URBIS

WEST NYANGAY SOLAR FARM

Scoping Report – Request for SEARs

Prepared for

AUSTRALIAN SOLAR FARMS

July 2024

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Clare Brown
Associate Director	Richard Barry / Stephan Diesel
Consultant	Pablo Yague
Assistant Planner	Evalyn Fechner
Project Code	P0049550
Report Number	P0049550 - 20240725

Urbis acknowledges the important contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society.

We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.

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GLOSSARY AND ABBREVIATIONS

Reference	Description
ACHAR	Aboriginal Cultural Heritage Assessment Report
BAM	Biodiversity Assessment Method
BC Act	*Biodiversity Conservation Act 2016*
BC Reg	*Biodiversity Conservation Regulation 2017*
BDAR	Biodiversity Development Assessment Report
CEEC	Critically Endangered Ecological Community
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Environmental Plan
DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water
DCP	Development Control Plan

Reference	Description
DPHI	Department of Planning, Housing and Infrastructure
DPI	Department of Primary Industries
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA Regulation	*Environmental Planning and Assessment Regulation 2000*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EIS	Environmental Impact Statement
EPA	NSW Environment Protection Authority
HIPAP	Hazardous Industry Planning Advisory Paper
LEP	Local Environmental Plan
MNES	Matters of National Environmental Significance
NSW	New South Wales
PBP	Planning for Bushfire Protection
PCT	Plant Community Type
PSI	Preliminary Site Investigation
SAII	Serious and Irreversible Impacts
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
Site	**Table 2**
SRD SEPP	*State Environmental Planning Policy (State and Regional Development) 2009*
SSD	State Significant Development
SSDA	State Significant Development Application
TfNSW	Transport for New South Wales
TIA	Traffic Impact Assessment
VIS	Vegetation Integrity Score
WMP	Waste Management Plan
WSUD	Water Sensitive Urban Design

1. INTRODUCTION

This Scoping Report has been prepared on behalf of Australian Solar Farms Pty Ltd (**Australian Solar Farms**) (the **Applicant**) in support of the proposed West Nyangay Solar Farm (the **Project**). The Project is located at Cobb Highway, Booroorban, approximately 40km south of Hay, and is located in the Edward River Council local government area. The site is approximately 5,500 hectares (ha) and the site is zoned RU1 – Primary Production Zone under the *Conargo Local Environmental Plan 2013*.

This report seeks Secretary's Environmental Assessment Requirements (**SEARs**) for the preparation of an Environmental Impact Statement (**EIS**) that will accompany a State Significant Development Application (**SSDA**).

This Scoping Report provides a brief overview of the proposed development and the relevant planning framework that applies to enable the issue of SEARs, which will guide the preparation of a formal EIS for future development of the land. The Scoping Report should be read in conjunction with the Scoping Summary Table provided in **Appendix A**.

This section of the report identifies the applicant for the project and describes the site and proposed development. It outlines the site history and feasible alternatives explored in the development of the proposed concept, including key strategies to avoid or minimise potential impacts.

1.1. APPLICANT DETAILS

The applicant details for the proposed development are listed in the following table.

Table 1 Applicant Details

Descriptor	Proponent Details
Full Name(s)	Australian Solar Farms Pty Ltd
Postal Address	Level 7, 182 Blues Point Road, McMahons Point NSW 2060
ABN	23 670 022 527
Nominated Contact	Kulwant Singh
Contact Details	02 9659 0022

Australian Solar Farms (**ASF**) is an emerging renewable energy developer based in Sydney, NSW. Their vision is to specialise in solar and battery development, with West Nyangay proposed to be their flagship project. ASF aims to work with long-term strategic partners to deliver energy projects and provide asset management services through their operational life across all NSW.

ASF's vision is to become a leading solar company, offering a local and emerging sustainable energy alternative, powering NSW to a sustainable future and creating a positive impact that will benefit the local communities.

1.2. PROJECT DESCRIPTION

West Nyangay Solar Farm is proposed to have a solar capacity of approximately 800 megawatts (MWac) and an estimated storage capacity of 500MWac/2000MWh. The project will connect into the national electricity grid via connection into the 220kV Transgrid line that traverse west to east through the northern portion of the site, with intent to also take advantage of the upgraded network as part of the South West Renewable Energy Zone (**REZ**). The Project will include the construction of solar arrays, a battery energy storage system (**BESS**), inverters and ancillary infrastructure, internal access roads, a switch yard, an office and amenities building(s). The Project will contribute to NSW's transition to renewable energy generation.

The objectives of the proposed development are described as follows:

- Contribute to NSW's transition towards renewable energy generation that will reduce the reliance on fossil fuels and meet need for clean energy as fossil fuel power generation is scaled down in the National Energy Market.
- To assist decarbonising the country and become an active part of the green transition.
- Be responsive to the site's physical and environmental constraints.
- Adopt measures to maintain and regenerate the site's historically land use.
- To provide the community with positive social infrastructure that benefits future generations and assures social licence to operate over the life-span of the project.

The proposed land use is categorised as *electricity generating works* and is permitted with consent in the RU1 zone. The proposed development has an estimated capital investment value greater than $30 million. Accordingly, the proposal is classified as State Significant Development (**SSD**) under Section 20 of the *State Environmental Planning Policy (Planning Systems) 2021* (**Planning Systems SEPP**).

The Minister is the consent authority for the proposal in accordance with section 4.5 of the *Environmental Planning and Assessment Act 1979* ('**EP&A Act'**). Accordingly, this application will be lodged with the Department of Planning, Housing and Industry (**DPHI**) as an SSDA seeking development consent for the proposed development.

