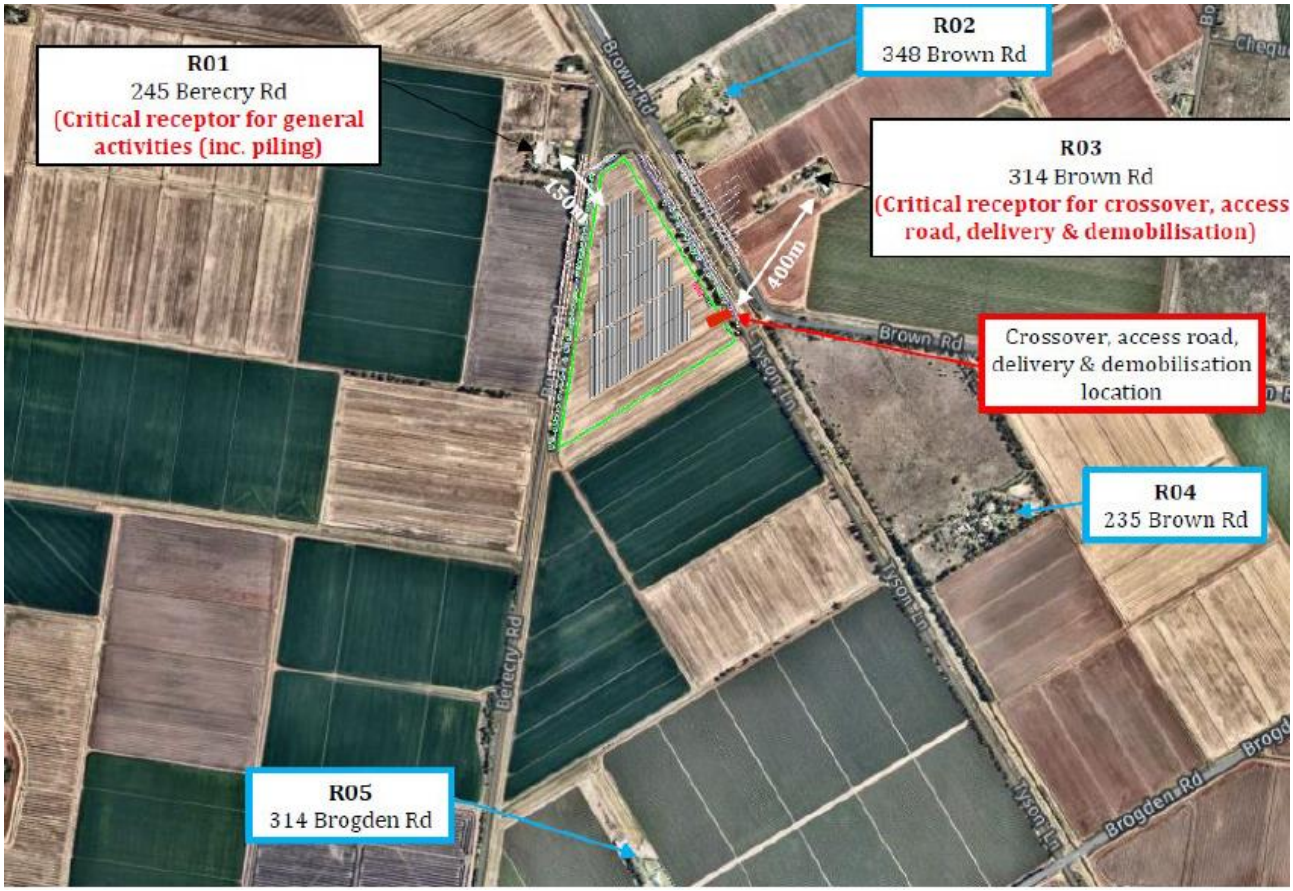


Figure 6: Development Site and 5 nearest dwellings

PART E: BACKROUND INFORMATION AND HISTORY OF THE SITE

Pre-Lodgement

Prior to the application being lodged with Griffith City Council, the proponent for the development had attended a pre-lodgement discussion with Council Officers on the 16th of November 2022. During the pre-lodgement discussion, the following issues were raised verbally (or in writing):

- Construction and operational traffic impact.
- Removal of Native Vegetation.
- Use of land (which may be mapped as State Significant Agricultural Land).
- Use of irrigable land for solar farm.
- Construction of operational visual impact.
- Potential dust impact.
- Cost of Development.
- Planning Approval Pathway.
- Security.
- Landscape.

Development Assessment Panel

The matter was considered at the Development Assessment Panel meeting on 25th of May 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 is required:

- The current cost of work would classify the development as Regional Development under the SEPP – Planning Systems 2021.
- Council confirmed that a Flora and Faunce Assessment and Bushfire Assessment is needing to be prepared.
- Council confirmed that the site is mapped as significant – irrigated land.
- Council confirmed that the development is prohibited under the LEP.
- Council confirmed that the electrical components are required to be above the 1% AEP Flood level.
- A traffic and transport assessment should be prepared.
- Aboriginal due-diligence report is to be prepared.

Council had also sent a request on 26 June to the applicant to respond to the issues raised in the eight (8) submissions received through the notification period.

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 grow rice.

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	~~Yes~~/No
EE&S	National Parks, & Wildlife Act1974 Protection of the Environment Operations Act 1997 Water Management Act 2000	~~Yes~~/No
NSW Heritage	Heritage Act 1977	~~Yes~~/No
Transport for NSW	Roads Act 1993	**Yes**/~~No~~
RFS	Rural Fires Act 1997	~~Yes~~/No
Transport NSW	SEPP Infrastructure – Division 5 Subdivision 2	Yes/~~No~~

Referral	Date Sent	Date Received
Essential Energy	2 June 2023	16 June 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 as are of relevance to the development the subject of the 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 sub-5 megawatt (Mw) solar farm and sub-5 MW 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 are 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 an *Electricity Generating Works* is not listed as a development that is permitted with the consent of the Council. Nonetheless, Electricity Generating Works is permitted within Part 2.3, Division 4 of the SEPP – 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 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 solar farm's capacity enables it to provide power to up to 1000 homes. The development of the solar farm has minimal impact on the surrounding resource lands. It occupies only a relatively small area 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 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 1% Annual Exceedance Probability (1 in 100 year event). The proposed development is for the construction of a sub-5MW solar farm and sub-5MB Battery Energy Storage System. The installation includes 11,000 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.

The high voltage kiosk, central inverter and 4 Battery Energy Storage System containers will be installed on the portion of land that is not flood prone for the 1% Annual exceedance probability.

The applicant has submitted a Stormwater Management Plan, prepared by their consultant Planit Consulting, dated 11/05/2023, detailing the existing stormwater arrangements on site as well as the effects of the proposed development on the stormwater discharge of the site.

Based on hydraulic calculations it was determined that the proposed development, with the additional hardstand areas created for the high voltage kiosk, central inverter, 4 Battery Energy Storage System containers, loading and parking area will result in an additional stormwater discharge of 5% during the 1 in 100year event.

Given that the development site comprises 20 hectares in the northern portion of a 98 hectare allotment, 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 vacant 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:
The applicant has thoroughly considered Clause 5.21 of the LEP, specifically regarding flood behaviour. Engineering Conditions have been provided to address this matter satisfactorily.

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 includes ancillary earthworks which is associated with the construction of the solar farm. These works include.

- Construction of the new vehicle access from Tyson Lane
- Placement of the footings for the solar panels.
- Place footings for the HV kiosk, central inverter and BESS containers.
- Install thee security fence posts and power poles (2).

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 applies to the proposed development as a small amount of the southern section of the project area occupies an area of terrestrial biodiversity. The project area has been overlayed which confirms the only potential impact on the overlay is associated with the works undertaken on the southern portion of the project area.

Figure 7: Part of Development Area (RED) and Terrestrial Biodiversity overlay (GREEN)

(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: As part of the preparation of the Development Application the applicant engaged Habitat Environmental Services to prepare a Flora and Fauna Assessment Report. The proposed project is situated in an agricultural landscape with limited native vegetation and important habitat features that support local fauna and flora species.

To minimise the impact on native vegetation within the study area, the development plan has been carefully designed. All solar panels, trackers, fencing, storage containers, and the carpark will be placed on non-native agricultural lands, ensuring that the majority of the native vegetation remains undisturbed. In addition, a setback will be implemented between the road reserve's native vegetation and the external perimeter fencing.

