



COUNCIL ASSESSMENT REPORT

PLANNING PANEL

PANEL REFERENCE & DA NUMBER	PPSWES-179 – DA 2023/0024	
PROPOSAL	Electricity Generating Works (5MW Solar Farm and Battery Energy Storage System)	
ADDRESS	Lot 1 and Lot 2 DP134908, 96 Tancred Drive, Bourke	
APPLICANT	ITP Development Pty. Ltd.	
OWNER	Ross Bernard Williams and Jessica Bridget Goulden	
DA LODGEMENT DATE	19 May 2023	
APPLICATION TYPE	Development Application (Local Development)	
REGIONALLY SIGNIFICANT CRITERIA	The development comprises private infrastructure (electricity generating works) with a capital investment value (CIV) over \$5 million	
CIV	\$8,667,599.32 (excluding GST)	
CLAUSE REQUESTS	N/A	
KEY SEPP/LEP	 State Environmental Planning Policy (Biodiversity and Conservation) 2021 State Environmental Planning Policy (Planning Systems) 2021 State Environmental Planning Policy (Resilience and Hazards) 2021 State Environmental Planning Policy (Transport and Infrastructure) 2021 Bourke Local Environmental Plan 2012 Bourke Development Control Plan 2012 	
TOTAL & UNIQUE SUBMISSIONS KEY ISSUES IN SUBMISSIONS Lifestyle and health impacts Environmental impacts (wildlife, dust, noise and traffi Reduction in property values		

DOCUMENTS SUBMITTED FOR CONSIDERATION	The application comprises the following documents: Plans prepared by itp renewables comprising: 22107-G-0100 Title 22107-G-0400 Location Plan – Issue 2 22107-G-2200 Site Elevations – Issue 11 22107-G-2200 Site Elevations – Issue 2 22107-C-4300 Inverter Footing Details – Issue 1 22107-C-4310 BESS Footing Details – Issue 1 22107-C-5301 Gate Details – Issue 1 22107-C-5301 Gate Details – Issue 1 22107-C-6300 Access Path Details – Issue 1 22107-E-3400 FTC Voyager Tracker Details – Issue 1 22107-E-3300 Inverter Station Details – Issue 1 22107-E-5300 BESS Station Details – Issue 1 22107-E-5300 BESS Station Details – Issue 1 22107-E-5310 DC-DC Converter Skid Detail – Issue 1 Statement of Environmental Effects prepared by Zenith Town Planning, dated 11 May 2023. Traffic Impact Assessment Report prepared by Price Merrett Consulting version. 6, dated 23 November 2023. Noise Assessment Prepared by Muller Acoustic Consulting Pty Ltd, dated 17 April 2023. Preliminary Biodiversity Assessment prepared by Red-Gum Environmental Consulting, dated 1 May 2023. Fire and Hazard Assessment prepared by itp Renewables, Rev. 4, dated 10 May 2023. Glare and Glint Assessment prepared by itp Renewables, Rev. 4, dated 4 May 2023. Landscape Character and Visual Impact Study prepared by Zenith Town Planning, Dated 1 May 2023. Waste and Decommission Assessment prepared by itp Renewables, Rev. 4, dated 31 August 2023. Water Assessment prepared by itp Renewables, Rev. 2, dated 17 April 2023. Flood Study prepared by itp Renewables, Rev. 2, dated 17 April 2023.
SPECIAL	
INFRASTRUCTURE CONTRIBUTIONS (S7.24)	N/A
AGENCY REFERRALS	The application has been referred to the following Agencies: Transport for NSW (TfNSW) Essential Energy Air Services Australia CASA Aviation Group
RECOMMENDATION	Approval
DRAFT CONDITIONS TO APPLICANT	NO

SCHEDULED MEETING DATE	27 February 2024
PLAN VERSION	Version 1
PREPARED BY	Andrew Crump, Director, Andrew Crump Town Planning Pty. Ltd.
DATE OF REPORT	7 February 2024

EXECUTIVE SUMMARY

The development application DA 2023/24(1) seeks consent for 'electricity generating works' being a 5MW solar farm with battery energy storage system. *State Environmental Planning Policy (Transport and Infrastructure)* 2021 ('SEPP (T&I)') defines this land use as follows:

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.

The proposed solar farm is not considered to be a 'solar energy system', which is specifically for photovoltaic systems which generate electricity for a land use located on the same parcel of land or adjoining land. In this case, the purpose of the proposed solar farm is to generate electricity to supply energy requirements within the power grid, and not for a land use on the site. As such, the proposed development is characterised as *electricity generating works*, that is making / generating electricity and storing that electricity.

Key aspects of the development are summarised in the below table:

Table 1: Key Development Data

Control	Proposal
Zoning	RU1 Primary Production
Land-use	Electricity Generating Works
Relevant EPI(s)	SEPP (Transport and Infrastructure) and Bourke LEP 2012
Site area	23.79ha (total combined lots)
Scale	Capacity of 5MW; and
	Area 11.54ha (i.e. solar farm fenced area)
Clause 4.6 Requests	Not Applicable
Max Height of solar modules	4.1m
Max Height of DC convertors	2.12 (with skid)
Max Height of inverter station	3.05m (with skid)

Max Height of BESS station	3.2m (with footings)
Max Height of security fence and gates	2.31m (fence and barbed wire top)
Landscaped area	Not proposed
Car Parking spaces	40 temporary parking spaces (for construction workers)
Setbacks	West / road - 13m (from front boundary to fence)
	North – 8m
	East – 18.7m
	South – 236.6m (from fence to furthest boundary of Lot 2)

The subject site is known as 96 Tancred Drive, Bourke ('the site') and comprises two rectangular shaped lots with a total area of 23.79ha. The site has frontage to a classified road being the Mitchell Highway / Tancred Drive. Vehicular access is via an existing access point at the western corner of the site, from an unformed Crown Road that connects with the Mitchell Highway. The development site is effectively cleared agricultural land used for the purposes of cropping and gazing, as well as a disused gypsum mine which is in the process of being decommissioned / remediated.

The site is located within the RU1 Primary Production zone pursuant to the *Bourke Local Environmental Plan 2012* ('LEP') and is predominantly surrounded by agricultural land uses (cropping and grazing) and rural residential dwellings. The proposal is permissible in the zone with development consent pursuant to Division 4, Clause 2.36(1)(b) of SEPP (T&I).

The application is not integrated development pursuant to Section 4.46 of the *Environmental Planning and Assessment Act 1979* ('EP&A Act'). Referrals were sent to Essential Energy and Transport for NSW (TfNSW) pursuant to SEPP (T&I) and recommended conditions of consent have been provided by these agencies. CASA Aviation Group and Air Services Australia were also consulted, and they raised no objections.

Jurisdictional prerequisites to the grant of consent imposed by the following controls have been satisfied including:

- Section 4.14 of the EP&A Act in relation to development on bush fire prone land;
- Section 2.48(2) of SEPP (T&I) in relation to development immediately adjacent to electricity infrastructure;
- Section 2.119 of SEPP (T&I) in relation to development with frontage to a Classified Road; and
- Section 4.6 of the State Environmental Planning Policy (Resilience and Hazards) 2021 for consideration of whether the land is contaminated.
- Clause 6.8 (Essential Services) of Bourke LEP 2012.

The application was placed on public exhibition from 22 May 2023 to 9 June 2023 via neighbour notification letters and an advertisement in the local paper. Two (2) submissions were received. These submissions raised issues relating to visual impacts, landscape character, vegetative screening, heat island effects, environmental impacts such as dust, noise, wildlife and traffic, and reduction in property values.

The application is referred to the Western Regional Planning Panel ('the Panel') as the development is considered to be 'regionally significant development' pursuant to Section 2.19(1) and Clause (5)(a) of Schedule 6 of *State Environmental Planning Policy (Planning Systems) 2021*. Specifically, the proposal is development for 'electricity generating works' with a capital investment value (CIV) over \$5 million.

A briefing was held with the Panel on 7 August 2023 where key issues were discussed. These include:

- 1. Traffic matters raised by TfNSW.
- Visual impacts and vegetative screening.
- 3. Accuracy of the submitted plans.
- 4. Requirement for a boundary adjustment.
- 5. Existing vegetation.
- 6. Intention with existing advertising structures.
- 7. Asset Protection Zones (APZs).
- 8. Flooding.
- 9. Aboriginal Heritage.

A request for additional information (RFI) was sent to the applicant seeking clarification and revised documentation with regards to the above matters. Various revisions and additional documentation has been provided by the applicant, which were referred to TfNSW and internal Council staff for further consideration.

The key issues and means of addressing these issues are as follows:

- Visual impacts and glare vegetative screening required to mitigate impacts;
- Traffic and access access upgrades required to mitigate construction impacts;
- Natural hazards (flooding and bushfire) water supply for firefighting purposes required on the site, and emergency planning documents need to be prepared to manage potential impacts;
- Construction noise and vibration construction works measures to minimise impacts;
 and
- Environmental impacts construction and operational measures to minimise impacts.

The topography of the subject land, and the broader landscape surrounding the site is generally flat, meaning there are no elevated vantage points that would be presented with an adverse visual impact, and any residual visual impacts that do arise from the development can be easily mitigated through the recommended landscape screening.

The proposed development is considered a suitable use of the subject land and is considered to be in the public interest.

Following consideration of the matters under Section 4.14 and Section 4.15(1) of the EP&A Act, the provisions of the relevant State Environmental Planning Policies, the Bourke LEP, and the Bourke DCP, the application is recommended for approval, subject to conditions of consent as outlined above and discussed in detail in the main body of this report. Recommended conditions of consent can be found in **Appendix A** of this report.

1. THE SITE AND LOCALITY

1.1 The Site

- The subject site is located on the south-eastern side of Tancred Dive (also known as the Mitchell Highway), to the north of the township of Bourke, and midway between Bourke and North Bourke.
- The subject site comprises two rectangular shaped parcels of some 11.9ha respectively, with a total area of 23.79ha.
- The site has frontage to a Classified road being the Mitchell Highway (HW7) / Tancred Drive, and vehicular access is via an existing access point at the western corner of the site, from an unformed Crown Road that connects with the Mitchell Highway.
- The development site is effectively cleared agricultural land used for the purposes of cropping and gazing.
- The southwestern portion of the subject site comprises an abandoned gypsum mine which the applicant submits is in the process of being decommissioned / remediated as a separate process to this application.
- The topography of the site is generally flat, and is identified as being flood liable, but it is not mapped as being flood prone land under the LEP.
- The subject site is not mapped as being bushfire prone, nor is it identified as comprising
 any high value biodiversity. A large eucalyptus tree is present within the northwest corner
 of the site which is to be retained. The site is not considered to be core Koala habitat.
- There are no natural watercourses within the development site.
- There is a row of numerous signage structures along the western boundary frontage, advertising local businesses in Bourke.

1.2 The Locality

- The surrounding land is predominately used for agricultural purposes. Uses include grazing and cropping. Much of the agricultural land surrounding Bourke is used for cotton farming.
- The land immediately to the north comprises a rural-residential dwelling.
- There is a cluster of rural residential dwellings to the south-west on High Street.
- Tancred Drive / Mitchell Highway is a State Road (HW7).
- The settlement of Bourke starts approximately 2kms to the south-west (by road), and comprises residential dwellings, as well as the Back O' Bourke Information and Exhibition Centre, and the Koinonia Christian Academy (K-10 school).
- Bourke's town centre is approximately 3.5kms to the south-west of the site (by road).
- The settlement of North Bourke is approximately 4km north-west (by road). Bourke Airport
 is located to the north of this settlement.
- A 22kV power line runs in a south-west to north-east direction within an easement immediately parallel to the western boundary of the site. This connects to the Essential Energy Bourke Zone substation.
- The Darling River flows in a north-south direction to the west of the site and forms the northern boundary to the township of Bourke.

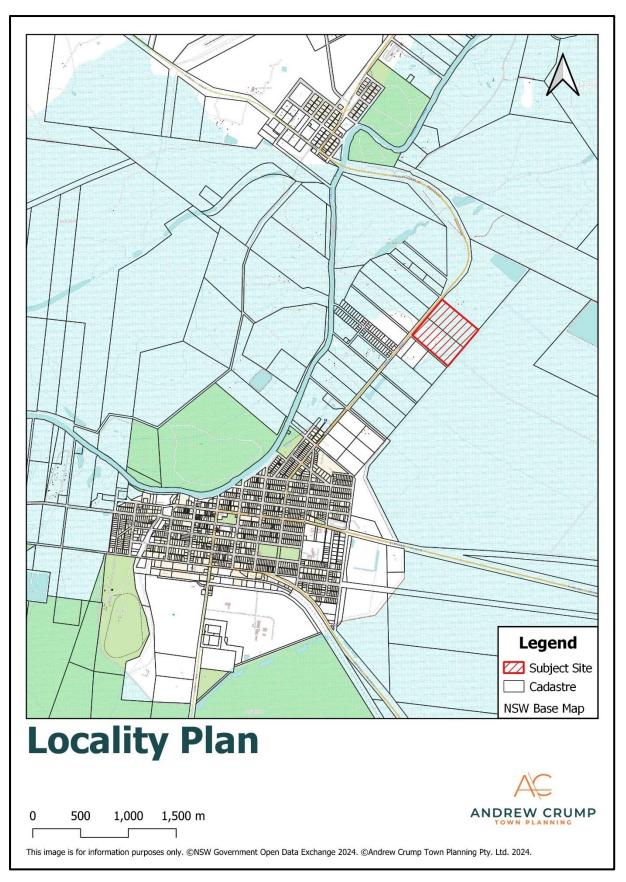


Figure 1 - Locality Plan



Figure 2 - Aerial photograph of site





Figure 3 (left) – View of the site from Tancred Drive verge (looking north-east)

Figure 4 (right) – View of the site from Tancred Drive (looking south-west)





Figure 5 (left) – View from Tancred Drive verge (looking north-east – site far right of image)

Figure 6 (right) – View of site and existing access from Tancred Drive verge

2. THE PROPOSAL AND BACKGROUND

2.1 The Proposal

The proposal seeks consent for *electricity generating works* (being a 5MW solar farm), known as "Bourke 2B Solar Farm".