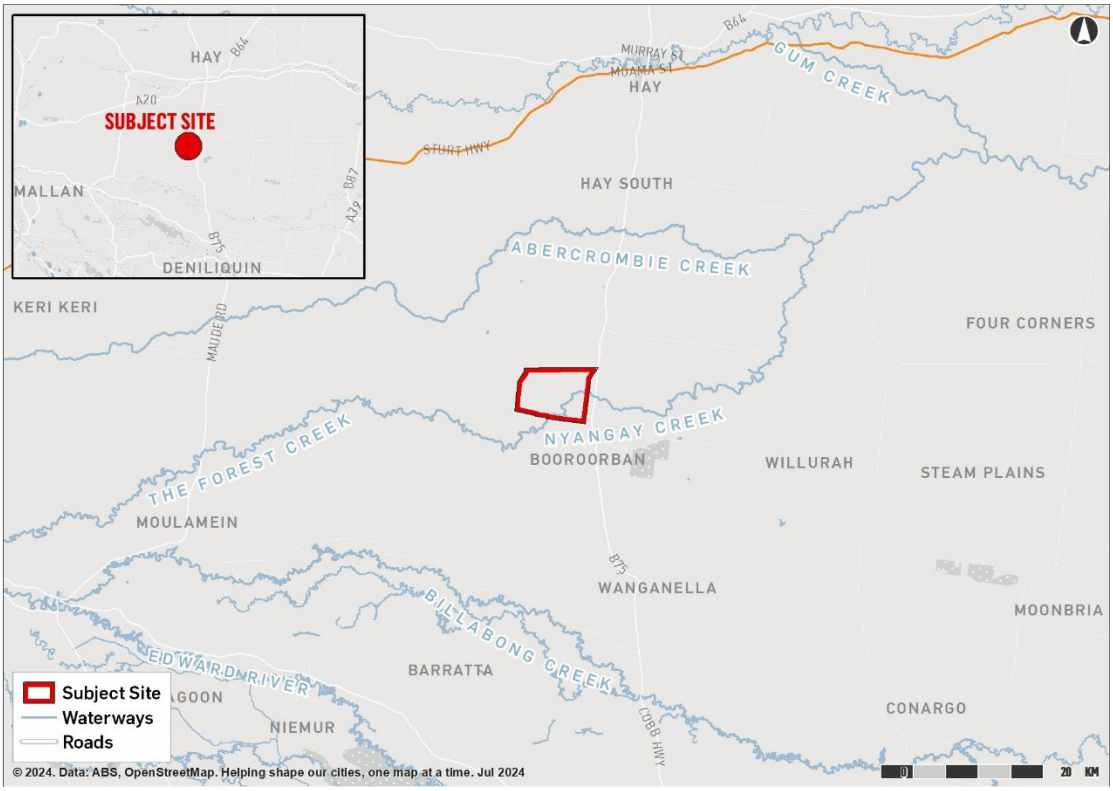
The site information relevant to the project is provided in the following table. A detailed description of the key features of the site and locality is provided in **Section 2.2** of this report.

Table 2 Site Details

Descriptor	**Site Details**	
Street Address	Cobb Highway, Booroorban NSW 2710	
Legal Description	▪ **Lot**	▪ **Deposited Plan**
	▪ 1, 2, 3, 4, 5, 6	▪ 134993
	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21	756277
	5, 6, 7, 12, 13, 14, 19, 24, 28, 30, 31, 32, 44, 45	756321
Site Area	The site has an area of approximately 5,500 hectares.	

A map of the site in its regional setting is provided in Figure 1 and an aerial photograph of the site is provided in Figure 2 below.

Figure 1 Regional Context

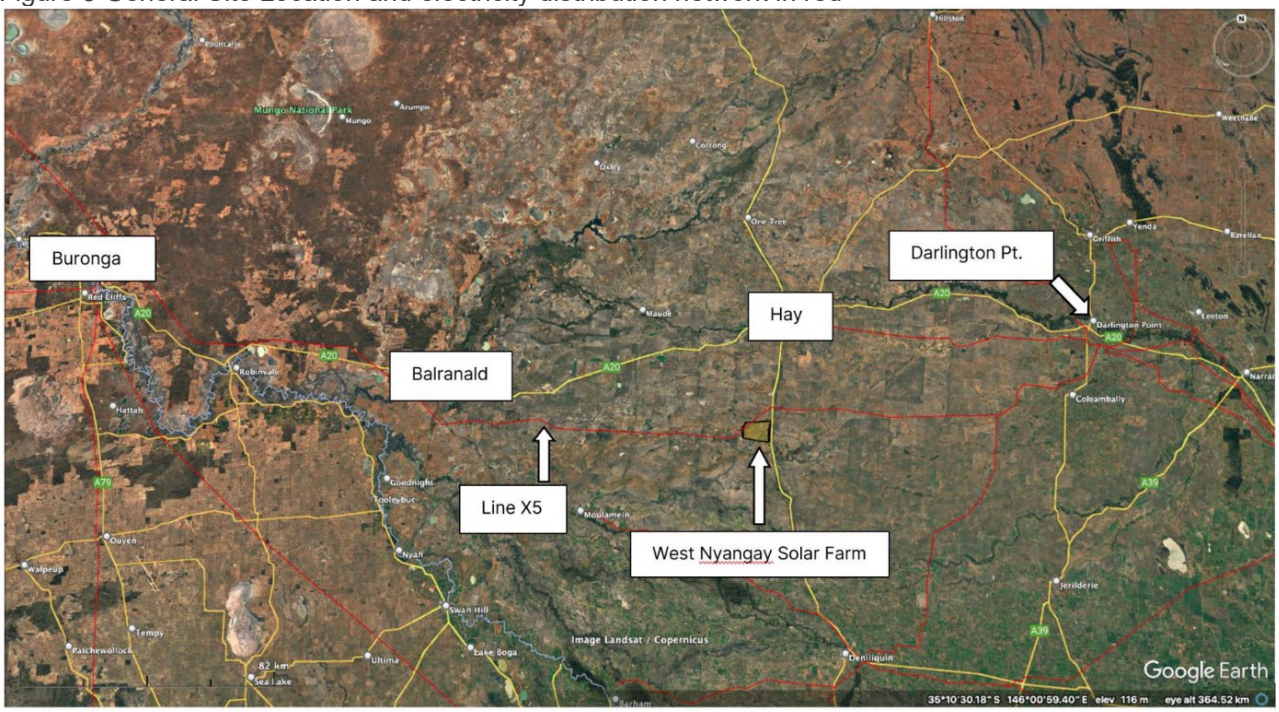


Source: Urbis

Figure 2 Aerial Image of the Site

Source: Urbis

Figure 3 General Site Location and electricity distribution network in red



Source: Enhar

1.3. PROJECT BACKGROUND

1.3.1. Site History

The site is undeveloped and has historically been used for grazing and associated rural activities. The site has been selected due to its relatively unconstrained nature of the site and its immediate proximity to existing transmission grid infrastructure with available capacity.

1.3.2. Likely Future Strategies

It is anticipated the following key strategies will be adopted to avoid, minimise or off-set the impacts of the project to the extent known at the scoping stage:

- Avoidance of impacts on existing significant biodiversity and riparian ecosystems.
- Design elements to minimise visual impacts, including setbacks and landscaping.
- Potential for sheep grazing under the solar arrays to continue current agricultural/ grazing activities.

1.3.3. Related development

There are no existing or approved developments that would be constructed or operated in conjunction with the West Nyangay Solar Farm.

2. STRATEGIC CONTEXT

This section describes the way in which the proposal addresses the strategic planning policies relevant to the site. It identifies the key strategic issues relevant to the assessment and evaluation of the project which will be explored in further detail within the future EIS.

2.1. PROJECT JUSTIFICATION

The Project would improve the reliability and security of the state and national electricity network by generating electricity from renewable sources and feeding into the grid for its national transmission.