To provide access from Tyson Lane, a small portion of moderately conditioned native vegetation will be affected. However, the access point has been chosen to avoid direct impacts on native trees in the road reserve.

Provided that the mitigation measures outlined in Section 5.2 of the Flora and Fauna Report are followed, the proposed development is not expected to have significant adverse effects on threatened species, threatened ecological communities, or migratory species.

(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:

The proposed development follows a site-responsive approach, aiming to minimize environmental harm. It takes into consideration the unique characteristics of the site, including its topography, natural features, and existing infrastructure.

To minimise impacts, the solar farm will be situated in an area without vegetation, resulting in only minor effects related to the new access point. The design of the solar farm will also integrate with the existing topography, reducing the need for extensive grading or excavation. Moreover, the project team has identified and conserved any natural features, such as the roadside vegetation, that could be affected by the development.

By employing a site-responsive design and careful siting, the proposed development seeks to minimise environmental impacts and make a positive contribution to the local community.

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	~~Yes~~/No
BASIX 2004	~~Yes~~/No
Exempt and Complying Codes 2008	~~Yes~~/No
Biodiversity and Conservation 2021	~~Yes~~/No
Housing 2021	~~Yes~~/No
Industry and Employment 2021	~~Yes~~/No
Planning Systems 2021	**Yes**/~~No~~
Primary Production	**Yes**/No
Resilience and Hazards 2021	~~Yes~~/No
Transport and Infrastructure 2021	**Yes**/~~No~~
Resources and Energy 2021	~~Yes~~/No

State Environmental Planning Policy – Planning Systems 2021

Clause 2.19 of SEPP – Planning System

2.19Declaration 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 System
5 Private infrastructure and community facilities over $5 million
Development that has a capital investment value of more than $5 million for any of the following purposes—

*(a) air transport facilities, **electricity generating works**, port facilities, rail infrastructure facilities, road infrastructure facilities, sewerage systems, telecommunications facilities, waste or resource management facilities, water supply systems, or wharf or boating facilities,*
(b) affordable housing, 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 capital investment value (CIV) of more than $5 million, and the Project's CIV is approximately $6,772,842.00.

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 not – residential 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.

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 above ground that will connect the electricity generating works to the existing line in Brown Street – **Figure 8**.

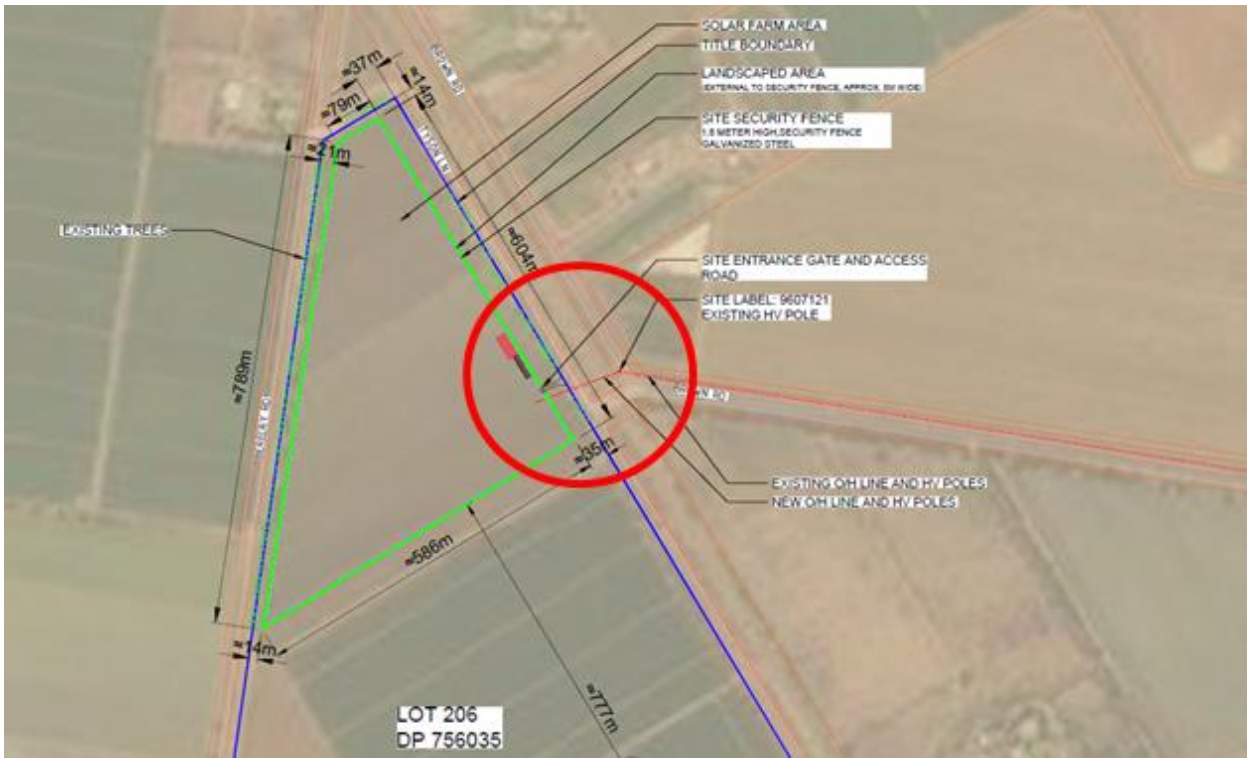


Figure 8- Above Ground HV Work

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.

Council notified Essential Energy of the Development Application. A response was received by Essential Energy on the16/06/2023 and has been attached at of 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 by Essential Energy on the16/06/2023 (**Attachment B)** and has been attached at of this report. The response does not object to the development and outlines certain safety risks.

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

At the Griffith City Council Ordinary Council meeting held on 24 January 2023, Council resolved to place Planning Proposal – PP 2022-3697 on public exhibition for a period of 28 days and seek public submissions. The Planning Proposal proposes to amend the Griffith Local Environmental Plan 2014.

The draft environmental planning instrument is not relevant to this development application.

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/**~~No~~
DCP No. 3	Industrial Development	~~Yes~~/No
DCP No. 11	Urban Subdivision	~~Yes~~/No
DCP No. 19	Mixed Development	~~Yes~~/No
DCP No. 20	Off Street Parking Policy	~~Yes/~~No
DCP 2020	Residential Development Control Plan	~~Yes~~/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)	The site front boundaries include Berecry Road and Tyson Lane. The development sits more than 10m from these boundaries. The development does not sit adjacent to an arterial road.
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.

Design Element	Minimum Development Standard	Assessment
	- A minimum buffer distance (by way of an easement) of twenty (20) metres shall apply over drainage lines and canals.	N/A – there are no natural watercourses within the sites 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.	N/A Noting that passive screening exists with trees. It is recommended that a condition requiring additional landscaping along adjoining roadway be included. Noting the applicant has included a landscape plan that should form part of the condition of consent.
(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.	Added vegetation is proposed for certain buffer areas, to increase the environmental quality of these areas and to mitigate visual impacts. Notably the site does benefit from existing native vegetation along the perimeter of the development area.

Design Element	Minimum Development Standard	Assessment
	- 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	- 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 additional channel crossings	The proposed vehicle access to Tyson Lane will be implemented as a gravel road. The construction of this access will adhere to the standards required for gravel roads, extending from the proposed boundary to the road carriageway. The vehicle access would be a minimum of six (6) metres wide between the edge of the road carriageway and the property boundary. There are no internal roads proposed within the facility.

Design Element	Minimum Development Standard	Assessment
	are proposed consent shall be obtained from Murrumbidgee Irrigation and Council prior to construction. - 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	- 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 Standards for Bushfire	The site has not been identified to be Bushfire Prone Land. 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
	Protection) - 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	Mowing and slashing is the preferred method of construction of firebreaks. Recommendations for this include: - ¾ Mowing a strip up the back of the table drain will help to prevent fires. - ¾ Avoiding any rare or significant plants during firebreak construction. - ¾ Avoid construction of unnecessary firebreaks. - ¾ Avoiding areas where there are native shrubs and trees or revegetated zones when constructing firebreaks. - ¾ Minimisation of damage to native vegetation. Consultation is required with the Rural Fire Services	A 10 m Asset Protection Zone is proposed and will be maintained between the solar panels and the chain mesh fence.