The proposed development is comprised of:

- Approximately 11,700 solar modules ranging in height from 1.5 metres to 2.75 metres installed in 100 rows running north to south, with approximately 6.4 metres centre to centre spacing between each row.
- The maximum height of each module is 4.1 metres.
- Two 3.4MW inverter stations that are 3 metres high and each mounted on a 12.2 metre long skid.
- A 2.9 metre high kiosk to convert high and medium voltage to low voltage electricity suitable for connection to the local system.
- A battery storage system (BESS) that is 12.2 metres long, 2.4 metres wide and 2.9 metres high.
- A temporary car parking area (40 spaces) and materials laydown area.
- A 1.8 metre high security fence topped with three rows of barbed wire, giving a total height of 2.3 metres.
- A 4 metre wide internal road providing access from the public road to the centre of the array.

The solar farm will be set within a fenced area measuring between 243-249m wide by 464m long. It will occupy all of Lot 1, and a small portion of Lot 2. Each row of photovoltaic (PV) panels will rotate to track the sun from east to west each day. The hub height of each tracker is 1.5m with the peak of the modules reaching a height of approximately 4.1m (i.e. when fully tilted to 60 degrees in the early morning and late evening). Ancillary items such as the invertor station, transformer, BESS, etc, will be located near the centre of the array, and will be mounted on skids / footings. Each invertor will be connected to the adjacent 22kV powerline via underground cables.

Site access will be via the existing access point off Tancred Drive at the south-western corner of Lot 2. The existing entry provides access to the disused gypsum mine on Lot 2 and a track runs parallel to the western boundary to the north and into Lot 1. It is proposed that this track will be extended to connect to the centre of the array where the inverter stations and BESS are to be located.

Construction is expected to take three (3) months, with up to 50 personnel on site working 7.00am to 4.00pm Monday to Friday. The mounting system with the PV panels is constructed on piles that are driven into the ground using a vibrating pile driver. Portaloo toilets will be provided for staff during the construction stage, as well as a temporary carpark for up to 40 vehicles. A shuttle bus may be used for staff.

Once operational, the site will be unmanned. Maintenance and cleaning are expected to be carried out quarterly by a crew of 2-3 people. The land will continue to be used for grazing sheep and goats.

Solar panels and related infrastructure will be decommissioned and removed upon cessation of operations, which is estimated to be around 35 years. The site will then be returned to the pre-development land use of agriculture.

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

Table 1: Key Development Data

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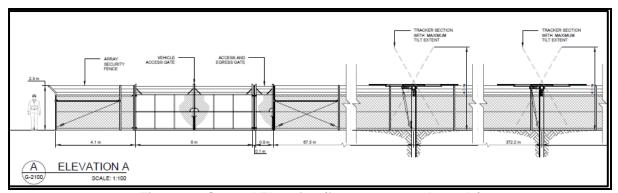


Figure 7 – General Elevation (fence, gates and panels)

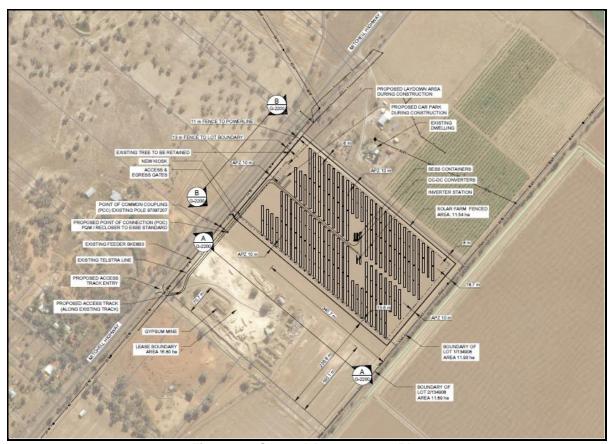


Figure 8 – General Arrangement Plan

2.2 Background

The development application was lodged on **19 May 2023**. A chronology of the development application is outlined in **Table 2**.

Table 2: Chronology of the DA

Date	Event
19 May 2023	DA lodged and referred to external agencies
25 May 2023	Exhibition of the application (14 days)
9 June 2023	Request for Information (RFI) received from TfNSW
29 June 2023	First RFI sent from Council to applicant
4 July 2023	Response from CASA received
7 August 2023	Panel Briefing Meeting
9 August 2023	Additional information received from applicant (public submission response)
24 August 2023	Second RFI sent from Council to applicant
31 August 2023	Further additional information received from applicant and referred to TfNSW
18 September 2023	Response from Essential Energy received
20 September 2023	Response from Council's Manager Works (flooding)
29 September 2023	Second RFI received from TfNSW and sent on to applicant
23 November 2023	Further additional information received from applicant and referred to TfNSW (NOTE: amended and additional information accepted by Council under Cl 38(1) of the <i>Environmental Planning and Assessment Regulation 2021</i>
13 November 2023	Final response from TfNSW received
13 December 2023	Response from Council's Manager Roads

Following additional information requests from Council, the applicant has revised the application to:

- remove the proposed boundary adjustment / consolidation component from the proposal.
- remove the proposed creation of easement / right of carriageway.
- amend setbacks and Asset Protection Zones (APZs).
- retain the existing eucalypt tree in the north-west corner of the site.

Revised drawings and documentation have been submitted to this effect.

Following feedback and additional information requests from TfNSW, the applicant has submitted various amended Traffic Impact Assessments. Of note, in September TfNSW responded that they did not support the proposed development in the form submitted at that time and required further information and measures to be undertaken to facilitate safe turning movements for the identified traffic volume associated with the construction stage of the proposal.

Based on the most recently revised documentation provided by the applicant (November 2023) TfNSW has confirmed that the proposed development is not of a size or scale that requires referral to TfNSW under Section 2.122 of SEPP (T&I) and have recommended conditions relating to access upgrades and further approval requirements which are addressed in detail below.

2.3 Site History

- The development site has a long history of being used for grazing purposes.
- The southern allotment, Lot 2, comprises a disused gypsum mine which the applicant submits is in the process of being remediated (as a separate process outside the remit of this application).

3. STATUTORY CONSIDERATIONS

3.1 Section 1.7 - Application of Part 7 of the Biodiversity Conservation Act 2016 and Part 7A of the Fisheries Management Act 1994

When determining a development application, the consent authority must take into consideration Section 1.7 of the EP&A Act, which identifies that Part 7 of the *Biodiversity Conservation Act 2016* (BC Act) and Part 7A of the *Fisheries Management Act 1994* have effect in connection with terrestrial and aquatic environments.

A 'Preliminary Biodiversity Assessment' has been submitted in support of the application. It notes that:

- The majority of the site is dominated by exotic pasture grass which has little to no value to threatened fauna and threatened flora are not present in these previously pasture improved areas.
- In its current form, the development will only impact areas classified as "Low" value native grass zones, and although the proposed access tracks occur along the edge of a "Moderate" value native grass zone, the development will utilise existing tracks and no modification of these tracks is being proposed or will be necessary. Therefore, the "Moderate" value vegetation will **NOT** be impacted and the clearing thresholds will not be exceeded.
- As the proposed activities do not propose the removal of any trees, they are unlikely
 to have an adverse effect on the foraging ability or the life cycle of threatened species
 that may be opportunistically using the site or surrounding areas and it is highly unlikely
 to displace any rare or threatened species.
- The activities as proposed will NOT have a significant effect on any threatened species and ecological communities and/or their conservation as noted within this assessment if the areas identified as 'Moderate value'... are avoided by the development as shown in the design provided at the time of this assessment.
- By way of a clearing process that minimizes the risk to threatened species that may be opportunistically using the site, I recommend:
 - I. The site boundary and any exclusion zones clearly identified prior to site establishment;
 - II. Vehicle movements around the site will be restricted to the defined footprint and away from any existing native trees and flagging exclusion fencing to be installed.
 - III. Soil disturbance by vehicle and pedestrian access is to be kept to a minimum outside the proposal footprint.
 - IV. Any weeds removed (particularly those bearing seeds) are to be disposed of appropriately at the nearest waste management facility.

It is noted that the land does not occur on the NSW Biodiversity Map, the proposal does not involve clearing of native vegetation, and does not trigger the need for a Biodiversity Development Assessment Report under the *Biodiversity Conservation Act 2016*.

Conditions are attached that the development is carried out in accordance with the submitted biodiversity assessment. Subject to the above recommendations, the proposed development is not likely to significantly affect any threatened species, habitat or communities.

3.2 Bushfire prone land - Section 4.14

When determining a development application, the consent authority must take into consideration the matters outlined in Section 4.14(1)(a) of the EP&A Act as follows:

- (1) Development consent cannot be granted for the carrying out of development for any purpose (other than a subdivision of land that could lawfully be used for residential or rural residential purposes or development for a special fire protection purpose) on bush fire prone land (being land for the time being recorded as bush fire prone land on a relevant map certified under section 10.3(2)) unless the consent authority—
 - (a) is satisfied that the development conforms to the specifications and requirements of the version (as prescribed by the regulations) of the document entitled Planning for Bush Fire Protection prepared by the NSW Rural Fire Service in co-operation with the Department (or, if another document is prescribed by the regulations for the purposes of this paragraph, that document) that are relevant to the development (the relevant specifications and requirements), or
 - (b) has been provided with a certificate by a person who is recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment stating that the development conforms to the relevant specifications and requirements.

The subject site is not mapped as being bushfire prone. Notwithstanding, the site is in close proximity to mapped bushfire prone land, and is directly adjacent to agricultural land that could, in the future, be used in a manner which increases bushfire risk (e.g. grassland grazing). As such, it is considered reasonable to assess the application against the relevant requirements of the NSW Rural Fire Service's (RFS) 'Planning for Bush Fire Protection 2019' ('PBP 2019').

Relevantly, Clause 8.3.5 of PBP 2019 sets out specific bushfire requirements for wind and solar farms. It states that solar farms require special consideration and should be provided with adequate clearances to combustible vegetation as well as emergency firefighting access and water supply. It also states the following should be provided for solar farms:

- a minimum 10m asset protection zone (APZ) for the structures and associated buildings / infrastructure; and
- the APZ must be maintained to the standard of an inner protection area (IPA) for the life of the development.

The policy goes on to state that essential equipment should be designed and housed in such a way as to minimise the impact of bush fires on the capabilities of the infrastructure during bush fire emergencies. It should also be designed and maintained so that it will not serve as a bush fire risk to the surrounds. A 'Bush Fire Emergency Management and Operations Plan' should be prepared to identify all relevant risks and mitigation measures associated with the construction and operation of the solar farm.

The applicant has submitted a 'Fire and Hazard Assessment' report which includes a brief bushfire assessment. The proposed development has been amended to include 10m APZs around the entire site, being a 10m setback from a non-combustible chain-link fence. This provides a defendable space and buffer against radiant heat for emergency services. The applicant states that the APZ will be established at the commencement of building works, and will be maintained for the life of the development as an IPA in accordance with PBP 2019. The submitted assessment does not deal with emergency management planning, and it is considered that a condition of consent is necessary to ensure an appropriate document is prepared and implemented in accordance with PBP 2019.

The proposed development should also generally comply with access, construction, landscaping, and water supply requirements of PBP 2019. The following comments are made in this regard:

- Access requirements of PBP 2019 have been taken into account in the design and site layout of the development, which will ensure safe access by firefighting vehicles, and evacuation should any staff be on site at the time of a bushfire.
- As the ancillary structures are non-habitable, there are no specific construction measures required for these.
- No landscaping is proposed, however it is considered that vegetative screening will be required to minimise the visual impacts of the development (discussed later in this report). This vegetation will also need to comply with the landscaping and IPA requirements of PBP 2019.
- Adequate water supply is essential for firefighting purposes, however, no water supply is proposed on site, as the applicant states that water is not required for the solar farm (other than during construction and for scheduled cleaning, to which it will be brought in for these purposes). This is not considered acceptable, and a condition of consent is recommended that a static water supply be constructed on site for emergency firefighting purposes (i.e. a water tank). PBP 2019 does not set out a minimum capacity for water supply for a solar farm. Given its size, it is considered that the general static water supply requirements set out in Table 5.3d for a large rural lot gives sufficient guidance, being 20,000L.

3.3 Evaluation - Section 4.15

When determining a development application, the consent authority must take into consideration the matters outlined in Section 4.15(1) of the EP&A Act. These include the following:

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

These matters are further considered in detail below.

Due to the nature of the development application, it is noted that the proposal is not considered to be:

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

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

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

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

The following Environmental Planning Instruments ('EPI') are relevant to this application:

- State Environmental Planning Policy (Biodiversity and Conservation) 2021
- State Environmental Planning Policy (Planning Systems) 2021
- State Environmental Planning Policy (Resilience and Hazards) 2021
- State Environmental Planning Policy (Transport and Infrastructure) 2021
- Bourke Local Environmental Plan 2012
- Bourke Development Control Plan 2012

Key matters for consideration arising from these Environmental Planning Instruments are outlined in **Table 3** below.

Table 3: Summary of Applicable Environmental Planning Instruments

EPI	Matters for Consideration	Comply (Y/N)
State Environmental	Chapter 3: Koala Habitat Protection 2020, and	Υ
Planning Policy (Biodiversity &	Chapter 4: Koala Habitat Protection 2021	
Conservation) 2021	The subject land is located within an LGA declared to be Koala Habitat. The land is cleared farmland, save for a single eucalyptus tree. The applicant has confirmed retention of this tree. The submitted Biodiversity Assessment does not make specific reference to Koalas.	
	Notwithstanding, given the nature of the land, being cleared farmland used for grazing purposes and a former gypsum mine, the land is not considered to be potential Koala habitat, and thus adverse impacts to koalas or koala habitat are unlikely. A koala plan of management is not considered necessary.	
State Environmental	Chapter 2: State and Regional Development	Υ
Planning Policy (Planning Systems) 2021	Section 2.19(2) declares the proposal regionally significant development pursuant to Clause 5(a) of Schedule 6.	
	The proposal involves development that is private infrastructure – electricity generating works, with a capital investment value (CIV) over \$5 million.	
	The Western Regional Planning Panel is the consent authority for this application.	
State Environmental Planning Policy (Primary Production) 2021	The subject land is not mapped as being State Significant Agricultural Land. As such, this SEPP is not applicable to the development.	N/A
SEPP (Resilience &	Chapter 3: Hazardous and Offensive Development, and	Υ
Hazards)	Chapter 4: Remediation of Land	
	A Fire and Hazard Assessment has been submitted with the application. Contamination has been considered within the submitted Statement of Environmental Effects.	
	These matters are addressed in greater detail following this table.	
State Environmental	Chapter 2: Infrastructure	Υ
Planning Policy (Transport and Infrastructure) 2021	Section 2.36(1)(b) – Electricity generating works permitted with consent in a prescribed non-residential zone (RU1).	
	 Section 2.48(2) - Development immediately adjacent to an easement for electricity purposes to be referred to electricity supply authority. Referred to Essential Energy for comment, and conditions of consent recommended. 	