The Project would support energy generation and storage development in NSW and Australia by increasing flexibility and resilience of the electrical grid as overall renewable energy generation increases and non-renewable energy generation decreases over time.

The proposed development is aligned with the Commonwealth, State, Regional, and Local strategic plans and policies applying to the site as outlined below.

2.1.1. Commonwealth Commitments

The Renewable Energy Target (**RET**) is an Australian Government Scheme designed to incentivise investment and encourage additional renewable energy generation. The scheme has a target to provide an additional 33,000 gigawatt hours (GWh) each year until the scheme ends in 2030.

The project would contribute towards achieving the RET and providing an alternative power generation at a time when fossil fuel generation is being phasing out from the grid. This will also contribute to Australia meeting the Paris Agreement commitments and targets aiding toward the global green energy transition.

2.1.2. State Commitments

2.1.2.1. NSW Transmission Infrastructure Strategy

Released in 2018, the NSW Transmission Infrastructure Strategy outlines how the State government will prioritise energy zones while bringing forward large-scale network upgrades. In order to decrease the financial risk for private stakeholders, the NSW Government devised this strategy to encourage investment in the infrastructure needed.

The West Nyangay Solar Farm is strategically significant to the development of the renewable energy future of NSW. The location of the project takes into account these objectives and aligns itself with the strategic merit of the State Strategy.

2.1.2.2. NSW Electricity Strategy

The NSW Electricity Strategy is the NSW Government's plan for a reliable, affordable, and sustainable electricity future that supports a growing economy. There are numerous hurdles that the NSW Government faces to reach the objectives of this plan. For example, some issues arise from congestion in the transmission system, which dampens investment in new generation, which is required to reduce electricity prices, improve reliability, and protect the environment.

The strategy looks at improving the efficiency and competitiveness of the NSW electricity market by reducing risk, cost, and delays in the process, through investing in new technologies. There are existing regulations to promote reliability which can be built upon however, as the sector is transforming, these will need to be reviewed and amended to align with new objectives.

The renewable energy sector is seeing improving costs of renewables with this type of energy generation being the most economical form of new generation. These factors, combined with coal-fired power stations reaching end of life, provides an opportunity for the government to promote renewables for investment.

The West Nyangay Solar Farm has strong strategic alignment with the NSW Electricity Strategy due to proposing the significant investment in large scale renewable energy generation and energy storage located immediately adjacent to existing and planned investment in transmission infrastructure to support NSW's renewable energy transition.

2.1.2.3. NSW Electricity Infrastructure Roadmap 2020

The NSW Electricity Infrastructure Roadmap outlines the NSW government's two-decade plan to transition the State's energy system into a clean, cheap, and reliable system. A target identified in the roadmap is to replace coal-fired stations with renewables, aiming to close the fossil fuel systems by 2035. The roadmap's enabling legislation was released in the same year, 2020, and received support by the government and the opposition at the time.

The roadmap will support the private sector to deliver 12 gigawatts of new renewable electricity generation and 2 gigawatts of long-duration storage at a minimum.

The roadmap identifies the creation of merit assessment criteria as part of project selection which is assessed by the Consumer Trustee. This ensures there is a state and community benefit to the proposed projects. The merit assessment criteria may include:

- Commitments to improve local employment opportunities.
- Compatibility and complementary with existing agricultural land uses.
- Local community engagement and support for projects.

The roadmap includes the creation of Renewable Energy Zones (**REZ**). The West Nyangay Solar Farm is located inside the South-West REZs and thus the project achieves the strategic outcomes established by the NSW Government and supports the selected location for the Project.

2.1.2.4. NSW Climate Change Act (Net Zero Future) 2023

The Climate Change Act (Net Zero Future) 2023, is a recent but central piece of legislation that solidifies and enshrines NSW Net Zero targets and commitment. The Act aligns with the Paris Agreement and states clear aims for the State moving forward.

The Act states the emission reduction targets are 50% reduction on 2005 levels by 2030 and a 70% reduction by 2035, leading to Net Zero by 2050.

The proposed solar farm is consistent with the Act as it helps move toward the goals set by the NSW Government through the provision of renewable energy infrastructure.

2.1.2.5. AEMO Integrated System Plan 2024

The Integrated Systems Plan is prepared by the Australia Energy Market Operator (**AEMO**). The 2024 ISP is deemed as a robust plan that calls for urgent investment in generation, firming and transmission that targets secure, reliable and affordable electricity through the energy transition. The 2024 ISP builds upon previous Plans with updated targets reviewed by existing actions.

The proposed West Nyangay Solar Farm supports the Integrated System Plan as it creates additional sources of renewable energy along planned and existing transmission lines and pathways to support the State Renewable Energy Zones and diversity of electricity sources.

2.1.3. Riverina Murray Regional Plan 2041

The site sits in the strategic context of the Riverina Murray Regional Plan 2041 (**the Regional Plan**). Regional strategic plans set out high level objectives for the future of land use planning to inform statutory planning and development. It is a 20-year regional plan that "*resets the priorities for the area and provides a path for sustained progress and prosperity for the Riverina Murray community."*

The regional plan includes objectives and strategies that focus on environmental preservation, supporting communities and places, and strengthening the regional economy. Objective 13 relates to transitioning the region to net zero by 2050.

It notes that:

> *The Riverina Murray's climate, resources and strategic connections to utility infrastructure place it in a strong position to contribute to and capitalise on the net zero target and electricity infrastructure plans. In recent years, large-scale solar farms account for more than 50% of major projects.*

The proposed project land uses for a solar farm is consistent with the objectives of the regional plan and therefore can demonstrate strategic merit.

2.1.4. South-West Renewable Energy Zone

The South-West Renewable Energy Zone (**REZ**) is in its early stages of planning and is expected to receive up to $2.8 billion in private investment, and support over 2,000 construction jobs across the region. The REZ Zone will be located next to the Victorian border around the towns of Hay, Balarand and Buronga. The Plan recognises that while the REZ is expected to be developed in the medium to long term, it may be needed to be developed earlier to transition away from fossil fuels at a faster rate.

While the REZ will support solar farms, the government has voiced concerns regarding their cumulative impact on agricultural land. In response to these concerns, the state government has released the *Large-Scale Solar Energy Guidelines*, which will help to facilitate solar farms across the region.

The site at Booroorban is within the identified South-West REZs. The existing 220kV line traversing the site is also planned as a proposed EnergyConnect route. This translates into solid and committed strategic planning for the area suitable for renewable energy, including securing access to transmission, holistic community engagement, and coordinating investment for infrastructure projects.

It is therefore reasonable that the site can leverage the resources and investment in the region and support the strategic priorities identified.