It should be noted that on 30 May Council was advised of the Rural Fire Service commissioning a revised bushfire prone land map which now identifies the subject land as bushfire prone due to it being under cereal crop. This application was lodged (24 May 2023) prior to that mapping being finalised and thus the 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 Tharbogang 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, 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 native 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.

Aboriginal Heritage

A search of relevant heritage registers for Aboriginal sites and places identified 12 Aboriginal Heritage Information Management System (AHIMS) sites within 1km of the Project area. The site has been historically used for agricultural purposes and therefore resembles a disturbed site. It is considered that the project would not damage any sites of Aboriginal heritage value.

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 15 construction staff vehicles will access the site daily resulting in 30 light vehicle movements per day. In addition, it is anticipated that at the peak of the construction delivery period up to 4 heavy vehicles, being a 12.5m rigid truck or a 19m semi-trailer, will access the site per day, resulting in an additional 8 heavy vehicle movements per day.

During operation the Traffic Impact Assessment prepared by Trafficworks, dated 18/04/2023 states that 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. Given that the development is anticipated to generate relatively low numbers of additional traffic during the construction period and that Kidman Way and Brown Road is already an approved heavy vehicle route with an AUL and CHR at the intersection of Brown Road and Kidman Way Council is satisfied that Kidman Way and Brown Road would not require any upgrade works.

The intersection of Brown Road and Tyson Lane Access Road currently has no turning treatments. The existing traffic volumes on Brown Road and Tyson Lane is relatively low and the bridge on Tyson Lane Access Road is designed to cater for heavy vehicles. Given that the development will create fairly low additional traffic volumes for a short period during construction and that construction traffic will only travel on Tyson Lane for approximately 75m before entering the development site, Council is satisfied that Tyson Access Lane and Tyson Lane does not need to be upgraded as part of this development. It will however be conditioned that truck warning signs be installed on Brown Road and Tyson Lane for the duration of the construction period to increase driver awareness.

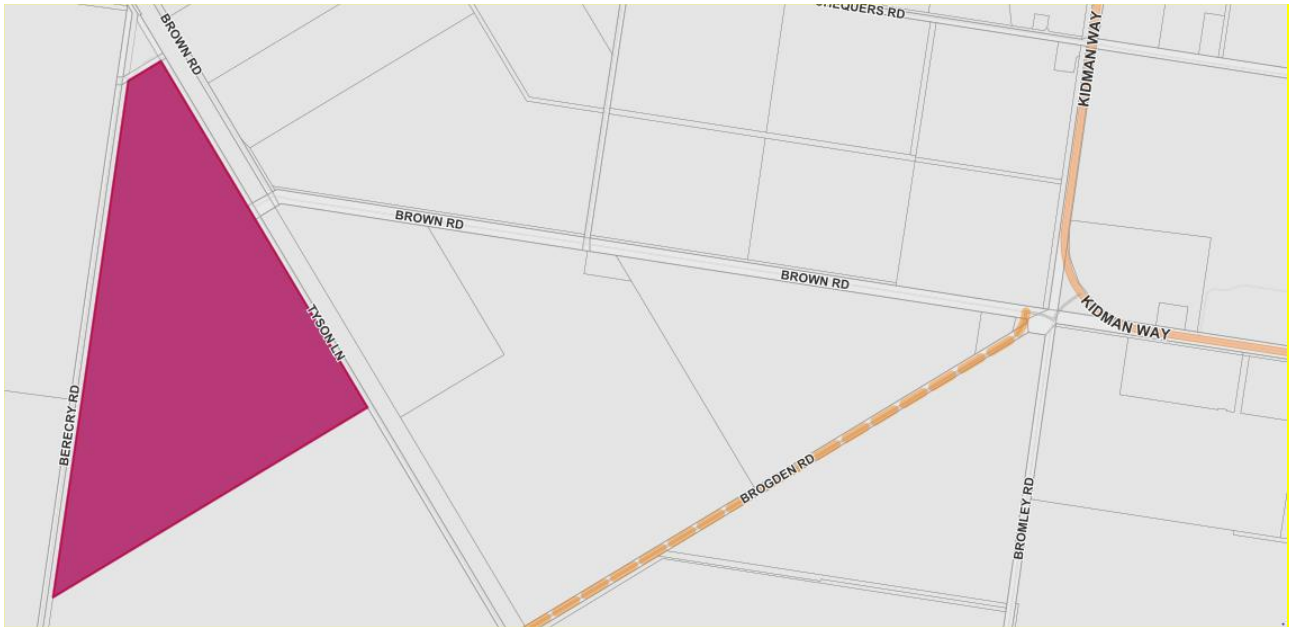


Figure 8 – Surrounding public road network.

As part of the subject Development Application, the applicant has submitted a Traffic Impact Assessment (TIA) completed by their traffic consultant Trafficworks, dated 18/04/2023. 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.

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 development site is mapped as having a Land and Soil Capability (LSC) class of three, which is described as land that has "moderate limitations and is capable of sustaining high-impact land uses, such as cropping with cultivation, using more intensive, readily available and widely accepted management practices. The development site is identified on the draft State Significant Agricultural Land map. The impact on soils and landscape is minimal and is directly associated with the proposed development works. 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.

Air Quality

Any temporary air quality issues that may arise during the construction phase, such as dust, can be effectively managed through the implementation of a Construction and Environment Management Plan. The Flora and Fauna Report prepared by Habitat Environmental Services incorporates various mitigation measures specifically designed to address potential air quality concerns. These measures have been included as specific conditions in the determination notice to ensure their implementation and to safeguard air quality throughout the project.

Biodiversity

Habitat Environmental Services was commissioned to prepare a comprehensive Flora and Fauna Assessment Report for the project. The development site was previously utilised for agricultural purposes and has undergone clearing. Within the development site, there are patches of exotic vegetation, while native vegetation can be found in the road reserve along Tyson Lane and Berecry Road.

To ensure minimal impact on native vegetation, the proposed development has been carefully designed to be situated in cleared areas of the site. The placement of the perimeter fence has been strategically determined to avoid any disturbance to the existing trees and undergrowth along the road reserves. Similarly, the proposed access point from Tyson Lane has been positioned in a way that prevents any harm to the trees in the road reserve. Therefore, no trees would need to be removed for the construction of the project. However, there may be a need to remove a small amount of native vegetation (ground cover) to facilitate the construction of the Tyson Lane access.

The construction and operation of the solar farm have the potential to cause some direct and indirect impacts on flora and fauna. To address this, the Flora and Fauna Report has put forth a number of protective measures that are to be included as specific conditions in the determination notice. These measures aim to mitigate any potential negative effects and ensure the preservation of the local ecosystem.

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 Impact Assessment was prepared by MAC and identified potential sensitive receivers that may be affect by noise from in particular during construction activities. A number of mitigation measures have been recommended and if implemented and will be included in the conditions of consent.

Visual

Environmental Ethos Pty Ltd conducted a Glint and Glare Assessment on behalf of the applicant. The assessment determined that the project will have minimal to low visual impact on the surrounding areas. The modelling conducted as part of the assessment revealed that with the solar farm's tracking system operating under normal conditions, including backtracking and a resting angle of at least 5 degrees, no additional measures are required to mitigate potential glare impacts on receivers.
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

Environmental Ethos. 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. However,

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 support the electricity needs of 1000 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 approximately 1000 homes. By reducing the dependence on electricity imports from distant power plants, the proposal aims to enhance the energy self-sufficiency and resilience of the area, while also promoting 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. 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	2nd to the 9th of Junes 2023
Letters to Neighbours	YES	2nd to the 16th of June 2023

External Referrals	**Date Sent**	**Date Received**
Essential Energy	YES	16th of June 2023

As a result of the public participation process, Council received ten (10) submissions in response to the notification and referral of the development application, in which eight (8) of submissions were unique, there were three (3) from one individual. The applicant prepared a response to each of the concerns raised over the eight submission and a copy of this report has been provided at **Attachment C**. A summary of the concerns raised over the seven submissions have been detailed below and how the applicant has addressed each of the concerns.