EPI	Matters for Consideration	Comply (Y/N)
	 Section 2.119(2) - Development with frontage to classified road referred to TfNSW for comment, and conditions of consent recommended. 	
	These matters are addressed in greater detail following this table.	
Proposed Draft Instruments	No issues identified.	Y
Bourke LEP 2012	Clause 1.2 Aims of Plan	Υ
	Clause 2.3 – Permissibility and zone objectives	
	Clause 5.21 – Flood Planning	
	Clause 6.6 – Essential Services	
	These matters are addressed in greater detail following this table.	
Bourke DCP 2012	Clause 2.5 Potential Site Contamination	Υ
	Contamination is considered in detail in the SEPP (Resilience and Hazards) assessment following this table.	
	Clause 2.6 Development Notification	
	Public exhibition of this application was carried out in accordance with the DCP and Bourke's Community Participation Plan (CPP) and is discussed later in this report.	
	Clause 3.2 Flooding	
	Flooding is addressed in the LEP assessment following this table.	
	Clause 3.3 Bushfire	
	Bushfire has previously been considered earlier in this report in relation to PBP 2019. Conditions of consent are recommended with regards to emergency planning and water supply.	
	Clause 4.2 Objectives	
	The proposal meets the overall objectives set out in the DCP:	
	 is compatible with surrounding development does not impact on the surrounding development by way of overshadowing or privacy has adequate access to services and utility infrastructure 	
	Clause 6.2 Other Development Types	
	A solar farm is not a land use specifically provided for in the DCP, but this chapter covers general development specifications for other types of uses, including parking and landscaping. These matters are discussed in the "Likely Impacts" assessment section later in this report.	

EPI	Matters for Consideration	Comply (Y/N)
	Clause 6.3 Environmental Effects	
	These matters are discussed in the "Likely Impacts" assessment section later in this report.	

Further detailed consideration of the relevant SEPPs are outlined below.

State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 3: Hazardous and Offensive Development

Part 2 Section 3.7 of this SEPP requires that consideration be given to guidelines published by the Department of Planning relating to hazardous or offensive development. Appendix 3 of 'Hazardous and Offensive Development Application Guidelines – Applying SEPP 33' lists industries that may fall within SEPP 33. While this list does not explicitly include solar farms, projects can be assessed through the risk screening procedure outlined in Appendix 2 of the Guidelines.

A 'Fire and Hazard Assessment' has been submitted with the application which provides a preliminary hazard analysis via a risk screening procedure of the proposed facility. The main factors set out in the guidelines have been considered (e.g. properties of substances being stored, conditions of storage, quantities, location with respect to boundary, surrounding land uses, etc), as well as the 'Australian Code for the Transport of Dangerous Goods by Road and Rail'.

The screening assessment concludes that the storage of hazardous materials (e.g. fuel, pesticides, Li-ion batteries, etc) comply with applicable thresholds. Notwithstanding, the applicant has taken a conservative approach, and includes construction management measures via a *Construction Environmental Management Plan*, as well as a decommissioning plan to ensure any hazardous materials are removed from site and disposed of appropriately at the end of the operational life of the project.

Overall, it is considered that the proposed solar farm does not constitute hazardous development. A condition of consent is recommended that the development is carried out in accordance with the mitigation measures outlined in the submitted application documentation.

Chapter 4: Remediation of Land

Section 4.6 requires consent authorities to consider whether the land is contaminated, and if so, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out.

The site is not listed on the NSW Environmental Protection Authority's list of notified contaminated sites, nor known to be contaminated. Previous use of Lot 1 for agricultural grazing is unlikely to have resulted in site contamination. The former use of Lot 2 was a gypsum mine. Gypsum is a soft sulphate material composed of calcium sulphate dihydrate, and its dust can cause irritation of the skin and mucous membranes. The applicant notes that the former mine is in the process of being decommissioned / remediated. This matter is subject to separate assessment under this SEPP and other relevant standards and policies. The proposed solar farm is not considered to be a sensitive land use and will be located clear of the former mine.

Overall, the proposal is considered to be satisfactory subject to conditions regarding unexpected finds during construction works.

State Environmental Planning Policy (Transport and Infrastructure) 2021

Chapter 2: Infrastructure - Division 4 Electricity generating works or solar energy systems

Section 2.35 of SEPP (T&I) defines 'electricity generating works' as follows:

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 discussed previously, the proposed solar farm meets this definition. Section 2.36(1)(b) permits development for the purpose of 'electricity generating works' by any person, with consent, in a prescribed non-residential zone. The subject site is located in the RU1 Primary Production zone, which is a prescribed zone pursuant to Section 2.35. This application is seeking consent pursuant to SEPP (T&I).

It is noted that Section 2.42 does not apply as Bourke is not considered to be a 'regional city'.

Chapter 2: Infrastructure - Division 5 Electricity transmission or distribution

Subdivision 2 Development likely to affect an electricity transmission or distribution network applies to this application. Specifically, Section 2.48(2) - Determination of development applications - other development applies to development carried out immediately within or adjacent to an easement for electricity purposes. Such development must be referred to electricity supply authority for safety risk comments, and the consent authority must take into consideration any response to the notice given before determining the application.

The proposed solar farm is immediately adjacent to easement corridors of overhead powerlines. The application was referred to Essential Energy as the electricity authority for comments. They have responded as follows:

- As the plans provided do not show the distances from Essential Energy's infrastructure
 and the development, there may be a safety risk. A distance of 10M from the centre
 line part of the development to Essential Energy's infrastructure is required to ensure
 that there is no safety risk.
- As the plans provided do not show the distances from Essential Energy's infrastructure and the development, there may be a safety risk (sic).
- It is also essential that all works comply with SafeWork clearance requirements. In this
 regard it is the responsibility of the person/s completing any works to understand their
 safety responsibilities. The applicant will need to submit a Request for Safety Advice if
 works cannot maintain the safe working clearances set out in 'Working Near Overhead
 Powerlines Code of Practice', or 'CEOP8041 Work Near Essential Energy's
 Underground Assets'.

The applicant has amended the originally submitted drawings to show setback distances. A setback of 11m will be maintained between the proposed front / Tancred Drive fence and the adjacent powerlines, which meets Essential Energy's minimum safety distances.

Essential Energy also makes general comments about further consultation if the proposal changes, encumbrances, and guidelines before and during works. Conditions in relation to these comments and recommendations are attached.

Chapter 2: Infrastructure - Division 17 Roads and traffic

Subdivision 2 Development in or adjacent to road corridors and road reservations applies. Specifically, Section 2.119 - Development with frontage to classified road. The consent authority must not grant consent to development on land that has a frontage to a Classified road unless it is satisfied that:

- (a) where practicable and safe, vehicular access to the land is provided by a road other than the classified road, and
- (b) the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of—
 - (i) the design of the vehicular access to the land, or
 - (ii) the emission of smoke or dust from the development, or
 - (iii) the nature, volume or frequency of vehicles using the classified road to gain access to the land, and
- (c) the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.

Tancred Drive / Mitchell Highway is a State Classified Road. The application was referred to Transport for NSW (TfNSW) for comment. Initially concerns were raised about the lack of detail provided in the application, and further information was requested in regards to trip generation, and traffic impact assessment; including traffic volume counts, heavy vehicle movements, logistics route analysis, site distances, turn treatments, swept path analysis, cumulative impacts, accommodation and transport needs, road safety of haulage routes, crash data, project schedule including phases and stages, parking, rail corridors, public transport, climate conditions, transport of dangerous goods, Traffic Management Plan, and environmental impacts such as dust.

A request for information was sent to the applicant, who provided an amended Traffic Impact Assessment (August 2023). TfNSW reviewed the amending information, however responded that they did not support the proposed development in that form. Of note TfNSW would require further information and measures to be undertaken to facilitate safe turning movements for the identified traffic volume (associated with the construction stage of the proposal) as follows:

- provision of access upgrade (sealed Rural Property Access)
- Rural Basic Left Turn Treatment (BAL)
- Rural Basic Right Turn Treatment (BAR)
- strategic concept design
- details on underground / overground transmission lines in relation to the State road network (construction and operational stages)
- traffic generation for workers, including drop off points, routes, types of vehicles (with a suggestion that shuttle buses may reduce the number of trips and would be the preferred option)
- swept path diagrams
- Safe Intersection Sight Distance (SISD) assessment

TfNSW offered to meet with Council and the applicant to discuss the matter further. A meeting was not held, however the applicant provided another amended Traffic Impact Assessment (November 2023), which was forwarded to TfNSW for further consideration.

TfNSW has responded that the latest information confirms that the proposed development is not of a size or scale that requires referral to TfNSW under Section 2.122 of SEPP (T&I) (i.e. it is not 'traffic-generating' development). They have included recommended conditions of consent relating to:

- Upgraded vehicular access servicing the site (sealed access, sealed BAR, gate setbacks);
- Concept design for the intersection upgrade to be prepared and submitted to TfNSW for review;
- Works Authorisation Deed (WAD) required from TfNSW for road works; and
- All utility crossings on Mitchell Highway require consent from TfNSW under Section 138(2) of the Roads Act 1993.

TfNSW also notes that Council needs to consider safety, efficiency and operation of the Classified road pursuant to the SEPP (T&I). Council's Manager Roads has reviewed the revised documentation and TfNSW's comments, and concurs with TfNSW's recommended conditions. Traffic, parking and access impacts are discussed in greater detail in the "Likely Impacts" section of this report.

Bourke Local Environmental Plan 2012

The relevant local environmental plan applying to the site is the *Bourke Local Environmental Plan 2012* ('the LEP'). The aims of the LEP include:

- (aa) to protect and promote the use and development of land for arts and cultural activity, including music and other performance arts,
- (a) to encourage the proper management of the natural and human-made resources of Bourke by protecting, enhancing or conserving—
 - (i) productive agricultural land, and
 - (ii) timber, minerals, soils, water and other natural resources, and
 - (iii) areas of significance for nature conservation, and
 - (iv) areas of high scenic or recreational value, and
 - (v) places and buildings of archaeological or heritage significance,
- (b) to support the urban areas of Bourke by strengthening retail hierarchies, providing opportunities for employment growth and promoting tourism development,
- (c) to promote ecologically sustainable urban and rural development,
- (d) to provide a secure future for agriculture by expanding Bourke's economic base and minimising the loss or fragmentation of productive agricultural land,
- (e) to minimise land use conflict,
- (f) to ensure that development has regard to the capability of the land,
- (g) to provide a choice of living opportunities and types of settlement in Bourke,
- (h) to ensure that the efficiency of arterial roads is not adversely affected by development on adjacent land.

The proposal is generally consistent with these aims. Although the solar farm will be located on productive agricultural land, it is permissible in the zone via the SEPP (T&I), will still be used for sheep and goat grazing while operational, and following decommissioning, will revert back to grazing / agricultural use. It is not expected that the proposal will adversely impact on natural resources, or the future use / agricultural capabilities of the land.

Zoning and Permissibility

The site is located within the RU1 Primary Production Zone pursuant to Clause 2.3 of the LEP.

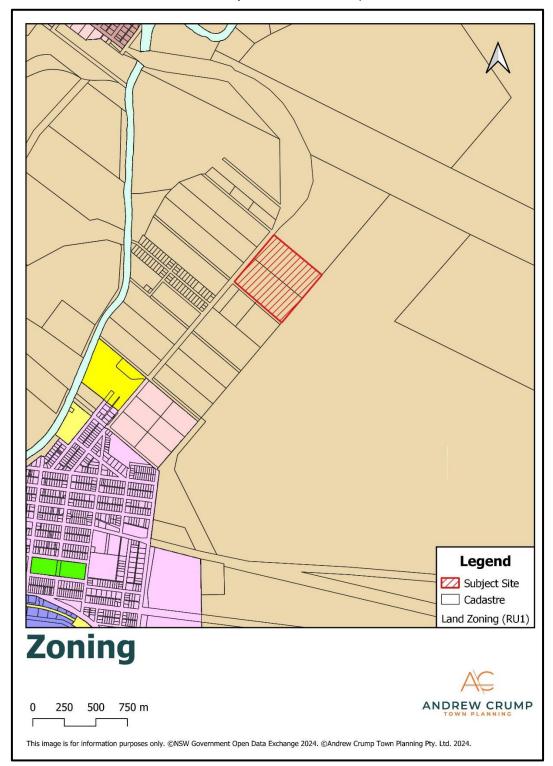


Figure 9 – Zoning Map (from Bourke LEP 2012)

The proposal is permissible in the RU1 zone with development consent pursuant to Division 4, Clause 2.36(1)(b) of SEPP (T&I) as previously discussed.

The objectives of the RU1 zone 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.

The proposal is generally consistent with these objectives. As noted previously, although the solar farm will be located on productive agricultural land, it is permissible in the zone via the SEPP (T&I), will still be used for sheep and goat grazing while operational, and will revert back to grazing / agricultural use following decommissioning. It is not expected that the proposal will adversely impact on the natural resource base or the future use / capability of the land. The proposal does not alter the current lot arrangements thus will not lead to fragmentation. Land use conflict is considered unlikely, as discussed throughout the following assessment sections of this report.