2.1.5. Edward River Council Local Strategic Planning Statement

The *Edward River Local Environmental Planning Statement* sets out a long-term vision for the future of land uses across the Edward River LGA. The Plan sets a 20-year vision to '*outline how change will be managed to maintain the high levels of liveability and landscape quality that characterises the Edward River region*'. To achieve their vision, Council has identified eight planning priorities to indicate the focus on future strategic planning in the Edward River Council area.

Although the plan doesn't explicitly identify particular strategies around renewable energy projects, it does outline the needs to continue attracting growth and investment for infrastructure in *Planning Priority 6: Infrastructure* and to adapt to Climate Change to build sustainable and resilient communities in *Planning Priority 7: Climate Change and Hazards*. The proposal clearly aligns with the local vision by providing a sustainable and reliable energy source, as well as significant investment in the region which can in turn generate broader benefits for the local community.

2.2. KEY FEATURES OF SITE AND SURROUNDS

The site is located at Cobb Highway, Booroorban, within the Edward River Local Government Area, bordering the Hay Local Government Area. The site has an area of approximately 5,500 hectares. The site is legally described as:

Lot	Deposited Plan
1, 2, 3, 4, 5, 6	134993
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21	756277
5, 6, 7, 12, 13, 14, 19, 24, 28, 30, 31, 32, 44, 45	756321

Figure 4 Aerial Map of the Site

Source: Urbis

Figure 5 Site Photographs

Picture 1 Westward view from the subject site

Picture 2 Northern view from the subject site

Picture 3 Eastward view from the subject site

Picture 4 Southern view from the subject site

Source: Urbis, 2024

The key features of the site which have the potential to impact or be impacted by the proposed development are summarised in the table below.

Table 3 Key Features of Site and Locality

Descriptor	**Site Details**	
Land Configuration	The site is rectangular in shape and runs adjacent to Cobb Highway, which runs at a north south alignment. The topography of the site is generally flat throughout the whole site. Several water sources traverse the site, with Nyangay Creek running diagonally through the southeast portion of the site and several ponds, small lakes and ephemeral creeks scattered throughout the middle of the site. Most native vegetation consists of shrubland, albeit there are also several areas of woodlands throughout the site.	
Existing Development	Current land use consists of regular grazing and associated agricultural activities.	
Local Context	The surrounding locality is described below: **North**: Land adjacent to the north consists exclusively of modified pastures for grazing. The town of Hay is located approximately 40 km to the north of the site. **East**: The Cobb Highway traverses adjacent to the east of the site in a north-south alignment. The Woodland Nature Reserve sits approximately 13 km away south east of the site. **South**: Directly adjacent to the south comprises predominantly of land used for grazing, with some localised irrigated pastures and irrigated croplands. The rural settlement of Booroorban sits approximately 3km away from the site. The town of Deniliquin sits approximately 70km south of the subject site. **West**: Land to the west predominantly consists of undulating grazing farmlands.	
Regional Context	The subject site is located in the Edward River Council, approximately 110km north of the Victorian border. The surrounding area is characterised as rural and contains limited landmarks or built features.	
Infrastructure	Cobb Highway is adjacent the site on its eastern boundary. The Darlington Point to Balranald 220kV power line intersects the site in a general north east to south west alignment through the north west corner of the site.	
Site Access	It is proposed that access to the site during construction and operation will be undertaken through Cobb Highway near Lot 14 DP 756277.	
Easements and Covenants	*Lots Burdened*	*Easement*
	Lot 3 in DP 134993	Easement For Transmission Line

Descriptor	Site Details	
	Lot 44 in DP 756321	Easement For Transmission Line
	Lot 5 in DP756321	Easement for Transmission Line
	Lot 45 in DP756321	Easement for Transmission Line
	Lot 6 in DP756321	Easement for Transmission Line
	Lot 6 in DP756321	Easement for Access over track in use
Acid Sulfate Soils	Acid Sulfate Soils have not been identified on site or surroundings at a desktop level.	
Contamination	No record of notice or list of notified sites has been identified within the site or its surroundings.	
Stormwater and Flooding	Council has not undertaken flood studies for this land.	
Bushfire Prone Land	The majority of the subject site has been mapped as Category 3 – Medium Risk Bushfire Prone Land.	
Flora and Fauna	The majority of the subject site is comprised of native vegetation. See Section **6.1.1.**	
Aboriginal Heritage	Basic and Extensive search of the AHIMS was conducted on the 4th of October 2023 that identified: There are 17 Aboriginal sites recorded in or near the site. There are no Aboriginal places declared in or near the site.	
European Heritage	There are no State Heritage listed items within the site or within a 4 km buffer. The Royal Mail Hotel, a Local Heritage Listed Item, is found approximately 3km south of the subject site.	

2.3. CUMULATIVE IMPACTS WITH FUTURE PROJECTS

The site is located within the locality of Booroorban. There are two solar proposed projects and one BESS proposed within approximately 10 km of the subject site. There are nine other proposed and three approved renewable energy projects within approximately 70km of the subject site (Table 4). Most of these projects have a large generating capacity and development footprint.