Table 2: Submission

ISSUE	COMMENT
Bushfire Risk	
Increase Fire Risk	The area and vicinity have been largely cleared for extensive agriculture, with a few trees found along roadsides, hedgerows, and near dwellings. However, there are no dense forested areas that could potentially fuel a bushfire. Thus, the main fire hazard at this location would be grass fires originating from nearby paddocks rather than forest fires or other types of wildfires. Currently, the development site is utilised for irrigated cropping, which poses a low risk of causing or spreading bushfires (though mapped by RFS as grassland vegetation). The primary fire risk in this landscape context occurs during harvest when machinery and vehicles traverse through cropped paddocks. To address any potential fire risks, a comprehensive bushfire management and emergency response plan has been prepared for the proposed development. This plan assesses that the proposal would not significantly increase the risk of bushfires when compared to the current land use for cropping. The plan provides specific recommendations for the design and operation of the proposed development.
Fire Risk from BESS Containers	In the event of a fire outbreak within the BESS, the containers are equipped with a range of integrated fire protection mechanisms that operate in unison. These include smoke and thermal sensors, a combustible gas detector, a pressure relief system, and an aerosol fire extinguishing system. Together, these devices work harmoniously to automatically suppress any internal fire.
Toxic Smoke	Solar panels are typically comprised of non-metallic materials such as silicon, mono- or polycrystalline silicon, glass, composite film, plastic, and epoxies, with an anodised aluminium frame. The type of panels used for solar farms are the same as those used for domestic rooftop solar and are not considered to pose any specific hazards in the event of a fire.
Environmental Hazards and Risks	
Health impacts from electronic magnetic radiation	Section 7.5.1 of the Statement of Environmental Effects (SEE) deals with the evaluation of potential electromagnetic radiation effects. Based on the assessment, the proposal is deemed to have no adverse impacts resulting from the emission of electromagnetic radiation.
Stress due to living near the solar farm	Section 7 of the SEE addresses issues like hazardous materials, noise, and bushfire risk, concluding that the proposal, with proper safeguards, won't significantly impact these aspects. Independent reports support this. Additionally, the determination notice has enforced safeguards during construction and operation to minimize adverse impacts.
Social and Economic Impacts	
Use of irrigated farmland for no-agricultural purposes	The solar farm's construction will be followed by revegetation with pasture species and maintained groundcover. Grazing will continue on the land, reducing weed growth. The proposal won't cause a complete loss of high-quality agricultural land, as alternative agricultural activities will persist. It won't conflict with adjacent land uses. During decommissioning, all infrastructure, including underground cabling, will be removed.

	Section 7.7 of the SEE addresses potential impacts of using irrigated farmland for non-agricultural purposes. In addition, ACEnergy's Agricultural Impact Assessment by Meridian Agriculture found: - Negligible loss of production during the 30-year life in terms of regional and state crop production. - No long-term detrimental effects on soil productivity or overall regional/state productivity, nor on neighbouring businesses' operations. The determination notice to include specific condition/s relating to the decommissioning of the Solar Farm which requires further testing to ensure the soil fertility has not declined.
NIL benefits to the environment	The proposal would feed 4.95 MW into the electricity grid and provide about 11 MWh of electricity storage to meet peak time demand. The proposal would avoid the need for Essential Energy to enact demand management measures in the area. This would allow businesses in the area to grow without any limitations on electricity supply. The development would contribute to the states renewable energy targets.
Biodiversity Impacts	
Impact on River Red Gums along Tyson 'Lane	The proposed development will not involve the direct removal of any River Red Gum trees to proceed. Furthermore, the cessation of irrigation in the area is not expected to have adverse effects on the longevity and health of the trees. The vegetation will still access alternative water sources, such as ground water and seepage from the drainage channel on the western side of the site, to sustain their well-being.
Dryland Salinity Impacts	Temporary dryland conditions are not anticipated to lead to an increase in salinity. Salinity concerns are typically linked to land irrigation practices. It is essential to acknowledge that the site will still be influenced by annual rainfall and water seepage from drainage channels, which can play a role in its overall condition.
Weed Spread	The proposal's flora and fauna assessment identified 31 exotic plant species on the development site, with three (3) being weeds of national significance. The assessment proposes safeguards to minimize weed spread during both construction and operation of the proposal. These requirements are represented as a condition within he determination notice.
Soil and Water Contamination	
Hail Damage	The applicant provided a Hail Test Report from manufacturer JA Solar which shows that the product has no major visual defects are the hail related.
Waste Management	
Council Waste Facilities would not be able to process the material after decommissioning.	The majority of the facility components can be salvaged and have value. Both recyclable and non-recyclable materials will be recycled as much as possible, following state and federal regulations at a licensed solid waste or e-waste facilities. A Waste Management Plan is conditioned in the determination notice which will detail the management strategies to be implemented at the decommission stage.
Toxic Waste	No toxic waste is to be generated. All waste will be managed under a Waste

	Management Plan.
Location of Solar Farm in proximity to Cities.	The electricity generated and stored on the site would be exclusively for local use. Consequently, there would be no long-distance transmission of electricity to or from the proposal.
Cumulative Impacts	
Construction of additional Transmission lines	The proposal includes installing an overhead line from the HV Kiosk to the existing 33 kV power line on Brown Road, involving the construction of three (3) poles. This installation is not expected to cause any adverse environmental impacts.
Reduced Available Farmland	NSW has around 80 million ha of land, of which 2.8 million ha is identified as State Significant Agricultural Land on the draft map. The project encompasses the utilization of 20 hectares of land, representing nearly 20% of the total property area of 98 hectares, for the establishment of a solar farm. The remaining southern section, currently used for rice cultivation, will be preserved, while the allocated land for the solar farm will be utilized for sheep grazing. With a projected lifespan of 30 years, the solar farm can be decommissioned and returned to agricultural use if not upgraded.
Unreliable. Electricity source	The use of micro solar can reduce a community's need to import electricity over long distances. This, in turn, reduces the need for electricity distributors to construct and maintain higher-voltage transmission lines.
Other	
Inadequate Consultation	The proposed development was notified in accordance with Council's policy and the *Environmental Planning and Assessment Act 1979*.

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 are not a head of 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 environmental 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.
In light of this comprehensive assessment, it can be concluded that the proposed development is unlikely to give rise to any issues 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 environment.

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 proposed development involves (describe the development in terms of the requirement of the s7.12 triggers) and is within the (insert details) precinct.

The calculations associated with the section 7.12 contributions payable at 1% of the cost of works being $6,772,842 (excluding consultant fees) - $67,728.42.

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	31 May 2023
Engineering	See attached Engineering assessment	30 June 2023
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 Griffith City Council as the consent authority pursuant to section 4.16 of the Environmental Planning & Assessment Act 1979 grant consent to Development Application No: 212/2022(1) for Sub- 5mW at 2773 Berecry Road, Tharbogang (Lot 206 in DP 756035).

ASSESSING / DELEGATED OFFICER		Date
Name:	Consultant	27/07/2023
Position:	Outsourced Consultant	
Signature:	……	

REVIEWING / DELEGATED OFFICER		
Name:	Kerry Rourke	27/07/2023
Position:	Acting Development Assessment Coordinator	
Signature:	Kerry Rourke	

Attachment: Internal Referrals

Building Surveyor Assessment

In regards to the proposed solar farm – DA 93/2023.

There doesn't appear to be any permanent "buildings" on site, however, a construction certificate is required for the battery container, installation of the solar panel (footing and frame) and the perimeter security fencing (1.8m high chain link fence). These would all be 10b structures. Architectural designs have been submitted for each.

Please include the following standard conditions.

Code	Condition
AC1127	NCC
AC 1103	CC – Building Work
PCW1502	Protection of adjoining areas
CCB1221	LSL
PCW1503	Notification of commencement & appointment of PCA
DC1701	No obstruction of public way
PCW1504	Erection of signs
DC1702	Shoring & adequacy of adjoining property
DC1703	Maintenance of site
DC 1704	Survey of building – Site fencing to be wholly within the site
POC 1920	Submission of survey
DC1705	Toilet facilities
DC1706	SafeWork NSW
DC1707	Required documentation
DC1715	Hours of work

Engineering Assessment

This Engineering Assessment relates to the above development and addresses the following issues:

Clause 7.1 of the GLEP 2014 – 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.*
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.*

The proposed development will **require Construction Certificates prior to the commencement of any earthworks**, therefore the matters for consideration listed above will be addressed based on the information provided **prior to Construction Certificate** approval.

Clause 5.21 of the GLEP 2014 – Flood Planning

An Aerial Laser Survey (ALS) of the Griffith LGA was conducted as part of the *Griffith Main Drain J & Mirrool Creek - Yenda Flood Mapping Update 2021 (Torrent Consulting).* Information pertaining to the flood levels of the subject allotment has been extrapolated from this documentation.
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,*

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 the land that is flood prone.