General Controls and Development Standards

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

- Clause 4.1 Minimum subdivision lot size The original application involved a boundary adjustment; however, this component has been deleted from the proposal and thus, this LEP provision is no longer applicable.
- Clause 5.21 Flood Planning While the land is not mapped under the LEP as flood prone land, the applicant indicates that the land is subject to flooding. The applicant has submitted a 'Flood Study' as part of the application, which Council's Manager Works has reviewed. No issues have been raised in this regard. Emergency access and evacuation has been previously discussed under the bushfire assessment section of this report, and it is considered that the recommended emergency planning documents via condition of consent can appropriately cover both the bushfire and flooding hazards.
- Clause 6.6 Essential Services All relevant services are available for the development, with the exception of water supply for firefighting purposes as previously discussed. Conditions of consent are attached.

Overall, the proposal is considered to be consistent with the LEP.

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

There are several proposed instruments which have been the subject of public consultation under the EP&A Act, however none are directly relevant to the proposal.

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

The following Development Control Plan is relevant to this application:

Bourke Development Control Plan 2012 ('DCP')

An assessment against the applicable provisions of the DCP was carried out earlier in this report in Table 3. A detailed assessment of general development specifications and environmental impacts is set out in the "Likely Impacts" section of this report below.

No contributions plans are relevant pursuant to Section 7.18 of the EP&A Act.

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

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

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

Section 61 of the EP&A Regulation contains additional matters that must be taken into consideration by a consent authority in determining a development application. These matters are not relevant to the proposal.

Section 62 (consideration of fire safety) and Section 64 (consent authority may require upgrade of buildings) of the EP&A Regulation are not relevant to the proposal.

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

The consideration of impacts on the natural and built environments is set out below.

Context and Setting

The proposal is considered to be generally consistent with the context of the site. The site is generally flat, and only minimal earthworks / land shaping is required to construct the internal access road and install the required solar infrastructure. The proposed development has been designed to minimise native vegetation clearing, where only one tree is located on the site, and this is to be retained; and to utilise the existing access location (subject to upgrade requirements).

Although surrounded by predominately agricultural land and rural dwellings, the solar farm will be a reasonably benign land use within the surrounds. The construction phase of the proposal is likely to generate the most impact with regards to traffic and noise, and these matters are discussed in greater detail in the relevant sections below. The land will still be used for grazing purposes (i.e. dual use for solar farm and agricultural grazing), and upon decommissioning of the solar farm will revert back to agricultural use.

Notwithstanding, concerns have been raised about the proposed infrastructure being visually obtrusive from the highway and nearby surrounding properties, and this is discussed in greater detail in the "Visual Impacts" assessment below.

Concerns were also raised as to how the development will relate to the existing advertising signage along the Mitchell Highway frontage. The applicant has confirmed that these are to be retained. Although not shown on the submitted drawings, the proposed solar farm has been set back to take these into account. This matter is also discussed in greater detail in the "Visual Impacts" assessment below.

Visual Impacts

Given the proximity of the development to the Mitchell Highway / Tancred Drive, and the close proximity of the nearest sensitive receiver (dwelling house) to the north (see Figures 10 and 11), visual impacts of the proposed solar farm are considered to be an issue.



Figure 10 – View of neighbouring farm and dwelling to the north (from submitted Statement of Environmental Effects by Zenith Town Planning)

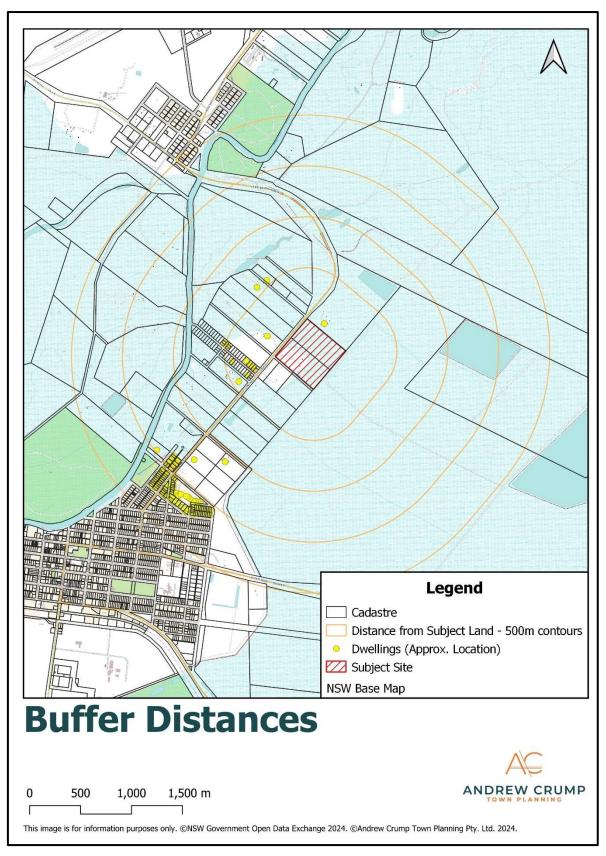


Figure 11 – Location of nearby dwellings

The applicant has submitted a 'Landscape Character & Visual Impact Assessment', which evaluates the potential impacts on character of the surrounding landscape and visual catchment, impacts on viewpoints and receivers; and provides avoidance and mitigation measures. It predominantly relies on the 'Landscape character and visual impact grading matrix' from the RMS Guideline for Landscape Character and Visual Impact Assessment (2018), and assesses that:

- The magnitude of the project and impact on landscape character is considered to be high due to the introduction of a new type of development that is substantial in size and scale relative to existing development.
- It will be visible from Tancred Drive which is a Classified road.
- There are 66 dwellings within the visual catchment (2km radius).
- It is considered that the view from a rural dwelling is more critical than views from "unoccupied" parts of the property such as yards and paddocks.
- It will cause minor changes to the character of the rural landscape in the immediate vicinity of the site, and to a lesser degree within the broader district of Bourke.
- The sensitivity of private property to landscape change is considered moderate given the existing modified landscape which is predominantly agricultural.
- The sensitivity of public places, such as Tancred Drive, to landscape change would be moderate in close proximity to the development, and low for other roads due to distance separation and vegetation on intervening land.
- The overall impact on landscape character is assessed to be moderate-high for both private property and the public domain.
- The ability to distinguish the type of land use and the actual composition of materials diminishes with distance. The visibility of the site from properties located beyond 2km would be negligible.
- Distance, the presence of roadside and boundary vegetation and paddock trees, the flat topography, and former quarry on the same property temper the effects on landscape character.
- The presence of the solar farm in the landscape can be reversed without permanent impact. The land will return to its current appearance after the solar farm is decommissioned in approximately 35 years time.

Most of the visual impacts based on observation points and estimates of magnitude from that assessment report range from negligible to low, with a few "high" results for the closest immediate neighbour to the north, a dwelling located on the western side of Tancred Drive (445m south-west), and for Tancred Drive / Mitchell Highway immediately to the west of the site. Most other dwellings in the vicinity will be shielded by existing vegetation, flat topography, and separation distances.

While most of these findings are considered reasonable, the submitted assessment report concludes that on balance the visual impacts are acceptable because the solar farm will provide renewable energy and a source of electricity, will generate employment opportunities, and that existing road reserve and neighbouring vegetation are to be maintained.

It is considered that these aspects do not specifically mitigate the visual impacts of the development, where the submitted assessment notes that the magnitude of the impacts could be high. Maintenance of existing vegetation on the road reserve and on neighbouring properties is outside of the control of the applicant / operator, and cannot necessarily be relied upon as a mitigation measure in its own right. Furthermore, views of the site from the road are impacted by existing advertising signage which line the site frontage. The submitted assessment report notes that this existing signage may screen visual impacts.

However, it is considered that the proposed development, in particular the boundary fencing and solar panels, are likely to result in an exacerbation of visual impacts when coupled with these existing signs.

As such, it is recommended that landscape / vegetative screening be implemented to ameliorate the adverse visual impacts. Amended plans were requested from the applicant to show landscape screening along the western boundary (i.e. the Mitchel Highway frontage), and along the common boundary between Lot 1 DP134908 and Lot 136 DP39834 (i.e. the closest neighbour to the north).

The applicant has responded that they are of the opinion that vegetative screening is not required for the following reasons:

- the closest neighbour has not objected,
- the adjacent gypsum mine operated without screening despite its industrial and invasive activities,
- an extensive landscaping corridor is "an excessive endeavour to address the very small number of objections that were received",
- the site is located on a high-speed section of a highway where the solar farm will only be viewable for several moments by passing motorists,
- there are other significantly larger solar farms in NSW and the ACT that are not screened.
- the site should be used to showcase to visitors that Bourke is an advocate of renewable energy, and
- that they can erect minor non-intrusive signage along the frontage of the property highlighting how solar farms work for educational purposes.

These reasons still do not address the identified visual impacts, nor provide any mitigation measures. While it is acknowledged that only a small number of submissions were received, impacts are not limited to the number of people affected, but the nature and extent of the impacts need to be assessed and addressed. Both objections received during the public exhibition period raised visual impacts as an issue, and these are discussed further in section 4.6 of this report. Additional signage is not considered warranted in this case, and is likely to exacerbate visual impacts further and may also result in adverse traffic safety impacts (i.e. traffic stopping to read the signs).

It is also acknowledged that the former gypsum mine did not provide visual screening, however any new activity on the land of this nature would require screening measures and buffers based on current planning provisions. While it may be the case that some other solar farms in the state and in the ACT do not provide screening, their particulars are not known (such as site setbacks, proximity to dwellings, etc.) and may not be directly comparable to this proposal and site.

Vegetative plantings are considered an easy way to provide screening on the site and provide a very effective mitigation measure with regards to visual impacts. The screening will also assist with reducing the amount of yellow glare experienced by motorists traveling along the Mitchell Highway, as detailed in the "Glint and Glare Impacts" assessment below.

It is considered that the vegetative screening should be:

- Endemic to the Bourke region and suitable for local growing conditions;
- A mature height of not less than 4.5m;
- A minimum landscaped corridor of 5m in width;
- Of a sufficient density to adequately screen the development;

- Positioned on the outside of the security fence;
- Not impede the APZ as an inner protection area;
- Wholly within the leased area;
- Provided with an irrigation source;
- Include a section drawing showing a timeline of projected growth of the landscaping at 3-5 years - post planting, 5-10 years and 10-15 years post planting; and
- Prepared by a suitably qualified landscape architect.

Overall, it is considered that visual impacts can be sufficiently mitigated via vegetative screening. Relevant conditions are attached.

Glint and Glare Impacts

Further to the visual impacts discussed above, a solar farm has the potential to result in glint and glare impacts. It is noted that PV cells are:

- · designed to absorb as much light as possible to maximise efficiency,
- are constructed from dark, light-absorbing material, and
- are treated with an anti-reflective coating.

The light reflected varies depending on the angle of the PV modules, and the greater the angle, the higher the percentage of reflective light. Tracking also varies throughout the year depending on the seasonal change in the sun's path.

The applicant has submitted a 'Glint and Glare Assessment' which identifies potential receptors and assesses the glint and glare hazard using the Solar Glare Hazard Analysis Tool (SGHAT) GlareGauge analysis (developed by Sandia National Laboratories, and recognised by the Australian Government Civil Aviation Safety Authority (CASA)). The same visual catchment from the submitted 'Landscape Character & Visual Impact Assessment' was used in this assessment.

The submitted assessment report's GlareGauge analysis indicates that two road routes received yellow and green glare, one observation point received yellow glare, and seventeen observation points received green glare. Yellow glare has the potential to cause after image to observers, while green glare has low potential to cause after image. In general, most of the glare occurred during early mornings and late evenings when backtracking is active. No observation points or routes received more than three minutes of glare in any single day.

The report goes on to note that the existing roadside vegetation and structures are expected to provide a physical obstruction between the solar farm, road users and some observation points, thus reducing the visual impact of the project. It is considered that the existing roadside vegetation is relatively sparse, and additional vegetative screening on the site is recommended to minimise visual impacts and assist to reduce glare and glint impacts as discussed above.

It is also noted that the application was referred to Air Services Australia and CASA Aviation Group, who do not raise any concerns. Of particular note, glare from solar farms typically only impacts on air traffic controllers seeing aircraft in the circuit area at the airport, however Bourke does not have an Air Traffic Control Tower, therefore the proposed solar installation is not considered to be a hazard.

Overall, it is considered that glare and glint impacts can be sufficiently mitigated via vegetative screening as previously discussed. Relevant conditions are attached.

Access and Traffic Impacts

The applicant has submitted various revisions of a 'Traffic Impact Assessment Report' (latest version 6, dated 23 November 2023). The Traffic Impact Assessment Report makes the following comments with regards to the proposal:

- The Battery Energy Storage System (BESS) comprises several 40-foot-high cube shipping containers - delivered to site on standard semi-trailer skeletals or flat beds and craned onto foundations.
- The BESS have a mass of approximately 12 tonnes designed to be transported as whole, one-piece units (same size as standard shipping containers that are commonly in transit on Australian roads).
- Oversize / overmass (OSOM) vehicles will not be required during the construction or operation phases – BESS battery packs delivered separately on loose pallets via tautliners / rigid vehicles, and manually inserted into the container's internal racks during on-site assembly.
- It is expected that trucks would travel from either Sydney or Newcastle, through Dubbo and into Bourke from Nyngan on the B71.
- A temporary construction compound is required for construction and decommissioning phases and includes:
 - temporary construction offices;
 - car and bus parking areas; and
 - material laydown areas.
- During the construction phase, approximately 45 heavy vehicles (including and up to B-doubles) will be accessing the site delivering panel components (expected daily average of 4 trucks) (weeks 3-10).
- Trucks will generally access the site between 10am and 2 pm, outside of morning and afternoon peak periods.
- A maximum of 50 construction workers are likely to generate movements in the order of 40 vehicles, entering the site in the morning between 6:30-8:00am and leaving at the afternoon peak around 4:00-5:00pm (based on number of vehicles being 80% of the workforce). These will be light vehicles and/or a shuttle bus service provided by the main contractor.
- Specialist electrical contractors will commission the site through light or heavy rigid vehicles (up to 12m) with up to 10 construction workers (weeks 10-12).
- All land required for the temporary construction compound, if not used as part of the array area, would be restored to its current condition.