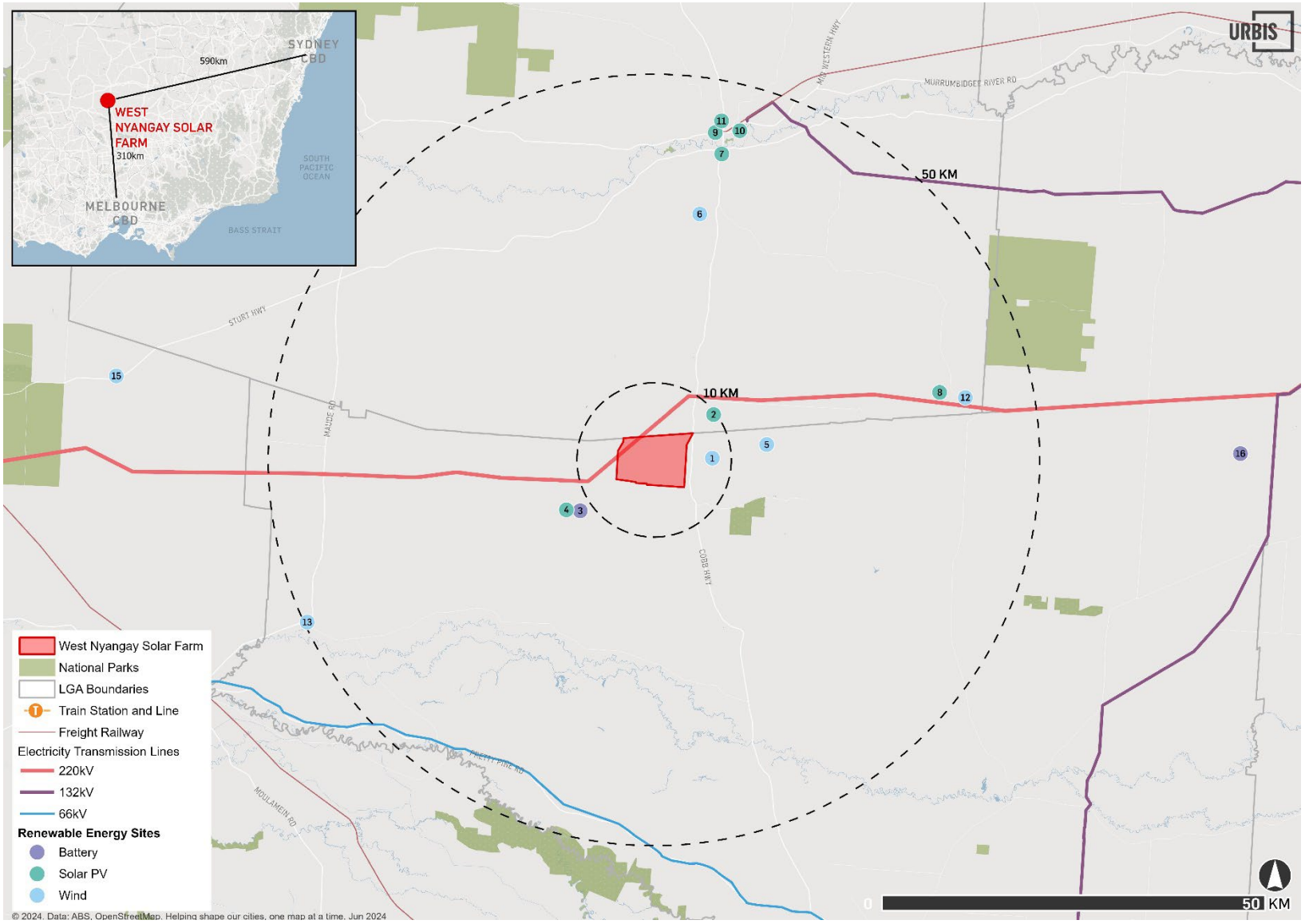
The potential cumulative impacts of the project will be addressed in the EIS in accordance with the DPHI's *Cumulative Impact Assessment Guidelines for State Significant Projects* (October 2022).

Approved and likely future developments that may be relevant in the cumulative impact assessment of the proposal are summarised in the following table and map (**Table 4; Figure 6**).

Table 4 Approved and Likely Future Developments

Number	Name	Capacity (MW)	Distance (km)	Status
1	Saltbush Wind Farm	400	1	Proposed
2	The Plains Solar Farm	400	4	Proposed
3	Romani Solar Farm BESS	150	6	Proposed
4	Romani Solar Farm	250	8	Proposed
5	Pottinger Wind Farm	750	11	Proposed
6	The Plains Wind Farm	1800	26	Proposed
7	Hay GGE Solar Farm	4.95	33	Proposed
8	Pottinger Solar Farm	300	35	Proposed
9	Hay Solar Farm	140	35	Approved
10	Langs Crossing Solar Farm	4.99	36	Approved
11	Hay 2A Solar Farm	4.99	37	Approved
12	Bullawah Wind Farm	1000	39	Proposed
13	Baldon Wind Farm	1000	47	Proposed
14	Tchelery Wind Farm	800	65	Proposed
15	Wilan Wind Farm	800	71	Proposed
16	Dinawan BESS	300	78	Proposed

Figure 6 Local Context and Cumulative Impacts Map



Source: Urbis, April 2024

3. THE PROJECT

This section outlines the key features of the proposed development, including the project area, the conceptual physical layout and design (including likely mitigation measures), the main land use activities and the likely timing for delivery of the project.

3.1. PROJECT OVERVIEW

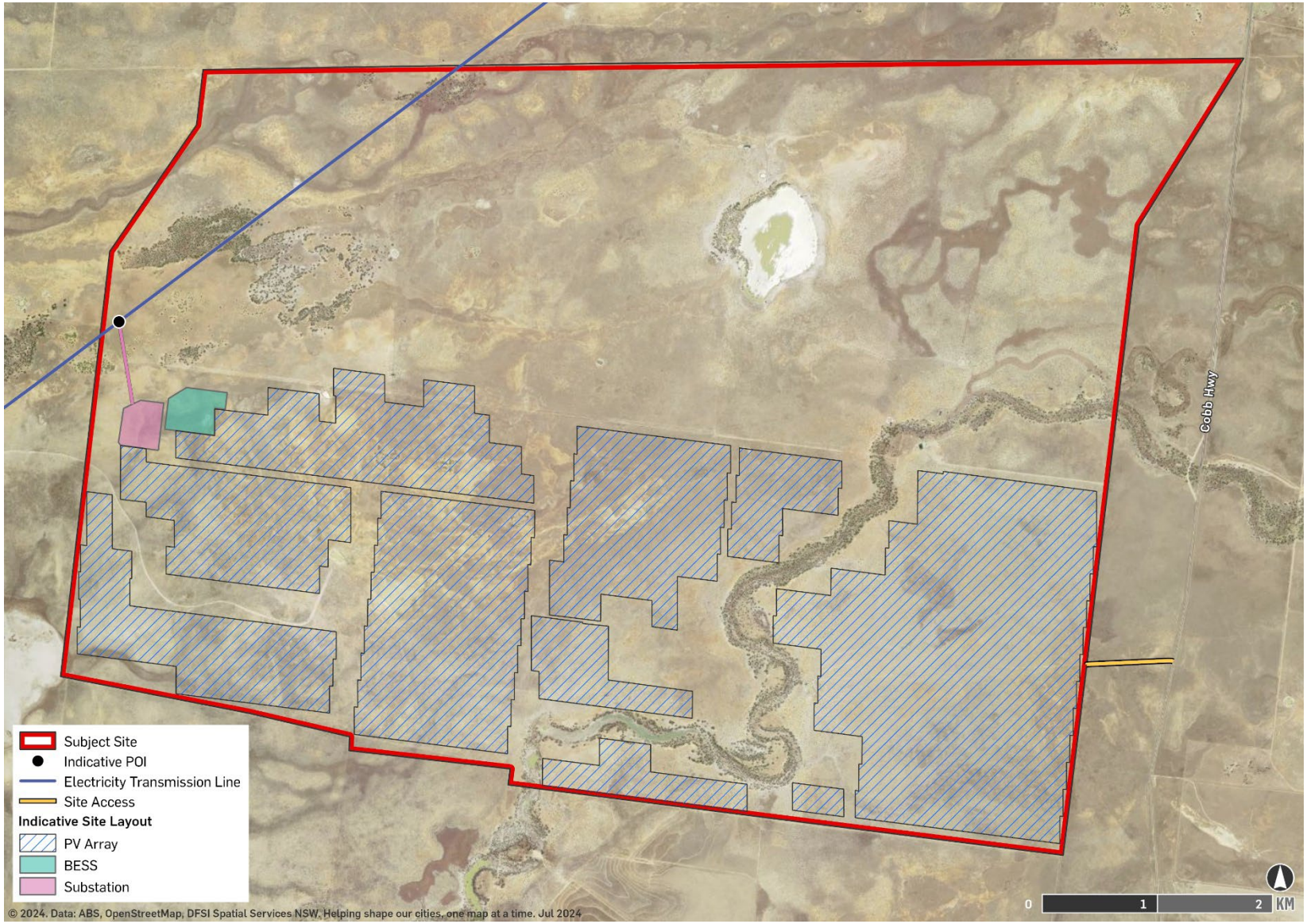
The key components of the proposed development are listed in the following table. A copy of the concept layout is attached as shown in Figure 7 and in Appendix **E**. The layout is preliminary in nature and subject to be refined during the EIS stage to respond to detailed environmental assessment, as will be required by SEARs.