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

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).

The proposed development is for the construction of a sub-5MW solar farm and sub-5MB Battery Energy Storage System. The installation includes 11,000 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. The high voltage kiosk, central inverter and 4 Battery Energy Storage System containers will be installed on the portion of land that is not flood prone for the 1% Annual exceedance probability.

The applicant has submitted a Stormwater Management Plan, prepared by their consultant Planit Consulting, dated 11/05/2023, detailing the existing stormwater arrangements on site as well as the effects of the proposed development on the stormwater discharge of the site. Based on hydraulic calculations it was determined that the proposed development, with the additional hardstand areas created for the high voltage kiosk, central inverter, 4 Battery Energy Storage System containers, loading and parking area will result in an additional stormwater discharge of 5% during the 1 in 100 year event. Given that the development site comprises 20 hectares in the northern portion of a 98 hectare allotment, 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.

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

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.

d. incorporates appropriate measures to manage risk to life from flood, and

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.

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.

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 vacant 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.*
4. *A word or expression used in this clause has the same meaning as it has in the Considering Flooding in Land Use Planning Guideline unless it is otherwise defined in this clause.*
5. *In this clause:*

    Considering Flooding in Land Use Planning Guideline *means the Considering Flooding in Land Use Planning Guideline published on the Department's website on 14 July 2021.*

    Flood planning area *has the same meaning as it has in the Floodplain Development Manual.*

    Floodplain Development Manual *means the Floodplain Development Manual(ISBN 0 7347 5476 0) published by the NSW Government in April 2005.*

Clause 7.10 of the GLEP 2014 – 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,

This development does not require a water supply.

b. the supply of electricity,

This development does not require an electricity supply.

c. the disposal and management of sewage,

This development does not require connection to a sewer system.

d. stormwater drainage or on-site conservation,

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).

The proposed development is for the construction of a sub-5MW solar farm and sub-5MB Battery Energy Storage System. The installation includes 11,000 solar panels mounted on tracker posts, one high voltage kiosk, one central inverter, 4 Battery Energy Storage System containers and hardstand areas for un/loading and parking. 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. The high voltage kiosk, central inverter and 4 Battery Energy Storage System containers will be installed on the portion of land that is not flood prone for the 1% Annual exceedance probability.

The applicant has submitted a Stormwater Management Plan, prepared by their consultant Planit Consulting, dated 11/05/2023, detailing the existing stormwater arrangements on site as well as the effects of the proposed development on the stormwater discharge of the site. Based on hydraulic calculations it was determined that the proposed development, with the additional hardstand areas created for the high voltage kiosk, central inverter, 4 Battery Energy Storage System containers and loading and parking areas will result in an additional stormwater discharge of 5% during the 1 in 100 year event. Given that the development site comprises 20 hectares in the northern portion of a 98 hectare allotment, 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 suitable arrangements will be available for stormwater drainage.

e. suitable vehicular access.

The development site is currently vacant and was previously used for agricultural purposes.
Access to the site is currently gained by an existing informal 6m wide gravel accessway off Tyson Lane which is located to the south of the intersection of Tyson Lane Access Road and Tyson Lane. The proposed development relates to the development of a sub-5MW solar farm and sub-5MB Battery Energy Storage System. The installation includes 11,000 solar panels mounted on tracker post, one high voltage kiosk, one central inverter, 4 Battery Energy Storage System containers and hardstand areas for un/loading and parking. The solar farm will be located on 20 hectares in the northern portion of the subject allotment. The applicant proposes to gain access to the development site by a new accessway off Tyson Lane, north of the intersection of Tyson Lane Access Road and Tyson Lane.

The Statement of Environmental Effects states that the proposed accessway will be a minimum of 6m wide and be constructed to gravel road standard between the property boundary and the road carriage way. It will be conditioned that an accessway plan with turning path diagrams is to be submitted to Council prior to the issue of a Construction Certificate to justify suitable tapers connecting to the road carriageway to accommodate 19m semi-trailers. This is to justify the width of the proposed access and the tapers at the connection point of the access to the Tyson Lane carriageway. In addition, it will be conditioned that the accessway is to be an all-weather access constructed from 200mm of compacted road gravel and shall include a concrete culvert with concrete headwalls and guideposts to delineate the accessway.

The development site will be fenced and a gate installed at the accessway. The Statement of Environmental Effects state that the proposed gate will be set back 40m from Tyson Lane. This will provide ample storage space for a 19m semi-trailer in the event where the gate is closed at the time of delivery. It will be conditioned that the proposed gate be set back a minimum of 40m from the edge of Tyson Lane to provide adequate storage space for a 19m semi-trailer.

The Statement of Environmental Effects states that location of the proposed accessway has been selected to avoid impacts on trees planted in the subject allotment, on the boundary and in the road reserve. The Traffic Impact Assessment completed by Trafficworks, dated 18/04/2023 assesses the sight distance from the proposed accessway location given the 100km/h speed zone of the road fronting the development site. It was concluded that the proposed sight access along

Tyson Lane satisfied the requirements as specified in AS/NZ 2890.1. Upon review of the information provided Council is in agreement that the location of the proposed accessway is satisfactory.

It is considered by Council that through the conditions of consent, suitable vehicular access will be available to proposed development.

State Environmental Planning Policy (Infrastructure) 2007

SEPP (Infrastructure) 2007 specifies that this Development Application does not require referral to Transport for NSW (TfNSW).

Compliance with Council's Engineering Guidelines - Subdivisions and Development Standards

Consent Approval Conditions will ensure the development complies with *Council's Engineering Guidelines - Subdivisions and Development Standards* **prior to the issue of a Construction Certificate**.

Compliance with AS 2890

As part of the subject Development Application, the applicant has submitted a Traffic Impact Assessment (TIA) completed by their traffic consultant Trafficworks, dated 18/04/2023. 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. **The Responsible Planning Officer will be required to determine the number of parking and disabled parking spaces required onsite as part of the proposed development**.

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*. The conditions of consent were justified by the following:

Car parking dimensions have been assessed as "user class 3" - Table 1.1 AS2890. Council's requirement of car park dimensions are 2.6m wide x 5.5m long in accordance with Council's Development Control Plan 20 Off-Street Parking 2011, this slightly exceeds the Australian Standard and will be conditioned accordingly.

All parking spaces are to be constructed of gravel and required to be delineated in accordance with AS 2890.1:2004.

As specified in AS2890:2004 all vehicles are to enter and leave the site in a forward direction
All internal vehicular manoeuvring aisles and parking areas shall be maintained clear of obstruction for the life time of the development. This is to ensure all vehicles can easily circulate within the development site.

Access, Traffic and Transport

Existing Accessway(s)/Driveway(s)

The development site is currently vacant and was previously used for agricultural purposes. Access to the site is currently gained by an existing informal 6m wide gravel accessway off Tyson Lane which is located to the south of the intersection of Tyson Lane Access Road and Tyson Lane.

Proposed Accessway(s)/Driveway(s)

The proposed development relates to the development of a sub-5MW solar farm and sub-5MB Battery Energy Storage System. The installation includes 11,000 solar panels mounted on tracker posts, one high voltage kiosk, one central inverter, 4 Battery Energy Storage System containers and hardstand areas for un/loading and parking. The solar farm will be located on the northern portion of the subject allotment. The applicant proposes to gain access to the development by a new accessway off Tyson Lane, north of the intersection of the intersection of Tyson Lane Access Road and Tyson Lane.

The Statement of Environmental Effects states that the proposed accessway will be a minimum of 6m wide and be constructed to gravel road standard between the property boundary and the road carriage way. It will be conditioned that an accessway plan with turning path diagrams is to be submitted to Council prior to the issue of a Construction Certificate to justify suitable tapers connecting to the road carriageway to accommodate 19m semi-trailers. This is to justify the width of the proposed access and the tapers at the connection point of the access to the Tyson Lane carriageway. In addition, it will be conditioned that the accessway is to be an all-weather access constructed from 200mm of compacted road gravel and shall include a concrete culvert with concrete headwalls and guideposts to delineate the accessway.

The development site will be fenced and a gate installed at the accessway. The Statement of Environmental Effects state that the proposed gate will be set back 40m from Tyson Lane. This will provide ample storage space for a 19m semi-trailer in the event where the gate is closed at the time of delivery. It will be conditioned that the proposed gate be set back a minimum of 40m from the edge of Tyson Lane to provide adequate storage space for a 19m semi-trailer.