The submitted report makes the following conclusions and recommendations:

- The existing access point has sufficient sight lines for the existing 90km/hr speed zone, well over 200m which would be required. Flat and extended sight lines are available.
- The existing driveway access looks to be only a light cover of gravel and, if access is required during wet conditions, it is suggested that additional crushed rock material be placed as required for the short-term construction works to proceed in wet weather.
- The provision of shared transport for workers (e.g. a shuttle bus system and/or carpooling) should be incorporated into the site management.
- A Traffic Management Plan (TMP) developed by an appropriately qualified person will be required to address incoming and outgoing traffic to the site during construction works
- The TMP needs to ensure the existing access gates will be fixed open during construction period, or the existing gates be relocated to ensure sufficient room to park the largest site vehicle without encroaching on the shoulders of the Mitchell Highway (i.e. gate setbacks).

Due to the nature of the development, traffic generation associated with the solar farm is primarily related to the construction element only. Ongoing traffic generation once operational would be limited to maintenance vehicles approximately four (4) times per year, which will have negligible impact on the surrounding road network. Suitable access for firefighting purposes has been discussed previously. While the proposal does not include any parking spaces in association with the ongoing use of the facility, an internal access road will be provided. Maintenance vehicles would likely be moving around the site rather than requiring a fixed car parking space. Given the unattended nature of the use, the provision of an access road and no parking is considered acceptable.

The proposal was referred to TfNSW pursuant to SEPP (T&I), being development with frontage to Classified road. Comments and recommended conditions were discussed previously in section 3.4 of this report.

Overall, it is considered that traffic and access impacts can be sufficiently mitigated via access upgrades and construction management plans. Relevant conditions are attached.

Noise and Vibration Impacts

The main noise source of the development will be associated with the construction phase of the development, including heavy vehicles coming and going from site, as well as pile drivers to install the solar panel infrastructure. Most of this noise and vibration will be limited to a short-term intensive construction period (6-8 weeks).

The application is supported by a 'Noise Assessment' which notes that:

- Construction noise levels have the potential to exceed relevant construction noise management levels at four nearest receiver locations.
- Recommendations have been provided to minimise the potential noise impacts from construction, albeit of a temporary nature, during the daytime over a three-month construction period.
- Noise emissions from the project would satisfy construction noise management levels at all other receiver locations, including operational noise levels (i.e. ongoing use).
- Sleep disturbance is not anticipated, as usual construction hours are proposed.
- Road noise emissions associated with the project are anticipated to satisfy the relevant criteria at all receivers along the proposed transportation route.
- A qualitative assessment of potential vibration impacts has been completed. Due to the nature of the works proposed and distances to potential vibration sensitive receivers, vibration impacts from the project would be negligible.

Conditions of consent are attached to ensure that hours and construction works are in accordance with the standard requirements of the *Protection of the Environment Operations Act 1997*, as well as in accordance with the submitted report's recommendations to minimise impacts.

It is not anticipated that the noise generated by the solar farm on an ongoing basis would be offensive to nearby residential properties, nor out of keeping with the locality in which it is based. The nosier components of the solar farm (BESS etc) will be located in the centre of the array / site, separated from the boundaries and neighbouring land uses. The submitted noise report demonstrates that operational noise will comply with relevant limits.

Overall, it is considered that noise and vibration impacts can be sufficiently mitigated via construction management plans and limited hours of operation. Construction noise impacts will be temporary in nature and can be managed sufficiently. Relevant conditions are attached.

Utilities and Servicing

Apart from electricity the site is not provided with any reticulated services. Stormwater can be appropriately managed onsite. A condition of consent will require temporary toilets and car parking to be provided for construction workers. The proposed development will require water to be stored onsite for firefighting purposes as previously discussed.

Overall, the site can be appropriately serviced and adverse impacts are unlikely. Relevant conditions are attached.

Heritage Impacts

Indigenous Heritage Impacts

Council staff requested that the applicant undertake further liaison with relevant stakeholders as part of the Aboriginal Heritage Assessment. The applicant submits that numerous attempts were made to consult with the Local Aboriginal Land Council, but to no avail.

An assessment of the development's potential to harm any Aboriginal objects was undertaken as part of the SoEE which is consistent with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wale*. The assessment determined that the potential for harm was unlikely. Notwithstanding, a condition of consent in relation to any unexpected finds during construction works is attached.

Non-indigenous heritage impacts

The subject land is not identified as an item of environmental heritage or located within a heritage conservation area. Notwithstanding, a condition of consent in relation to any unexpected finds during construction works is attached.

Environmental Impacts

The land is not identified as being environmentally sensitive, and the only tree onsite within proximity to the proposed solar farm is to be retained. Additional vegetative screening is recommended as previously discussed. The proposed development will not result in any significant changes to the contours of the land. Erosion and dust control measures will need to be implemented during construction works to protect neighbours, downstream properties, and the nearby Darling River.

As discussed previously, no concerns are raised in relation to contamination or flooding. Conditions in relation to unexpected finds, bushfire protection, and emergency procedures are attached.

Overall, subject to conditions of consent, adverse environmental impacts are considered unlikely.

Safety, Security and Crime Prevention

The proposed development is located on private land, approximately 2kms from the township of Bourke, and will be provided with a 2.3m high security fence around the compound area. No concerns in relation to safety, security and crime prevention are raised, and thus adverse impacts are considered unlikely.

Social and Economic Impacts

Due to the location of the site and the nature of the development there will be little interaction between the development and the public. Positive social impacts in relation to the additional renewable energy source is expected.

The proposed development is likely to employ approximately 50 construction workers, plus truck drivers and electrical workers, who are likely to access Bourke and the surrounds for accommodation, food and the like during the construction phase. No negative economic impacts are expected.

Housing construction workers during the construction phase of the development may present some challenges for the applicant and the community.

The applicant submits the following in relation to available accommodation:

There are 14 establishments offering accommodation for visitors to Bourke and the surrounding district listed on the NSW Government's VisitNSW website. These include holiday parks, motor inns, bed and breakfasts, serviced apartments and hotels. In addition to these establishments there are 210 unoccupied private dwellings some of which may be available as short-term rentals, and unregulated accommodation places such as AirBnB and Stayz.

Whilst this may be the case, there are numerous factors and practical realities that exist within Bourke, such as the competing labour market associated with the Goat Abattoirs which creates a scarcity in accommodation. The applicant may need to investigate either housing workers on-site as a separate application process, or alternatively, sourcing accommodation in neighbouring towns which would result in up to a two-hour commute.

It is noted the Department of Planning and Environment (as they were known at the time) recently exhibited the *Temporary and seasonal workers' accommodation draft guideline*. The applicant could explore the potential to accommodate works on-site under these provisions if adopted.

Cumulative Impacts

Due to the nature, scale and location of the development and the adjoining and surrounding uses, no concerns are raised in relation to cumulative impacts. Should a development application be lodged for a similar development within the vicinity of the subject land cumulative impacts in relation to visual amenity would need to be considered. The recommended vegetative screening will assist in softening the proposal into the environment and minimise impacts as previously discussed.

Accordingly, and subject to conditions of consent, it is considered that the proposal will not result in any significant adverse impacts in the locality as outlined above.

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

As discussed in detail in the foregoing sections of this report, the development site is considered suitable for the proposed solar farm. The proposal will fit within the locality subject to vegetative screening and access upgrade works. Adequate services can be provided on the site, and relevant conditions are attached in this regard. While the land has the potential to be affected by bushfire and flooding, conditions of consent can suitably mitigate impacts.

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

Two (2) submissions were received in relation to the proposed development. The following issues were raised:

- Visual and landscape character impacts
- Impacts on wildlife
- Heat island effects
- Lifestyle and health impacts
- Environmental impacts (dust, noise and traffic)
- Reduction in property values

These submissions are considered in section 4.6 and Table 6 later in this report.

Section 4.15(1)(e) - Public interest

The proposed solar farm is considered to be a suitable use of the subject land. The land use is permitted in the RU1 Primary Production zone via *State Environmental Planning Policy (Transport and Infrastructure) 2021.* Potential impacts during the construction phase and ongoing use can be mitigated via conditions as discussed in the main body of this report. The proposal is consistent with all relevant planning controls, and relevant government agencies have been consulted. Their recommended conditions of consent are attached.

The proposal will provide a renewable energy source, which is likely to provide an overall benefit to people and the environment. The construction phase of the development will provide job opportunities and is likely to benefit the town of Bourke via accommodation and servicing needs for those workers.

Overall, the proposed solar farm is considered to be in the public interest.

4 REFERRALS AND SUBMISSIONS

4.4 Agency Referrals and Concurrence

The development application has been referred to various agencies for comment as required by the EP&A Act and outlined below in Table 4. Relevant conditions are attached.

Table 4: Concurrence and Referrals to agencies

	Table 4. Concurrence and									
Agency	Concurrence / referral trigger	Comments	Resolved							
Concurrence Requirements (s4.13 of EP&A Act) & Integrated Development (S 4.46 of the EP&A Act)										
Not applicable - no concurrence requirements, as the proposal is not integrated or designated development.										
Referral / Consultation Agencies										
NSW Rural Fire Service (RFS)	S4.14 – EP&A Act Development on bushfire prone land	The proposal does not involve a 'special fire purpose' or subdivision for residential purposes, thus no referral / concurrence to RFS required. The consent authority can assess the proposal pursuant to PBP 2019, and this matter has been previously addressed in this report. Conditions of consent with regards to APZs and water supply attached.	N/A							
Electricity supply authority	Section 2.35 – State Environmental Planning Policy (Transport and Infrastructure) 2021 Development near electrical infrastructure	Referred to Essential Energy and previously addressed in this report. Conditions of consent attached.	Y							
Transport for NSW	Section 2.119 – State Environmental Planning Policy (Transport and Infrastructure) 2021 Development with frontage to classified road	Referred to TfNSW and previously addressed in this report. Conditions of consent attached.	Y							
Transport for NSW	Section 2.121 – State Environmental Planning Policy (Transport and Infrastructure) 2021 Development that is deemed to be traffic generating development in Schedule 3	Not considered to be traffic generating development, as peak hourly traffic movements under the thresholds in Schedule 3, as previously addressed in this report.	N/A							

Agency	Concurrence / referral trigger	Comments	Resolved
Air Services Australia	Proximity to Bourke Airport	No issues raised.	N/A
CASA Aviation Group	Proximity to Bourke Airport	No issues raised.	N/A

4.5 Council Officer Referrals

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

Table 5: Consideration of Council Referrals

Officer	Comments	Resolved
Manger Works	As previously discussed, Council's Manager Works has reviewed the submitted Flood Study and raises no issues.	Y
Traffic	The application was referred to TfNSW, as well as to Council's Manager Roads. Issues and conditions of consent discussed earlier in this report.	Y
Building	Erection of ancillary structures only, and no building controls, fire controls, or EP&A Regulations apply. No referral necessary.	N/A
Health	No environmental health issues, referral not necessary.	N/A
Waste	A waste study was submitted in support of the application. A waste management plan during construction works will be required. No referral necessary. Relevant conditions attached.	Y
Heritage	The subject site is not heritage listed or within a heritage conservation area. No referral necessary.	N/A

The issues which need to be addressed via conditions of consent were considered previously in this report.

4.6 Community Consultation

The proposal was notified in accordance with the Bourke DCP and Community Participation Plan (CPP) from 22 May 2023 to 9 June 2023. The notification included the following:

- An advertisement in the local newspaper The Western Herald; and
- Notification letters sent to adjoining and adjacent properties.

The Council received a total of two (2) unique submissions, both of which object to the proposal. The issues raised in these submissions are considered in **Table 6.**

Table 6: Community Submissions

	No of	
Issue	submissions	Council Comments
Visual and landscape character impacts Submissions raised concerns that the development will be ugly, cumulative impacts of unsightly structures, cumulative impacts if it was to expand, better alternative locations, vegetative sight barrier/screen should be implemented, vegetative screen will take many years to grow, impacts on views/scenic quality, industrial appearance.	2	This issue has been raised with the applicant, who submits that there is not a significant visual impact and thus vegetative screening is not warranted in this case. Council disagrees with this position and considers that vegetative screening is necessary to mitigate visual impacts to the nearest neighbours and to the main road. Although the plants will take some time to grow, they will be in-situ at their mature height for the majority of the lifespan of the project. The solar panel infrastructure is not significant in height to adversely impact on views. At its highest point (4.1m) the panels are comparable to a single storey dwelling house.
		These issues can be satisfactorily addressed subject to conditions of consent as previously discussed.
Impacts on wildlife Submission raised concerns that the development will adversely impact health and wellbeing of wildlife, will destroy habitat, prevent wildlife moving freely through the area, and long-term impacts on wildlife.	1	The subject site is already a highly altered environment comprising cleared agricultural grazing land and a former mine. The land is not identified as being environmentally sensitive. The proposed development does not involve the clearing of vegetation. Existing habitat is unlikely, and thus significant impacts to flora and fauna are also unlikely. Conditions of consent can ensure the nearby Darling River will not be adversely impacted during the construction phase (run-off, soil
		erosion, etc).
Heat island effects	1	While it is considered that large scale solar farms may produce some heat island effects,

Submission raised concern that the development will increase local temperatures by 4-5 degrees.		and that buffers to adjacent crops is recommended for such projects, the small scale of the proposed development is unlikely to have significant impacts. Vegetative screening will provide a buffer between the proposed panels and the closet neighbour, as well as from the main road, which will assist in mitigating adverse impacts.
Lifestyle & Health Impacts Submission raised concerns that the amount of infrastructure will demise the rural lifestyle, impacts to health and wellbeing of residents, reduce the use of nearby walking track, and impacts to local residents with regards to dust and chemical herbicides (weed management), and construction impacts (dust, noise, traffic).	1	Some impacts are expected during the construction phase of the development, such as noise, vibration, dust, traffic, etc. Subject to conditions of consent, these impacts will be within reasonable limit. The proposal is permitted in the zone and is considered a suitable use of the subject land as previously discussed. Adverse lifestyle and health impacts are not considered likely as previously discussed. The use of the land for a solar farm will not adversely impact on the use of the nearby walking track. The use of chemical herbicides etc. is considered similar to the existing use of the land for grazing. These matters can be satisfactorily addressed subject to the imposition of conditions of consent as previously discussed.
Environmental Impacts Submission raised concerns that the development will adversely impact soil quality/productivity, and dust and noise impacts.	1	Environmental impacts have been discussed in detail throughout this report. These matters can be satisfactorily addressed subject to the imposition of conditions of consent.
Reduction in property values Submission raised concern that the development will affect property values with no compensation being offered to affected land holders.	1	This matter is not a planning consideration and is outside of the scope of this application. General social and economic impacts have been discussed previously in this report.