Table 5 Project Details

Descriptor	**Project Details**
Project Area	The site has a total area of 5,500 hectares.
Project Description	The Project will comprise the construction of a solar farm with a solar capacity of approximately 800MWac. Key infrastructure components would include: ▪ Ground mounted solar/photovoltaic (**PV**) modules. PV modules would be mounted on single axis tracking systems with an assumed maximum height up to 3.5 metres above ground. ▪ A series of power conversion units (**PCU**) would be arranged at the end of each PV array across the Site, with underground cabling connecting each PCU to the on-site substation. ▪ An on-site 330/33 kV substation connected to the solar farm for connection to the distribution network via the existing TransGrid overhead powerline. ▪ Ancillary infrastructure, site office, internal access roads, perimeter fencing, landscaping and perimeter treatments (including bushfire setbacks). ▪ An estimated 500MWac/2000MWh BESS.
Estimated Development Cost	Approximately $1.8 billion AUD (excluding GST).
Development Footprint	2,000 hectares.
Indicative Height and Infrastructure	Solar panels' average height would be approximately 3.5 metres. Substation and ancillary equipment's average height may range between 6 to 10 metres. Transmission towers may be required to provide a point of connection to the existing transmission infrastructure. The height of transmission towers are to be determined during preparation of an EIS.
Indicative Construction Period	The project would be constructed over a period of approximately 12-18 months.

Descriptor	Project Details
	Construction hours would likely be limited to, unless otherwise agreed differently with the consent authority: 7am to 6pm Monday to Friday. 8am to 3pm Saturday. No work on Sunday or public holidays. The delivery of materials requiring an escort and/or emergency works may occur outside of the above construction hours.
Indicative Construction Workforce	Approximately 300 staff on site are likely to be required during the construction phases for each stage. The project will propose a Workforce Accommodation Strategy, likely in the form of an on-site temporary workforce camp. The scale and location of the camp will be determined during preparation of the EIS.
Staging/Phasing	The Project would likely be constructed in three (3) to four (4) stages, with each stage comprising of PV modules and proportionate BESS capacity. The size and timing for each stage is yet to be determined.
Site Access	Access to the site would be via Cobb Highway.
Indicative Operational Workforce	Approximately 20 staff on site are likely to be required during the operational phase. This is likely to be increased with each stage.
Project lifecycle	The Project is expected to operate for at least 30 years. Following the anticipated project operational period or the equipment exceeding its manufactured lifespan, the solar farm would either be replaced or refurbished or enhanced with upgraded equipment. Significant upgrades or changes to equipment may be subject to additional assessment and approval requirements.
Decommissioning	Once the project reaches the end of the operational lifecycle, the solar farm would be decommissioned, and all above-ground infrastructure would be removed to enable the site to return to its existing land capability. Equipment dismantled and removed from the site would either be repurposed or recycled where possible.

Figure 7 Preliminary Indicative Layout



Source: Urbis, 2024

3.2. FEASIBLE ALTERNATIVES

Section 192(c) of the *Environmental Planning and Assessment Regulation 2021* (the Regulation) requires an analysis of any feasible alternatives to the proposed development, including the consequences of not carrying out the development.

ASF identified three project alternatives which were considered with respect to the identified need for the renewable energy development. Each of these options is listed and discussed in the following table.

Table 6 Analysis of Feasible Alternatives

Option	Comments
Option 1 – Do Nothing	The 'Do Nothing' option would allow for the continued use of the land for agricultural purposes. However, this would preclude the strategic benefits as outlined in Section **2.1.** Considering the potentially irreversible impacts that climate change would have on existing and future land uses, biodiversity, and energy securities, among other effects, it is considered that the benefits of this project overwhelmingly outweigh its environmental impacts. Thus, the 'Do Nothing' approach is not deemed favourable.
Option 2 – Alternate location/ design	The Applicant has undertaken a detailed site suitability analysis and due diligence assessment to inform the selection of sites. This includes the consideration of multi-criteria assessment to identify sites with high suitability and minimal constraints. Several other sites were considered, however were considered unsuitable due to not satisfying criteria including: ▪ Topography ▪ Biodiversity density and quality ▪ Flooding ▪ BSAL Land ▪ Land size available ▪ Proximity to existing electricity network with available capacity ▪ Proximity to dwellings and sensitive receivers ▪ Suitable site access. West Nyangay Solar Farm was selected due to meeting the above criteria and allowing for a balanced approach to managing any identified potential constraints.
Option 3 – West Nyangay Solar Farm (Preferred)	Following the selection of the site for West Nyangay Solar Farm, the development footprint for Option 3 was refined following a preliminary assessment of native biodiversity and existing hydrology on site. The proposed footprint avoids the majority of areas and items of natural value while maintaining an optimal energy output, ensuring the proposal follows ecologically sustainable development principles.

4. STATUTORY CONTEXT

This section of the report provides an overview of the key statutory requirements relevant to the site and the project, including:

- *Commonwealth Environment Protection and Biodiversity Conservation (EPBC) Act 1999*
- *NSW Biodiversity Act 2016*
- *Environmental Planning and Assessment Act 1979*
- *Environmental Planning Assessment Regulation 2021*
- *State Environmental Planning Policy (Planning Systems) 2021*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021*
- *State Environmental Planning Policy (Resilience and Hazards) 2021*
- *State Environmental Planning Policy (Biodiversity and Conservation) 2021*
- *Conargo Local Environmental Plan 2013*

The following table categorises and summarises the relevant requirements in accordance with the DPHI guidelines. Each of these matters will be addressed in further detail within the future EIS.