The Statement of Environmental Effects states that location of the proposed accessway has been selected to avoid impacts on trees planted in the subject allotment, on the boundary and in the road reserve. The Traffic Impact Assessment completed by Trafficworks, dated 18/04/2023 assesses the sight distance from the proposed accessway location given the 100km/h speed zone of the road fronting the development site. It was concluded that the proposed sight access along Tyson Lane satisfied the requirements as specified in AS/NZ 2890.1. Upon review of the information provided Council is in agreement that the location of the proposed accessway is satisfactory.

Existing Road Network

The existing road network that will be used to access the site consists of Kidman Way, Brown Road and Tyson Lane. Refer to Figure 1

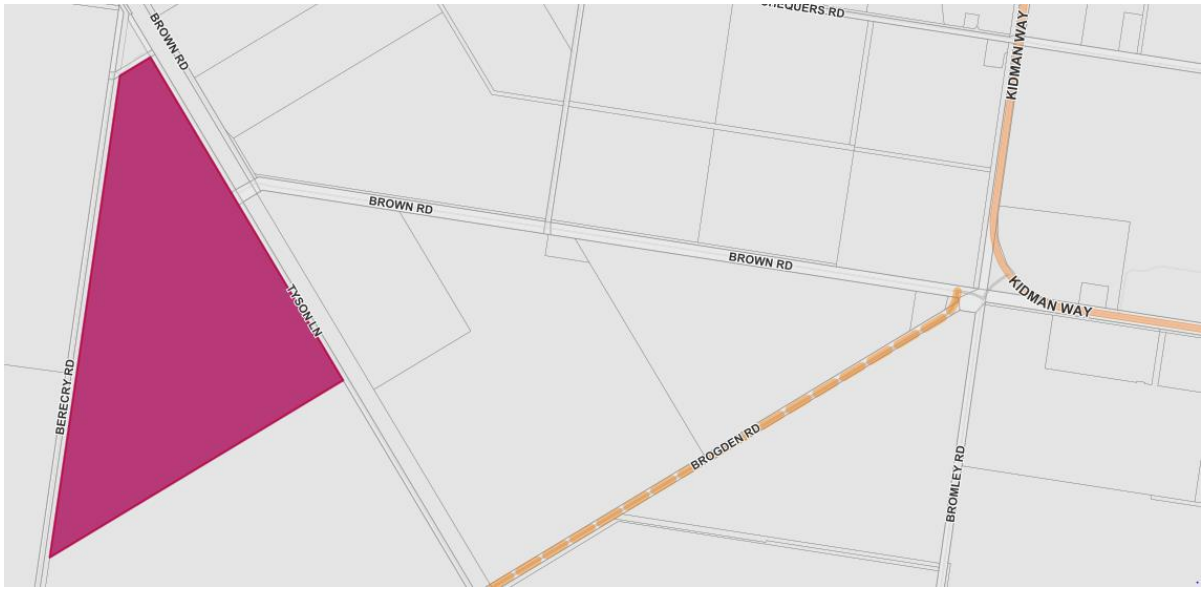


Figure 1: Existing Road Network (Source: IntraMaps)

Kidman Way

The Kidman Way is located east of the subject site and is classified as a state road under the control of Transport for New South Wales (TfNSW). Kidman Way is sealed, approximately 7.5m wide, providing one lane of traffic in each direction with sealed shoulders along both sides of the road. The speed limit on Kidman Way in the vicinity of the intersection of Brown Road and Kidman Way is 80km/h. An Auxiliary Left Turn (AUL) treatment and Channelised Right turn (CHR) treatment has been constructed at the intersection of Brown Road and Kidman Way. Kidman Way is an approved heavy vehicle route for vehicles up to an including road trains.

The Traffic Impact Assessment prepared by the applicant's consultant Trafficworks utilised information gained from TfNSW Traffic Volume Viewer and determined that the two way traffic on Kidman way is approximately 3014 vehicles per day, with approximately 255 vehicles in the morning peak period and 250 vehicles in the afternoon peak period.

Brown Road

Brown Road is located east of the subject site and is classified as a local road under the control of Griffith City Council. Brown Road is sealed, approximately 6.7m wide, providing one lane of traffic in each direction. The default speed limit of 100km/h applies to Brown Road. Brown Road provides connection between Kidman Way and Tyson Lane Access Road located approximately 2.8km west from the intersection of Brown Road and Kidman Way. Brown Road is an approved heavy vehicle route for vehicles up to an including road trains.

Council has supplied traffic counts taken on Brown Road during September 2017 to the applicant's traffic consultant Trafficworks. From the traffic counts provided the applicant's consultant Trafficworks determined that the current two way daily traffic on Brown Road is estimated to be approximately 498 vehicles per day with 29 vehicles in the morning peak period and 25 vehicles in the afternoon peak period.

Tyson Lane Access Road

Tyson Lane Access Road is a local road under the control of Griffith City Council. Tyson Lane Access Road provides connection between Brown Road and Tyson Lane. Tyson Lane Access Road is unsealed, approximately 7m wide and provides one lane of traffic in each direction. Tyson Lane Access Road has a bridge structure crossing Main Drain J. The Traffic Impact Assessment prepared by the applicant's consultant Trafficworks states that Murrumbidgee Irrigation confirmed

"The bridge is designed based on SM1600 loading and designed for B-Double (HML 68t), B-Triple (HML 90.5t) and Road Train (A-Double HML 85t)". The default speed limit of 100km/h applies to Tyson Lane.

Council does not have any information regarding the traffic numbers on Tyson Lane Access Road.

Tyson Lane

Tyson Lane is located along the north-eastern boundary of the subject allotment and is classified as a local road under the control of Griffith City Council. Tyson Lane is unsealed, approximately 7m wide, providing one lane of traffic in each direction. The default speed limit of 100km/h applies to Tyson Lane.

Council does not have any information regarding the traffic numbers on Tyson Lane. The Traffic Impact Assessment prepared by the applicant's consultant Trafficworks states that it is assumed that Tyson Lane carries up to 50 vehicles per day with morning and afternoon peak of 5 vehicles per hour. Upon review Council is in agreement with this assumption as Tyson Lane is not a through road that provide access to an extended road network.

Type of Traffic Expected to the Site

The applicant has stated in the submitted Traffic Impact Assessment that the traffic accessing the proposed development will range from passenger vehicles to 19m semi-trailers during the 6 month construction period. Following the construction period, it is anticipated that only light passenger vehicles will access the site for maintenance purposes.

Increase in Traffic to the Site

The RTA (now TfNSW) *Guide to Traffic Generating Developments* does not provide a base rate for solar energy facilities. The Traffic Impact Assessment prepared by Trafficworks, dated 18/04/2023 provides anticipated traffic generation volumes during construction and operation of the facility based on information supplied by the applicant.

Construction phase

During the 6 month construction phase it is anticipated that 15 construction staff vehicles will access the site daily resulting in 30 light vehicle movements per day. In addition, it is anticipated that at the peak of the construction delivery period up to 4 heavy vehicles, being a 12.5m rigid truck or a 19m semi-trailer, will access the site per day, resulting in an additional 8 heavy vehicle movements per day.

Operational phase

The Traffic Impact Assessment prepared by Trafficworks, dated 18/04/2023 states that 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.

Given that the development is anticipated to generate relatively low numbers of additional traffic during the construction period and that Kidman Way and Brown Road is already an approved heavy vehicle route with an AUL and CHR at the intersection of Brown Road and Kidman Way Council is satisfied that Kidman Way and Brown Road would not require any upgrade works.

The intersection of Brown Road and Tyson Lane Access Road currently has no turning treatments. The existing traffic volumes on Brown Road and Tyson Lane is relatively low and the bridge on Tyson Lane Access Road is designed to cater for heavy vehicles. Given that the development will create fairly low additional traffic volumes for a short period during construction and that construction traffic will only travel on Tyson Lane for approximately 75m before entering the development site, Council is satisfied that Tyson Access Lane and Tyson Lane does not need to be upgraded as part of this development. It will however be conditioned that truck warning signs be installed on Brown Road and Tyson Lane for the duration of the construction period to increase driver awareness.

Loading/Unloading Arrangements

The site plan (ACENERGY, drawing no G-1.1_221101, Rev A, dated 04/04/2023) indicates a dedicated off load zone during the construction period, wholly contained within the boundaries of the subject allotment. The Statement of Environmental Effects states that this will be an unsealed area, constructed of crushed rock.