5 CONCLUSION

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

Key issues predominately relate to visual impacts of the solar farm, and traffic and noise impacts associated with the construction phase of the project. A vegetative screen is recommended to mitigate visual impacts to the road (Mitchell Highway) and to the nearest rural-residential dwelling to the north. This will also provide a buffer with regards to environmental impacts (dust, noise, etc).

With regards to construction impacts, conditions of consent have been recommended from TfNSW and Essential Energy to ensure the development proceeds in a safe manner. In particular the existing access needs to be upgraded to facilitate construction vehicles. Management Plans are required to ensure traffic, waste, workers, etc. are suitably controlled during the construction phase of the project. While there will be some adverse noise impacts during works, these can be maintained within reasonable limit.

Recommended conditions of consent are set out in Appendix A.

Overall, it is considered that the site is suitable for the proposed use, and that the development is compatible with the surrounds. The proposed development is consistent with all relevant planning provisions and matters for consideration pursuant to Section 4.15 of the EP&A Act.

6 RECOMMENDATION

That the Development Application DA 2023/0024 for electricity generating works (5MW solar farm and Battery Energy Storage System) at 96 Tancred Drive, Bourke be APPROVED pursuant to Section 4.16(1)(a) of the *Environmental Planning and Assessment Act 1979* subject to the draft conditions of consent attached to this report at Appendix A.

7 List of Appendices

The following attachments are provided:

- Appendix A: Plans
- Appendix B: Public Submissions
- Appendix C: Agency Referral Responses

Appendix A – PLANS

BOURKE 2B 5MW SOLAR FARM

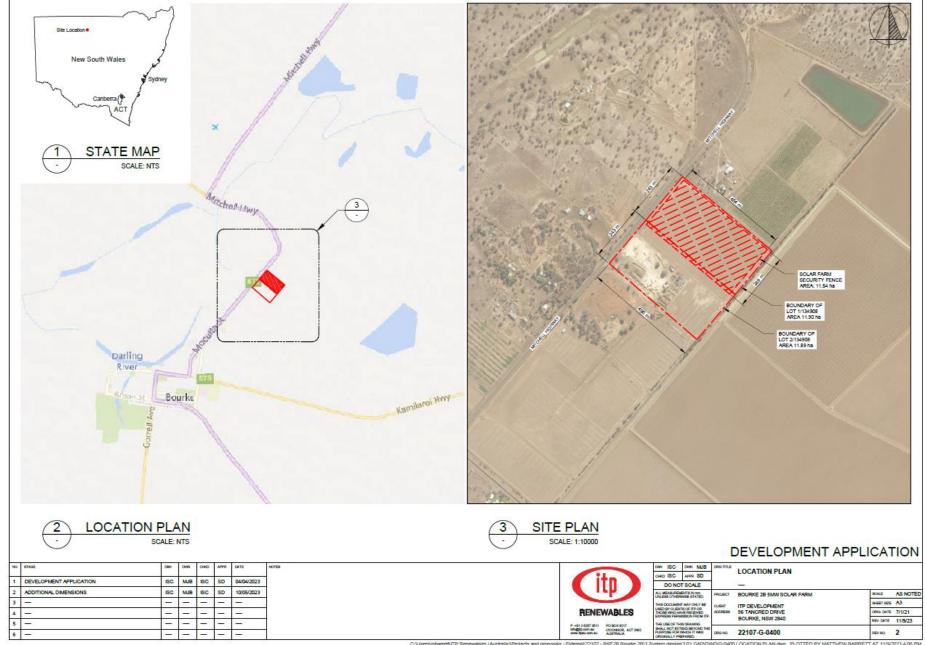
DEVELOPMENT APPLICATION

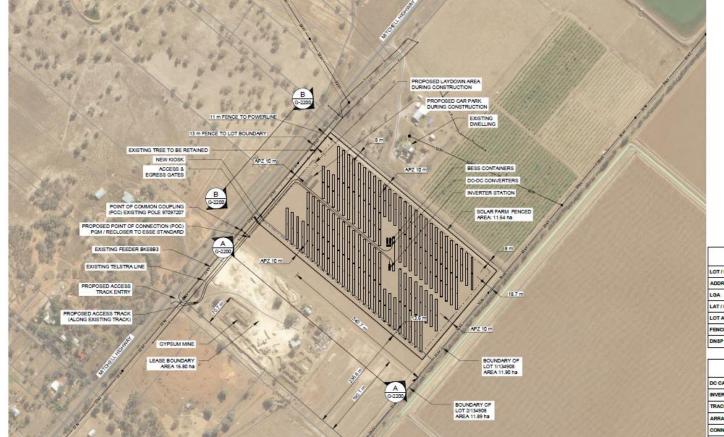
ADDRESS: 96 TANCRED DRIVE BOURKE NSW 2840





IT Power (Australia) Pty Ltd | ABN 42 107 351 673 | Part of The ITPEnergised Group







SITE INFORMATION							
LOT/DP	1/134908 & 2/134908						
ADDRESS	96 TANCRED DRIVE, BOURKE, NSW 2840						
LGA	BOURKE SHIRE COUNCIL						
LAT/LONG	-30.071649 / 145.962801						
LOT AREAS	LOT 1: 11.90 ha LOT 2: 11.89 ha						
FENCED AREA	11.54 ha						
DNSP	ESSENTIAL ENERGY						

	Out and a second second
DC CAPACITY	6.443 MW
INVERTER8	2 x 3.4 MW AC (4.99 MW)
TRACKER SPACING (N-S)	MIN. 2.0 m
ARRAY PITCH	11.0 m
CONNECTION VOLTAGE	22 KV
CONNECTION FEEDER	ESSENTIAL ENERGY BKESB3
CONNECTION SUBSTATION	ESSENTIAL ENERGY BOURKE ZS
SECURITY FENCE SETBACK	MIN. 8 m FROM OPTION BOUNDARY
ARRAY SETBACK	MIN. 10 m FROM SECURITY FENCE
ACCESS PATH WIDTH	4 m

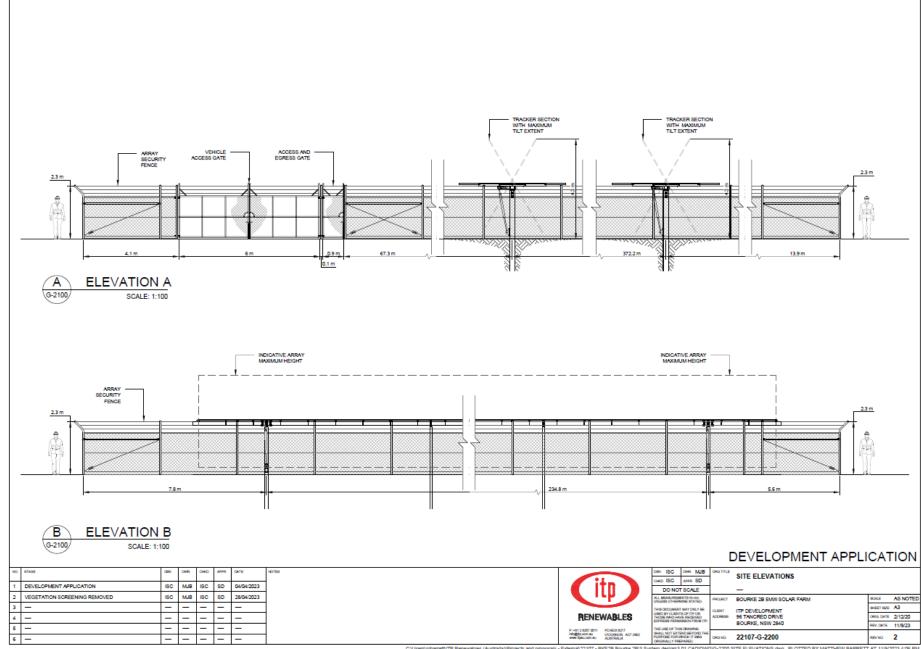


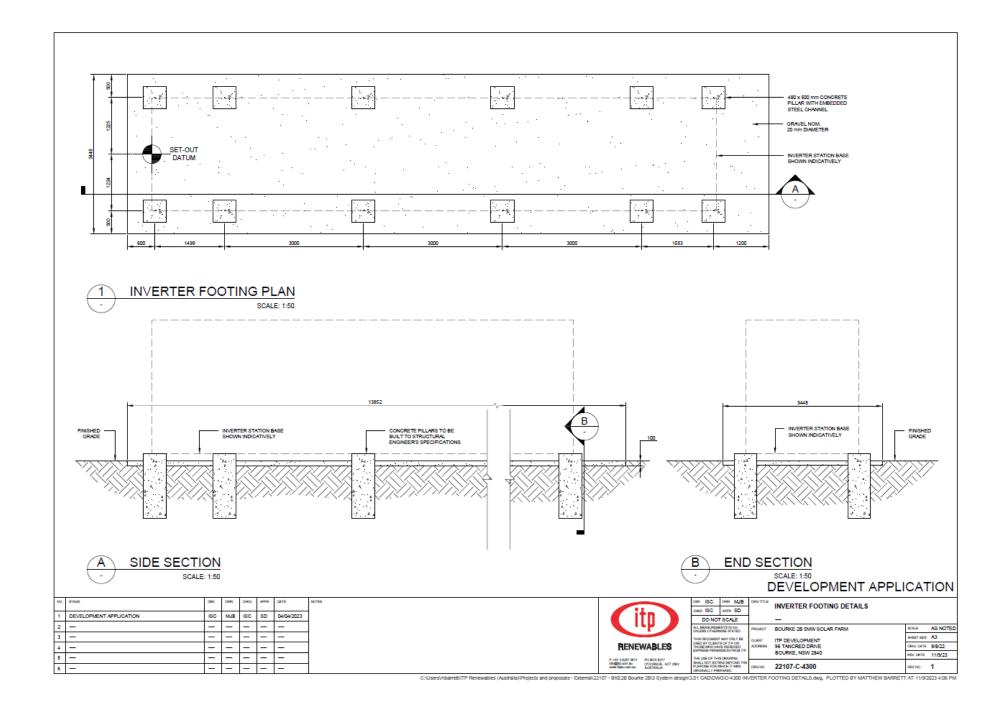
GENERAL ARRANGEMENT PLAN

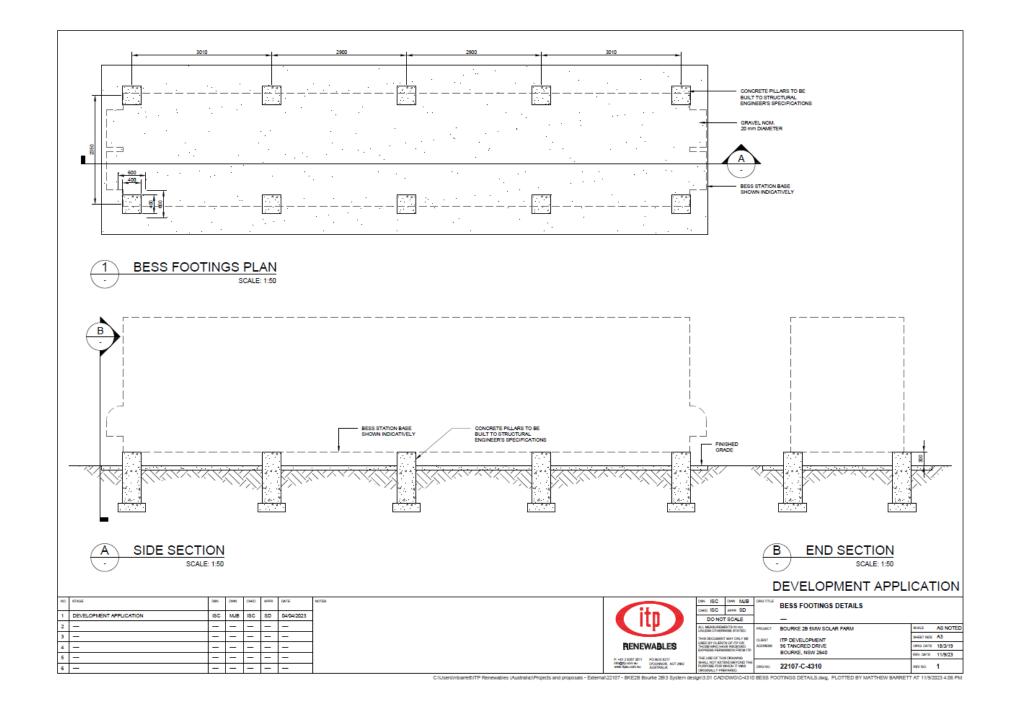
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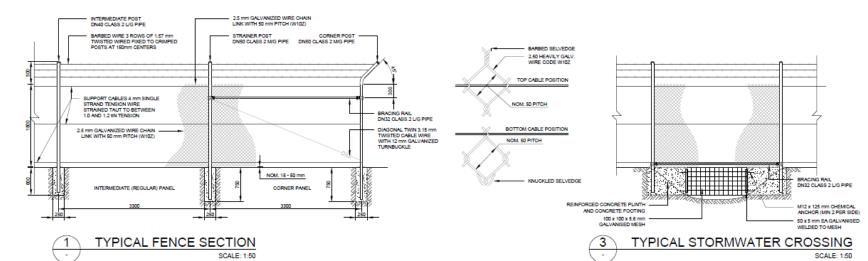
DEVELOPMENT APPLICATION