4.1. STATUTORY REQUIREMENTS

The following table categorises and summarises the relevant requirements in accordance with the DPHI *State Significant Development Guidelines*.

Table 7 Identification of Statutory Requirements for the Project

Statutory Relevance	**Action**
Power to grant approval	In accordance with Schedule 1, Section 20 of the Planning Systems SEPP, development for 'electricity generating works', are to be considered State significant if the project: *(20) (a) has an estimated development cost of more than $30 million, or* *(b) has an estimated development cost of more than $10 million and is located in an environmentally sensitive area.* The proposed project involves development for the purpose of electricity generating works using solar power and has an estimated cost of over $30 million. Therefore, the project will be considered State significant development under Part 4 of the EP&A Act 1979 with the consent authority being the Department of Planning, Housing and Infrastructure.
Permissibility	The site is zoned RU1 – Primary Production under the *Conargo Local Environmental Plan 2013*. Electricity generating works are prohibited in the RU1 – Primary Production zone under the Conargo Local Environment Plan. Notwithstanding, the proposed development satisfies Section 2.6(1)(a) of the *State Environmental Planning Policy (Planning Systems) 2021* as electricity generating works are permitted with consent within any land in prescribed zones under the *State Environmental Planning Policy (Transport and Infrastructure)*

Statutory Relevance	Action
	2021. The T&I Sepp states in Part 2.3 Development Controls, division 4, section 2.35 that: *Electricity generating works means a building or place used for the following purposes -* *(a) Making or generating electricity,* *(b) Electricity storage* The T&I SEPP, states in section 2.36: *(1) Development for the purpose of electricity generating works may be carried out by any person with consent on the following land –* *(a) In the case of electricity generating works comprising a building or place used for the purpose of making or generating electricity using waves, tides, or aquatic thermal as the relevant fuel source-on any land,* *(b) In any other case – any land in a prescribed non-residential zone.* RU1 is a prescribed rural, non-residential zone. Therefore, the project is permissible with consent under section 2.36 (1) of the State Environmental Planning Policy (Transport and Infrastructure) 2021.

Figure 8 Zoning of the Subject Site

Source: Urbis, 2024

4.2. OTHER APPROVALS

Table 8 below outlines other approvals required under relevant NSW and Commonwealth legislation that are relevant to the project.

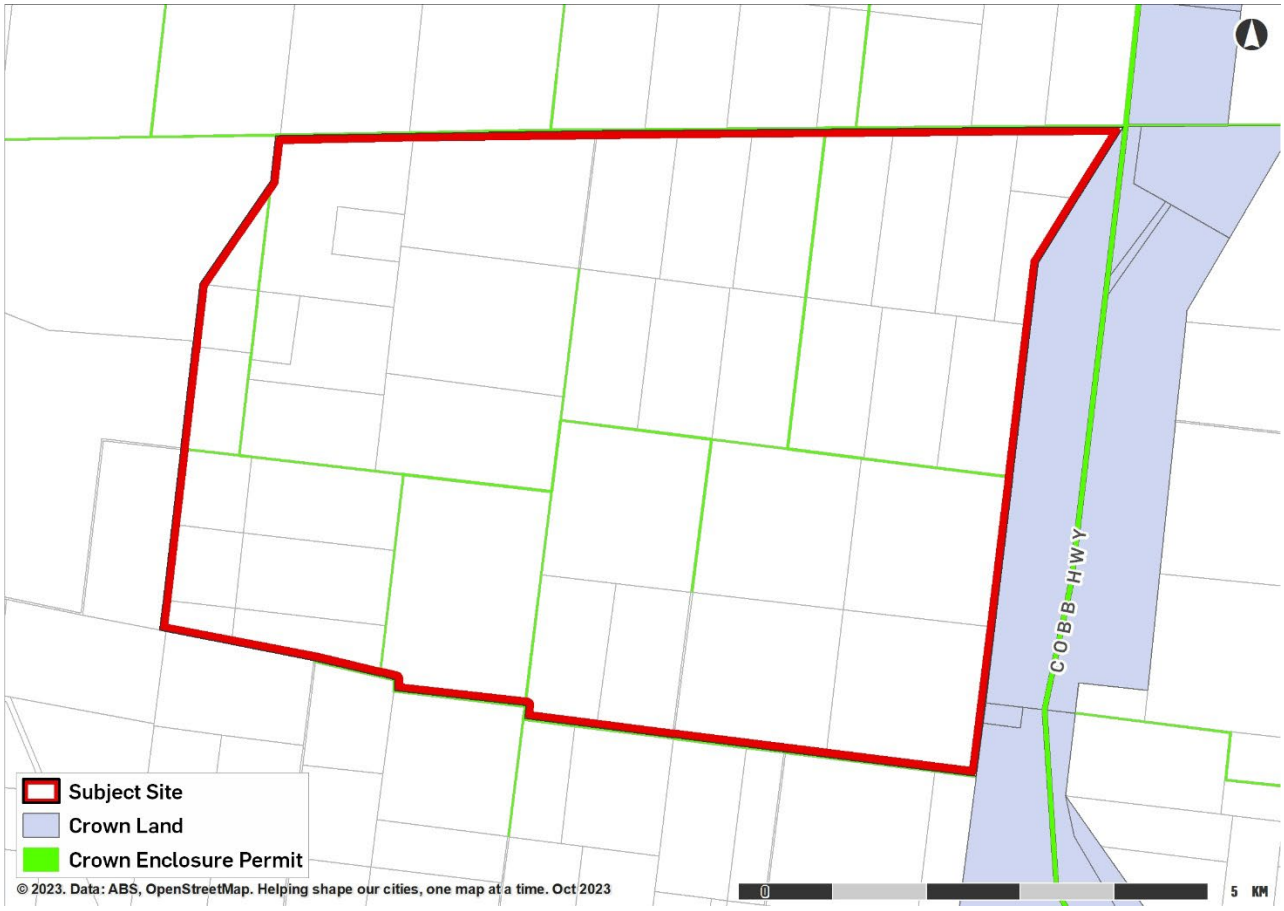
Table 8 Other Approvals required under relevant legislation.

Statutory Reference	Pre-Condition	Relevance
Roads Act 1993 (Roads Act)	The Project will require consent from the appropriate road authority under Section 138 for works undertaken on public roads, including upgrading and connecting to a private road. The impacts of the project on the transport issues will be addressed within the EIS.	Consistent with Section 4.42 (1) (f) of the EP&A Act 1979, approval of this matter cannot be refused if it is necessary for carrying out SSD that is authorised by a development consent under Division 4.7 and is to be substantially consistent with the consent.
EPBC Act	Approval from the Minister for the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) is required for any action that will or is likely to have a significant impact on one or more of the Matters of National Environment Significance (MNES).	An EPBC referral may be deemed required following preliminary biodiversity advise. Given the preliminary nature of the indicative layout and extension of the subject site, an EPBC referral will be submitted as soon as possible if the BDAR concludes the development could affect any of the MNES. All reasonable steps will be undertaken to avoid any potential MNES identified on the subject site.
Water Management Act 2000	The hydrology assessment will identify whether water access licences will be required for the Project. Pursuant Section 4.41 of the E&PA Act, the project will not require a water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91.	The Project may require water access licences under the WM Act during the construction phase.