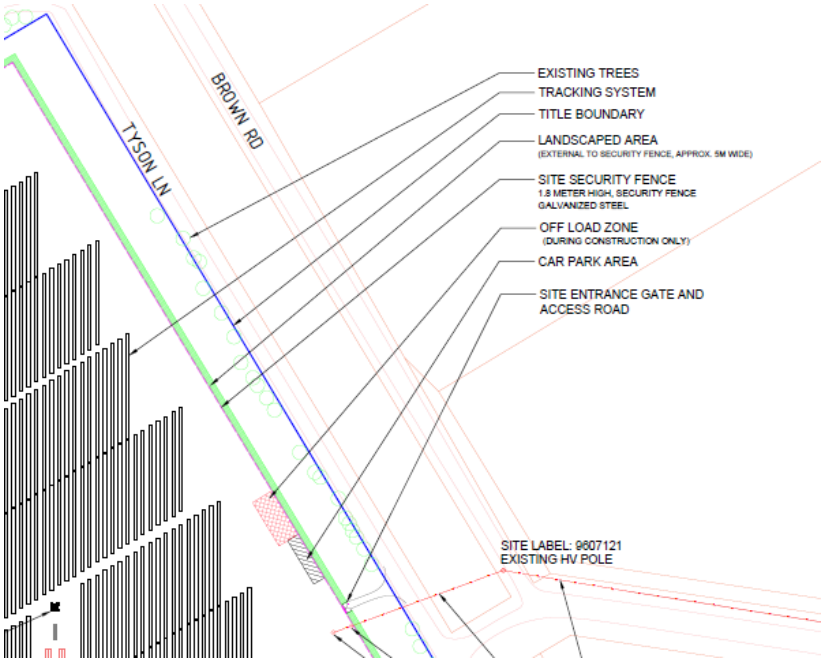


Figure2: Site Layout showing Off Load Zone
(Source: ACEnergy, drawing G-1.1_221101, Rev A)

Carparking Arrangements

As part of the subject Development Application, the applicant has submitted a Traffic Impact Assessment (TIA) completed by their traffic consultant Trafficworks, dated 18/04/2023. 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. **The Responsible Planning Officer will be required to determine the number of parking and disabled parking spaces required onsite as part of the proposed development**.

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*. The conditions of consent were justified by the following:

Car parking dimensions have been assessed as "user class 3" - Table 1.1 AS2890. Council's requirement of car park dimensions are 2.6m wide x 5.5m long in accordance with Council's Development Control Plan 20 Off-Street Parking 2011, this slightly exceeds the Australian Standard and will be conditioned accordingly.

All parking spaces are to be constructed of gravel and required to be delineated in accordance with AS 2890.1:2004.

As specified in AS2890:2004 all vehicles are to enter and leave the site in a forward direction

All internal vehicular manoeuvring aisles and parking areas shall be maintained clear of obstruction for the life time of the development. This is to ensure all vehicles can easily circulate within the development site.

Pedestrian Services

The subject allotment has not been identified in Council's *Griffith Pedestrian and Bicycle Strategy – July 2021* as an allotment that requires a footpath or other pedestrian links. The applicant will not be required to install pedestrian footpath as part of the subject Development Application.

Non-Essential Utilities

Gas

This development does not require a gas connection.

Telecommunications

The applicant is to make their own arrangements with the service provider for an adequate connection to this service for the proposed development if required. All costs are to be borne by the applicant.

Engineering Conditions

The following engineering conditions apply to the development above:

General Conditions

PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE

1. **CCB1249 S138 Roads Act**

   Prior to the issue of a Construction Certificate, a Section 138 Roads Act application, including payment of fees, shall be lodged with Griffith City Council, as the Roads Authority for any works required within a public road. These works may include but are not limited to:

   a. vehicular crossings (including kerb reinstatement of redundant vehicular crossings)
   b. Road opening for utilities and stormwater (including stormwater connection to Council Infrastructure).
   c. Road Occupancy or road closures

   All works shall be carried out with the Roads Act approval, the development consent including the stamped plans and Griffith City Council specifications.

PRIOR TO COMMENCEMENT OF WORK

2. **AC1110 Damage to Council Property**

   If any damage is occasioned to Council property during construction and associated works, the cost of repairs will be recoverable. It is therefore requested that any damage which is obvious before works commence be immediately notified to Council to avoid later conflict.

3. **PCW1513 Sedimentation and Erosion Controls**

   Effective dust, noise, sedimentation and erosion controls are to be implemented prior to the commencement of site works. This is to include (as a minimum):

   a. The installation of a sediment fence with returned ends across the low side of the works; and
   b. A temporary gravel driveway into the site. All vehicles needing to access the site are to use the temporary driveway.

   The control measures are to be installed **prior to the commencement of site works** and maintained during works in order to ensure that site materials do not leave the site and/or enter the stormwater system and to maintain public safety/amenity.

4. **PCW1507 Traffic Management Plan (TMP)**

   (AMENDED) A Traffic Management Plan (TMP) with all supporting documentation, including all relevant Traffic Guidance Schemes (TGS), is to be submitted to Council for approval **prior to the commencement of work** within Council's road reserve. The TMP must comply with the requirements of Transport for New South Wales' Traffic Control at Work Sites Technical Manual (TCAWS Manual), Standards Australia's Manual of uniform traffic control devices, Part 3: Traffic control for works on roads (AS1742.3), and Austroads' Guide to Temporary Traffic Management (AGTTM).

   The TMP must be prepared by a person/s with a 'Prepare a Work Zone Traffic Management Plan' qualification. Strict compliance to the TMP is to be maintained throughout the duration of the works. All inspections of the TMP and collection of records must comply with the requirements of the TCAWS Manual.

5. **PCW1506 Construction Management Plan (CMP)**

   Prior to the commencement of work, a Construction Management Plan is to be prepared by a suitably qualified professional detailing the proposed traffic control and traffic management arrangements during the construction of the development. The Construction Management

Plan is to be submitted to Council for approval and is to address, but not be limited to, the following:

a. the management of traffic during construction;
b. the management of loading and unloading of construction materials on site;
c. material stockpiling/storage;
d. identify parking for construction worker vehicles;
e. dust mitigation measures; and
f. complaint management and contingency measures.

The construction and traffic management measures specified in the approved Construction Management Plan shall be implemented for duration of construction.

DURING CONSTRUCTION

6. DC1710 Sedimentation and Erosion Controls

The approved erosion and sediment control measures shall be implemented and maintained during works.

7. AC1112 Existing Services

The applicant must check that the proposed works do not affect any Council, electricity, telecommunications, gas or other services. Any required alterations to services will be at the developer's expense.

8. AC1107 Provision of Services

The applicant is to be responsible for all amplification, extension and adequate provision for connection to services at their own expense. The work is to be in accordance with Council's *Engineering Guidelines – Subdivisions and Development Standards* and relevant authorities' specifications.

PRIOR TO USE OR OCCUPATION

9. POC2011 S138 Roads Act Approval

Prior to the issue of an Occupation Certificate, the Principle Certifying Authority shall ensure that all works associated with a S138 Roads Act approval have been inspected and signed off by Griffith City Council.

Stormwater

PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE

1. PSC1820 Stormwater Drainage

Adequate arrangements are to be made for the disposal of stormwater. Stormwater runoff shall not be permitted to flow over the property boundaries onto the adjoining properties unless legally created easements in accordance with Section 88B of the Conveyancing Act are created.

Detailed design drawings for the proposed stormwater drainage system are to be submitted to Council for approval in accordance with Council's *Engineering Guidelines – Subdivision and Development Standards* **prior to the issue of a Construction Certificate**.

PRIOR TO USE OR OCCUPATION

2. POC1958 Installation of stormwater infrastructure

(AMENDED) Prior to the issue of an Occupation Certificate, the stormwater drainage system for the proposed solar farm is to be constructed in accordance with an approved plan, Council's *Engineering Guidelines – Subdivisions and Development Standards, and Council's Stormwater Drainage & Disposal Policy (CS-CP- 310).*

Flooding

ADVISORY

1. ADV2207 Installation of electrical equipment

(AMENDED) The applicant is advised that the proposed development is situated on flood liable land. To minimise the likelihood of damage of property from flooding, it is advised that all electrical equipment be kept above the 1 in 100 year flood level. The choice of building materials, internal fixtures and floor coverings should also be considered.