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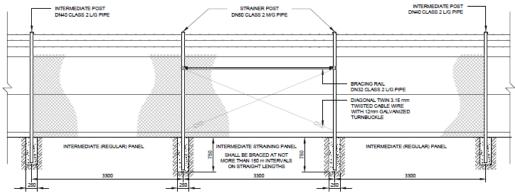








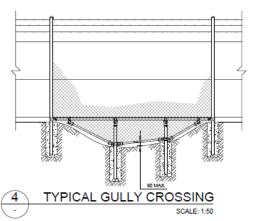
FENCE AND GATES TO BE DESIGNED AND CONSTRUCTED TO AS 1725 PART 1



INTERMEDIATE STRAINING PANEL FENCE SECTION

FENCE AND GATES TO BE DESIGNED AND CONSTRUCTED TO AS 1725 PART 1

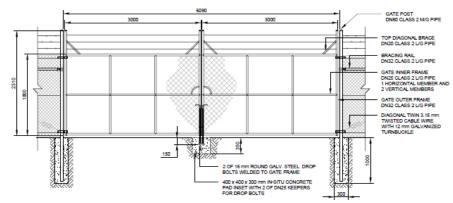
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FENCE AND GATES TO BE DESIGNED AND CONSTRUCTED TO AS 1725 PART 1

DEVELOPMENT APPLICATION

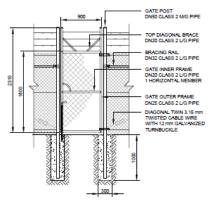
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DOUBLE LEAF 6 METRE GATE SECTION

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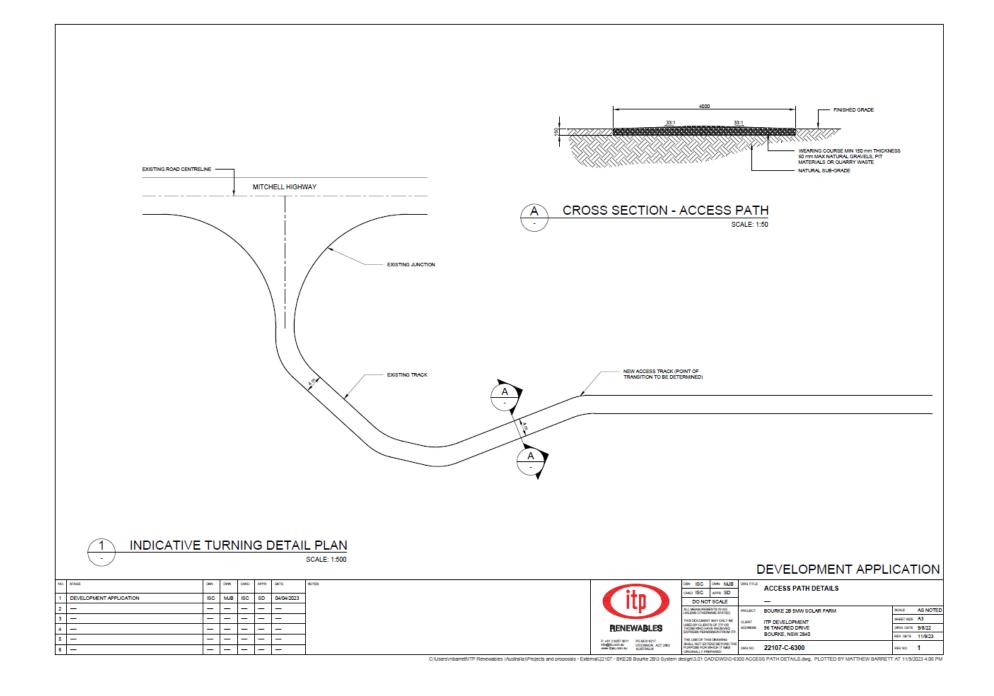


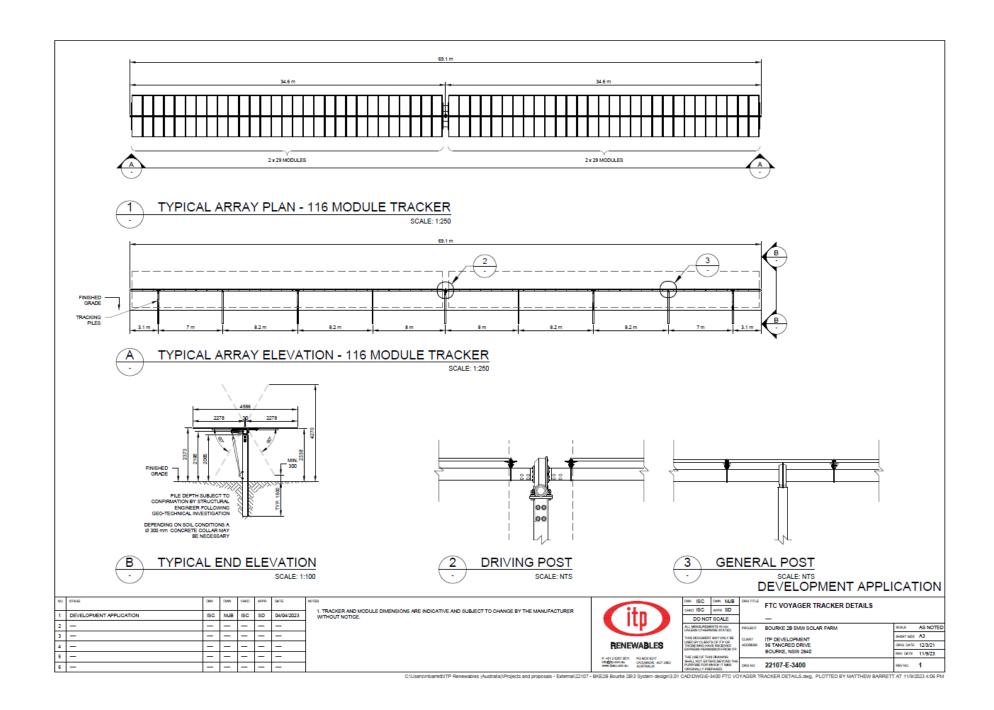
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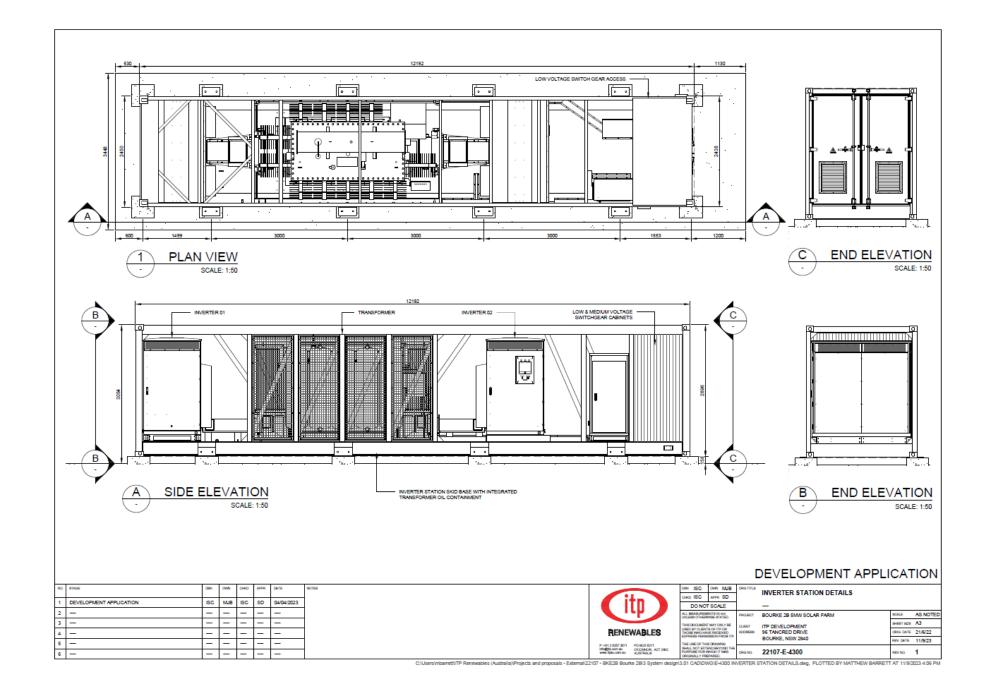
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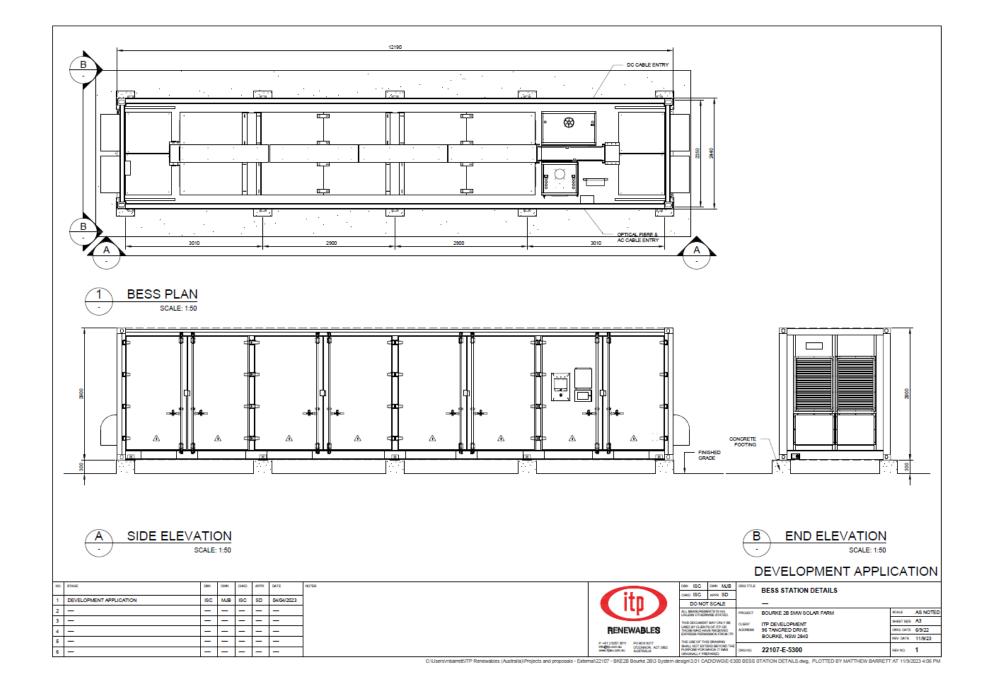
DEVELOPMENT APPLICATION

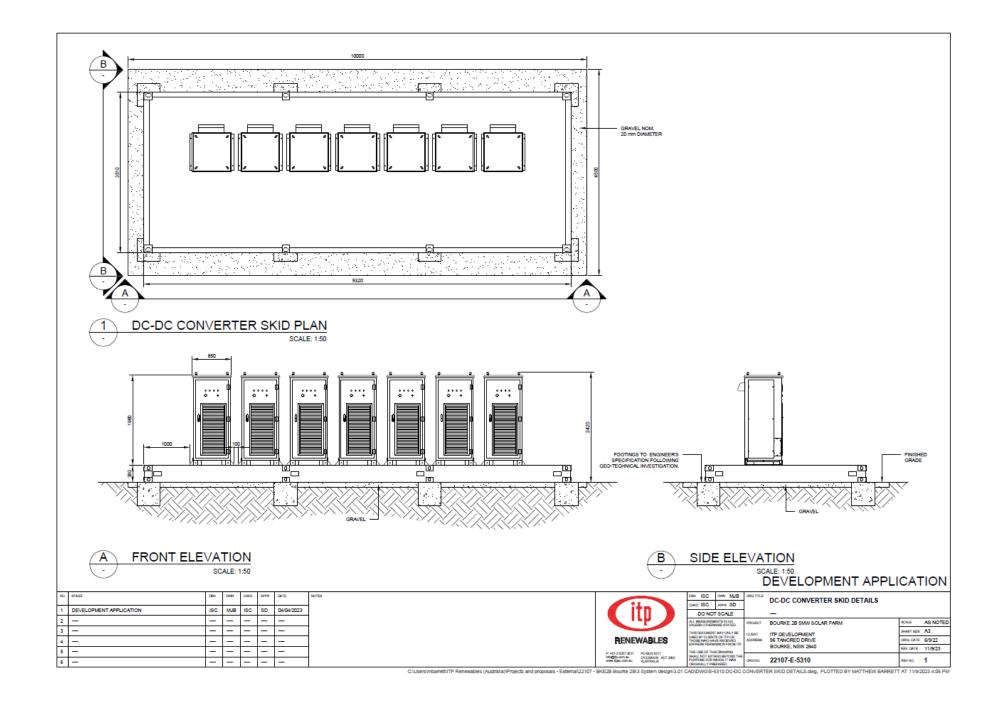
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Appendix B - PUBLIC SUBMISSIONS

The General Manager, Bourke Shire Council, Mitchell Street, BOURKE NSW 2840

Development Application DA 2023/0024 SWM Solar Farm with Battery Energy Storage System Lots 1 & 2, DP 134908 – 96 Tancred Drive, Bourke.

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MR		1	IT	
WM			DEPOT	
EDM			CREDITORS	
OTHER				

Dear Madam,

I hereby lodge my objection to the Solar Farm at 96 Tancred Drive, Bourke.

I acknowledge that a Notice was published in "The Western Herald" and can be found with some difficulty on the Bourke Shire Council website but the proposal is not something that the majority of Bourke residents would be aware of. If it was not for me, hardly anyone would be aware of the proposal including the next door neighbour, including the next door neighbour,

I am friends with Paradition who would appear to have an interest in the proposal and I wish to remain friends with Ross but I feel I have a far greater obligation to the Bourke community to at least seek amendment of the proposal.

I am reticent to lodge an objection but I cannot bear the thought of driving past the sheer ugliness of a solar farm situated right beside the Mitchell Highway numerous times a day until the end of my days.

There are unsightly structures and premises, in and around Bourke, that Council has little control over and much of that could be considered subjective but this is a proposal that Council and the Regional Planning Panel, has and ought to seek a better outcome for the community.

I have included an article from the internet from the "Renew Economy" magazine that suggests that it is NSW Government Policy to "protect some of the state's major regional centres from "encroaching solar and wind development". Whilst the article specifically refers to major regional centres, it should also apply to a major regional centre like Bourke and even small villages.

The article specifically refers to "visual impacts" amongst other things. I do believe that Bourke can expand whether the solar farm is built in this particular position and that there is a supply of alternate agricultural land.

There is plenty of alternative sites available for a solar farm, including land near the electricity substation that was set aside for such a purpose. Although it would still have visual impact in that alternate position, the impact would be about 10% of the proposed site.

I have looked at the plans but not any additional documents that may or may not set out any proposed conditions in the event of the venture failing, the removal of the structures at the end of their useful/economic life span. The advent of nuclear power, although some decades away, may well make the proposal obsolete. On a positive note, policy dependent, the solar farm has the potential to supply power during daylight outages of the "normal" power supply.

At the very minimum, the proposal should be amended to include a vegetative sight barrier outside the security fence of sufficient depth and height to screen the majority of the solar farm on the southern, northern and eastern boundaries.

Further, that the consent should include a clause setting out real, enforceable penalties and I am thinking millions of dollars, for failing to plant, maintain and manage the vegetative screen throughout the life cycle of the project. I do realise that the panels will at some stage each day, protrude well above the proposed security fence line and seeing them may be unavoidable but the vegetative screen should be as high as possible without shadowing the panel array.

The article from "Renew Economy" is reproduced hereunder :-

"The New South Wales government has updated guidelines to state planning rules to protect some of the state's major regional centres from "encroaching solar and wind development," after receiving almost unanimous support for the changes.

The planning amendment, first flagged by the government in October, seeks to restrict renewable energy projects from building within 10km of a commercial centre, or within 5km of residential land, in Albury, Armidale, Bathurst, Dubbo, Griffith, Orange, Tamworth and Wagga Wagga.

The rules do not seek to immediately rule out projects that fell into the above-mentioned planning zones, but rather will require authorities to consider additional mandatory matters around key issues, such as visual impacts and agricultural land, before granting planning approval.

In an update issued by the Department of Planning, Industry and Environment, its executive director of state policies and strategic advice, Felicity Greenway, said the changes will come into effect in early 2022 after 96% of public submissions on the new policy either gave feedback or supported the changes.

The government says the new rules will ensure renewable energy projects are built in the right places, to allow room for regional cities to grow and develop, including by safeguarding "vital land" needed to make regional cities more liveable.

In practice, the changes to the State Environmental Planning Policy (Infrastructure) 2007 will require consent authorities to consider if a proposed development will conflict with existing or approved uses of the land, such as land zoned for residential use.

Consent authorities will also have to consider whether a project would significantly impact or conflict with land needed to support the growth of a regional city, or significantly impact the scenic quality and landscape of the regional city.

Greenway said that with 14 operational large-scale solar farms in NSW worth more than \$30 million and a further 95 projects at various stages in the planning process, it is imperative to make sure they were done well.

"Renewable energy projects are a vital part of our state's transition to net zero emissions, but with the increasing number of applications cropping up close to existing regional cities, we need to make sure they're built in the right places," she said.

"We want to safeguard the success of our regional cities by making sure they have room to grow while we support the state's future energy needs.

"That's why we've updated our planning policy that covers infrastructure projects to ensure that solar and wind projects can only be approved if they would not have significant impacts on the future use of land, views, and scenic quality of regional cities."

For renewables developers – as the legal blog Lexology explained in October – the new rules don't prohibit projects in the designated zones, but rather will "present additional hurdles for approval and could compromise existing projects in the development pipeline."

Lexology said the proposed amendments sent the message that the NSW government's ambitious Net Zero Plan would "not be sought at all costs, or at least not without consideration of the impact ... on metropolitan and regional communities."

The updated guideline is now on public exhibition for community and stakeholder feedback until February 25, 2022. To read the guideline and have your say, visit planningportal.nsw.gov.au/solar-guidelines."



6th June, 2023

Development Application: DA 2023/0024

5MW Solar Farm with Battery Energy Storage System, Lots 1 & 2 DP 134908, 96 Tancred Drive, Bourle.

We STRONGLY OBJECT TO THE BUILDING OF THE SOLAR FARM at 96 Tancred Drive, Bourke.

This is the wrong position for a Solar Farm: The Community residents' physical and mental well-being must take precedence over the building of this solar farm between the townships of Bourke and North Bourke.

We are the owners of which is within a kilometre of the proposed Solar Farm.

The proposed development is the minimum area required for a SMW Solar Farm and we are very concerned that this is only the start of the development. Although the development application is only for Lots 1 and 2, there is the potential for further development in the future which could expand to incorporate the land from the end of the Lots 1 & 2 to the Bourke levy bank.

We like many before us and many to come enjoy the quieter lifestyle of rural fiving. Recently council constructed a walking track from Bourke to North Bourke. We have observed over the recent months how frequently the locals utilise this track including mothers taking their babies for walks, families with young children on bikes, walkers and joggers. This walkway is a beautiful area for the locals and visitors to enjoy and experience the true outback. We are concerned that the development will deter from this lifestyle and the walkways will no longer be utilised due to the physical and visuals impacts of hundreds of solar panels, 3 to 4 metres off the ground and surrounded by a 2.5 metre fence.

The potential of the heat island affect associated with the Solar Farm could increase local temperatures by an additional 4 or 5 degrees. In previous years, the summer temperature in Bourke has peaked at 47 degrees (in the shade). These peak temperatures plus the heat generated from the solar farm could bring the temperature to an unbearable degree.

We are also very concerned about the amount of infrastructure that would be required to connect the development to the grid. Further upgrades to existing infrastructure including powerfines, substation and inverters will further demise the existing lifestyle and Impact the health and wellbeing of wildlife and residents.

There have been suggestions that the area will be screened by suitable vegetation but the details of this are not transparent. It takes many years for such planting to be effective. Will the residents be properly informed of what vegetation will be used and how long this will take to effectively block the unsightly view of the solar panels?

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EDM	EDM CREDITORS										
OTHER											

It is known that wild life diversity and habitat will be destroyed to create such a development. Fencing of the perimeter will prevent native wildlife from moving freely through the area. We are further concerned of the long-term impacts on the wildlife and environment.

It will be difficult to maintain vegetation below the panels. This could create a significant source of dust for nearby residents. Weed management under and around panels will require large, regular doses of chemical herbicides. This will be a possible health hazard for nearby residents. The compacting of the soil and the change in the microclimate under the panels will have a long-lasting effect on soil productivity.

During construction the local residents will be adversely affected by dust, noise and traffic movement by many trucks driving down local dirt roads.

People relocate to and live in Bourke to experience this lifestyle. A large proportion of the surrounding landscape will change from picturesque bush land with a magnificent view of Mount Oxley to that with an industrial appearance. The ambience of the area is important to the mental well-being of the local residents.

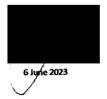
Property values will in turn be affected and no compensation has been offered to the affected land holders.

There are many areas on the outskirts of Bourke that are more suited to the installation of solar farms including areas that are no longer suitable for farming due to drought and lack of consistent water sources.

We highlight our reasons for the opposition to the solar farm at 96 Tancred Drive. The physical and mental well-being of the residents must take priority.

We wish to make it clear that we are not opposed to solar farms in general.

THIS SITE IS NOT APPROPRIATE FOR A SOLAR FARM!





Appendix C - AGENCY REFERRAL RESPONSES



25 Constitution Ave Canberra ACT 2600

www.airservicesaustralia.com ABN 59 698 720 886

AIRSERVICES RESPONSE: NSW-MA-808 - Solar farm, 96 Tancred Drv, Bourke

Hi there,

I refer to your request for an Airservices assessment of a solar farm at 96 Tancred Drv, Bourke.

Airspace Procedures

Assessment not required.

Communications/Navigation/Surveillance (CNS) Facilities

We have assessed the proposal to the maximum height specified for any impacts to Airservices Precision/Non-Precision Navigation Aids, Anemometers, HF/VHF/UHF Communications, A-SMGCS, Radar, PRM, ADS-B, WAM or Satellite/Links and have no objections to it proceeding.

Air Traffic Control (ATC) Operations

There are no additional instructions or concerns from our ATC.

Summary

Based on the above assessment, our view is that the proposed solar farm would not have an impact on any Airservices designed instrument procedures, CNS facilities or ATC operations at Bourke aerodrome.

If you have any further queries, please let our team know.

Kind regards,



Richard Tomlinson

airport developments & engagement advisor

From: TE_Technical Enquiries

To: Carolyn Crain

Subject: CNR-55438 - A-65866 - 96 TANCRED DRIVE BOURKE 2840

Date: Friday, 9 June 2023 10:17:31 AM

Attachments: <u>image001.png</u>

image002.png image003.png

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 the following comments to make as to potential safety risks arising from the proposed development:

 The plans provided do not show the distances from Essential Energy's infrastructure to the proposed development. A safe distance of 7.1 metres is required from the nearest powerline(s).

Information relating to developments near electrical infrastructure is available on our website Development Applications (essentialenergy.com.au). If the applicant believes the development complies with safe distances or would like to submit a request to encroach then they will need to complete a Network Encroachment Form via Essential Energy's website Encroachments (essentialenergy.com.au) and provide supporting documentation. Applicants are advised that fees and charges will apply where Essential Energy provides this service.

Council's and the applicant's attention is also drawn to Section 49 of the *Electricity Supply Act* 1995 (NSW). Relevantly, Essential Energy may require structures or things that could destroy, damage or interfere with electricity works, or could make those works become a potential cause of bush fire or a risk to public safety, to be modified or removed.

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.

Should you require any clarification, please do not hesitate to contact us.

Regards

Essential Energy



E: te_technical.enquiries@essentialenergy.com.au PO Box 5730 Port Macquarie NSW 2444 General Enquiries: 13 23 91 Power Outages (24hrs): 13 20 80 www.essentialenergy.com.au



Transport for NSW

13 December 2023

TfNSW reference: WST23/00070/03 | SF2023/111676

Your reference: DA 2023/0024 (CNR-55438)

General Manager Bourke Shire Council By Email: bourkeshire@bourke.nsw.gov.au

Attention: Carolyn Crain

DA 2023/0024 - WST23/00070/03 - 96 Tancred Drive Bourke - BESS - Further information

Transport for NSW (TfNSW) is responding to DA 2023/0024 referred on 23 November 2023.

Mitchell Highway (HW07) is a classified State Road. Council is the roads authority for all public roads in the area, in accordance with Section 7 of the *Roads Act 1993*.

TfNSW has reviewed the revised traffic report and provides the following advice to assist the consent authority in making a determination:

- Section 2.122 of State Environmental Planning Policy (Transport and Infrastructure) 2021 triggers
 referral to TfNSW for comment on traffic generating developments. The latest information has
 confirmed the current application is not of a size or scale that requires referral to TfNSW under
 Section 2.122. In accordance with Section 2.119 of the State Environmental Planning Policy
 (Transport and Infrastructure) 2021, Council needs to consider the safety, efficiency and ongoing
 operation of the classified road.
- The proposal includes works within Mitchell Highway road reserve that will require TfNSW concurrence pursuant to section 138(2) of the Roads Act 1993.
- After reviewing the revised traffic report, TfNSW is willing to remove some of the recommended conditions provided in our previous submission dated 29 September 2023. Our revised recommended conditions are provided in Attachment 1.

On Council's determination of this matter, please forward a copy of the Notice of Determination to TfNSW. If you have any questions, please contact Masa Kimura Development Services Case Officer, on 1300 019 680 or email development.west@transport.nsw.gov.au.

Yours faithfully.

Andrew McIntyre

Manager Development Services (West)

Community & Place

Regional and Outer Metropolitan

OFFICIAL

Lvl 1, 51-55 Currajong Street, Parkes NSW 2870 E. development.west@transport.nsw.gov.au

1300 019 680 transport.nsw.gov.au

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Attachment 1

DA 2023/0024 - WST23/00070/03 - 96 Tancred Drive Bourke - BESS - Further information

Recommended Conditions

- Prior to the commencement of construction works, the vehicular access servicing the subject site is to be upgraded to include:
 - A sealed Rural Property Access as provided in Figure 7.4 of Austroads Guide to Road Design Part 4 Intersections and Crossings. The access must be sealed a minimum distance of ten (10) metres from the edge of the travel lane in Mitchell Highway.
 - A sealed Rural Basic Right Turn Treatment (BAR) in accordance with Figure 7.6 of Austroads Guide to Road Design: Part 4A - Unsignalised and signalised intersections.
 - Any gate or grid located in the access is to be setback a minimum of 30 metres from the edge of the seal in Mitchell Highway.
- A strategic concept design of the intersection upgrade will need to be prepared and submitted
 to TfNSW for review. The strategic concept design is required to be prepared for the design
 speed, design vehicle and will require swept paths demonstrating that the design vehicle can
 utilise the treatments and permit through traffic when turning into the access.
- To undertake work on a State classified road, TfNSW will require the developer to enter into a
 Works Authorisation Deed (WAD) with TfNSW. TfNSW will exercise its powers and functions of
 the road authority, to undertake road works in accordance with Sections 64, 71, 72 and 73 of the
 Roads Act 1993, as applicable, for all works under the WAD (Attachment A). All road works
 under the WAD are to be completed before any works commence on site for the development
 (to enable the safe movement of construction related vehicles).

Comment:

It is requested Council advise the developer that Conditions of Consent do not guarantee TfNSW's final consent to the specific road work and other structures or works, for which it is responsible, on the road network. TfNSW must provide a final consent for each specific change to the classified (State) road network prior to the commencement of any work.

The WAD process, including acceptance of design documentation and construction, can take time. The developer should be aware of this and allow sufficient lead time within the project development program to accommodate this process. It is suggested the developer work through this process as soon as possible with TfNSW.

 All utility crossings on Mitchell Highway will require consent under Section 138 of the Roads Act 1993.

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