To establish the exact depth of flood waters on any part of an allotment, the applicant is advised to obtain a survey plan of the allotment.

Access & Roads

PRIOR TO COMMENCEMENT OF WORK

1. **CCB1225 Truck warning signs**
   Prior to the Commencement of Work truck warning signs is to be installed Brown Road and Tyson Lane on the approach to the intersection with Tyson Lane Access Road for the duration of the construction period.

PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE

2. **CCB1225 Turning path diagrams to justify suitable access tapers**
   Prior to the issue of a Construction Certificate, an amended accessway plan with turning path diagrams is to be submitted to Council to justify suitable tapers connecting to the road carriageway to accommodate 19m semi-trailers for the proposed accessway off Tyson Lane. This is to justify the width of the proposed access and the tapers at the connection point of the access to the Tyson Lane carriageway. Turning path diagrams are to be in accordance with Austroads Design Vehicles and Turning Path Templates Guide 2013.

PRIOR TO USE OR OCCUPATION

3. **POC1932 Accessway construction**
   Prior to the issue of an Occupation Certificate, an all-weather access is to be provided between the property boundary and the road carriageway off Tyson Lane. The accessway is to be constructed with 200mm of compacted road building gravel and shall include a concrete culvert with concrete headwalls and guideposts. The accessway is to be constructed in accordance with Council's *Engineering Guidelines – Subdivisions and Development Standards.*
4. **POC1935 Internal driveways**
   Prior to the issue of an Occupation Certificate the internal driveway to the proposed solar farm is to be constructed of gravel to an all-weather standard in accordance with Council's *Engineering Guidelines – Subdivisions and Development Standards.*

ONGOING

5. **ON2192 Sight Distance**
   Any landscaping, fencing or signage to be provided within the site or along the boundary with any adjoining road reserve is to be designed and maintained to provide safe sight distance to pedestrians for motorists entering and exiting the site to minimise conflict in accordance with AS2890.1-2004 "Off-street car parking".

6. **ON2136 Access maintenance**
   The property owner remains responsible for the upkeep and maintenance of the accessway and associated facilities for the lifetime of the proposed development.
7. **ON2191 Entry Gate Setback**
   (AMENDED) Any entry gate installed for the subject development shall be set back a minimum storage length of 40 metres from the edge of the road carriageway. This is to allow for the standing of large vehicles when gates are to be opened.
8. **ON2135 Ongoing access to site**
   (AMENDED) The following conditions will apply for the lifetime of the subject development:
   a. The turning path of the largest sized vehicle to access the site is to be clear of obstructions at all times.
   b. All vehicles are required to enter and leave the development in a forward direction.
   c. All vehicular loading and unloading is to be carried out within the site.
   d. Vehicles accessing the development are to be limited to 19 metre Semi-trailer Vehicles as specified in Austroads Design Vehicles and Turning Path Templates Guide 2013.

Carparking

PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE

1. **CCBXXXX Carparking Dimensions**

Prior to the issue of a Construction Certificate, amended dimensioned geometric plans of the proposed carparking spaces are to be submitted showing widths and lengths of parking spaces and aisle widths.
Detailed design drawings for the carparking areas are to comply with *Council's Engineering Guidelines - Subdivisions and Development Standards*, Austroads Guidelines and Council's *Development Control Plan No. 20 Off-street Parking Policy*.

PRIOR TO COMMENCEMENT OF WORK

2. POC1938 Off-Street Parking

(AMENDED) Prior to the Commencement of Work Fifteen (15) parking spaces each of dimensions 2.6 metres x 5.5 metres in accordance with Council's *Development Control Plan No. 20 Off-street Parking Policy* are to be provided on site to serve the development during the construction period.
NOTE: This consent does not guarantee compliance with the *Disability Discrimination Act, 1992* and the developer should investigate their liability under the Act. The applicant's attention is drawn to the Australian Standard AS 2890.6:2009 in respect of acceptable standards of design and requirements.

3. POC1940 Linemarking

(AMENDED) Delineation of parking bays and directional lines are to be implemented in accordance with the approved construction plans and *Australian Standard 2890.1:2004*. Parking bay delineation and directional lines are to be installed **prior to the Commencement of Work.**

ONGOING

4. ON2139 Parking Maintenance

The property owner remains responsible for the upkeep and maintenance of the car parking, vehicle manoeuvring areas and associated facilities for the lifetime of the proposed development.

Flood Report

According to **Griffith Main Drain J & Mirrool Creek Flood Study 2021 (Torrent Consulting):**

- This is **Flood Prone Land.**
- Estimated **1% AEP** Flood Level and the associated Hazard Category is for this location varies (see 1% AEP Level on page 4):

Location	Level (m AHD)	Hazard Category
1	117.99	Low
2	N/A	N/A
3	N/A	N/A
4	118.50	Low
5	118.37	Low
6	N/A	N/A
7	N/A	N/A

- Estimated PMF Level and the associated Hazard Category for this location varies (see PMF Level on page 6):

Location	Level (m AHD)	Hazard Category
1	118.35	Low
2	118.47	Low
3	118.83	Low
4	118.87	Low
5	118.71	Low
6	118.75	Low
7	118.45	Low

NB: Floor levels are subject to Council's Flood Management Policy.
The floor level for habitable room areas is to be **500mm** above the 1% AEP flood level, i.e.

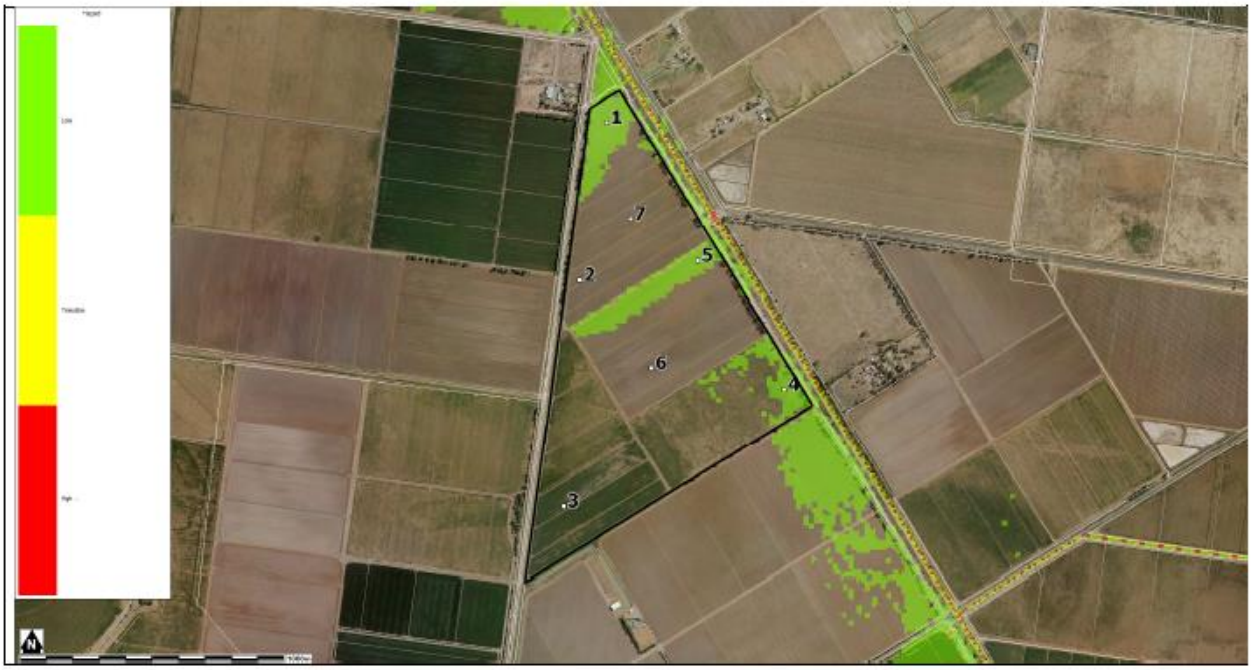
Location	Level (m AHD)
1	118.49
4	119.00
5	118.87

Or **410mm** above the existing natural ground level, whichever is higher.

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.

1% AEP Level – Lot 206 DP 756035, 2773 Berecry Road, THARBOGANG

1% AEP Hazard – Lot 206 DP 756035, 2773 Berecry Road, THARBOGANG



Attachment : External Referral

Essential Energy

Thank you for seeking comment from Essential Energy in relation to the proposed development at the above property.

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.