Statutory Reference	Pre-Condition	Relevance
Native Title Act 1993	A search undertaken on 1 May 2024 of the Native Title Register, the Register of Native Title Claims and Native Title Applications Registration and Determinations did not identify any active Native Title Claim within the site.	An Aboriginal Cultural Heritage Assessment Report will be submitted with the EIS.
Biodiversity Conservation Act 2016	A Biodiversity Assessment Report (**BDAR**) will be prepared to accompany the EIS.	The BDAR will assess impacts on threatened species and communities (See Section **6.1.1**). Any needed and unavoidable biodiversity offsets will be addressed in the EIS.
Fisheries Management Act 1994	Pursuant Section 4.41 of the EP&A Act, the project will not require a permit under section 201, 205 or 219 of the FM Act.	Any works around Nyangay Creek and mitigation measures will be undertaken in accordance with Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013) and Guidelines for watercourse crossings on waterfront land (DPE, 2022).
Heritage Act 1977	Pursuant Section 4.41 of the EP&A Act, the project will not require an approval under Part 4, or an excavation permit under section 139.	It is unlikely that the proposed development would have any impacts on the Historical Heritage.
National Parks and Wildlife Act 1979	Pursuant Section 4.41 of the EP&A Act, the project will not require an Aboriginal heritage impact permit under section 90.	An Aboriginal Cultural Heritage Assessment Report will be submitted within the EIS and outline requirements, impacts, and mitigation measures.
Rural Fires Act 1997	Pursuant Section 4.41 of the EP&A Act, the project will not require a bush fire safety authority under section 100B.	A Bushfire Assessment Report will be submitted within the EIS in accordance with the *Planning for Bush Fire Protection 2019* Guidelines and the specific matters within section 8.3.5 - Wind and Solar Farms.

Statutory Reference	Pre-Condition	Relevance
Transport and Infrastructure SEPP 2021	Pursuant Section 2.48 of the T&I SEPP requires a written notice to be given of a project located near electrical infrastructure to the electricity supply authority, inviting comments about potential safety risks. An existing 220 kV transmission line traverses the site, therefore appropriate notice and consultation with the relevant electricity authority would be undertaken in preparation of the EIS.	Written notice would be required to be given to the relevant electricity authority during the EIS phase.
Crown Land Management Act 2016	Under the CLM Act, Crown Land must not be occupied, used, sold, leased, licenced, dedicated, reserved, or dealt with in any other way unless authorised by the CLM Act. Pursuant Section 152I of the Roads Act 1993, the Department of Crown Lands may consider transferring the road to Council if suitable.	The alignment of Crown Roads will be considered during the design of the project, with the intent to locate all infrastructure outside of Crown Roads corridors and maintain access. A landowner consent from Crown Lands would be sought if any works need to be undertaken on the identified Crown Roads on site (Figure 9). The project will completely avoid impacts on adjacent Crown Land, considered a Category 2 Travelling Stock Reserve under the *Local Land Services Act 2013*.

Figure 9 Crown Roads identified within the subject site.



Source: Urbis

4.3. MANDATORY CONSIDERATIONS

Table 9 outlines the relevant pre-conditions to exercising the power to grant approval and the section where these matters are addressed within the EIS.

Table 9 Mandatory Considerations

Statutory Reference	Mandatory Consideration
Consideration under the EP&A Act and Regulation	
Section 1.3	Relevant objectives of the EP&A Act (a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources, (b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment, (c) to promote the orderly and economic use and development of land, (e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats, (f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage), (i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State, (j) to provide increased opportunity for community participation in environmental planning and assessment. These objectives will be considered and addressed in the EIS.
Section 4.15	In determining a development application, a consent authority is to take into consideration such matters that are of relevance to the development subject of the development application, as stipulated in section 4.15. These include: ▪ Relevant environmental planning instruments ▪ Relevant draft environmental planning instruments ▪ Relevant planning agreement or draft planning agreement ▪ Development control plans ▪ The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality. ▪ The suitability of the site for the development ▪ The public interest. These matters would be considered and addressed in the EIS.

Statutory Reference	Mandatory Consideration
Mandatory relevant consideration under EPIs	
Biodiversity Act 2016	Section 7.14 of the BC Act outlines the requirements for biodiversity assessments to be conducted for state significant development. When determining an application, the Minister is required to take into consideration the likely impact of the proposed development on biodiversity values. Section 7.16 of the BC Act, Serious and Irreversible Impacts on biodiversity values, would be considered in the BDAR and EIS.
State Environmental Planning Policy (Resilience and Hazards) 2021	Under Section 3.7 of the Resilience and Hazards SEPP, consideration must be given to guidelines from the Department relating to hazardous or offensive development in determining whether a development is: a) a hazardous storage establishment, hazardous industry or other potentially hazardous industry, or b) an offensive storage establishment, offensive industry or other potentially offensive industry. Consideration of guidelines and circulars will be given in the EIS, including Multi-Level Risk Assessment Guideline and Hazardous Industry Planning Advisory Paper (HIPAP) No.3 and No.12.
State Environmental Planning Policy (Biodiversity and Conservation) 2021 – Chapter 3	Section 3.3(1) of the State Environmental Planning Policy (Biodiversity and Conservation) 2021 applies to land zoned RU1 Primary production, RU2 Rural Landscape, RU3 Forestry, and equivalent zones in local government areas identified in Schedule 2. The Edward River LGA is listed as an applicable LGA. Although Chapter 3 of the SEPP not applicable in SSDAs, as Council is not the consent authority, the BDAR will consider the potential impacts on Koala habitat.
Conargo Local Environmental Plan 2013	The EIS will address relevant components of the *Conargo Local Environmental Plan 2013* including: ▪ The objectives and land uses for RU1 – Primary Production Zone ▪ Part 4 – Principal development standards ▪ Part 5 – Miscellaneous provisions ▪ Part 6 – Additional local provisions.

5. COMMUNITY ENGAGEMENT

The following sections of the report describe the engagement activities that have already been carried out for the project, including preliminary community views, and the engagement to be carried out during the preparation of the EIS.

The following sections of the report describe the engagement activities that have been undertaken during the preparation of the EIS and the community engagement which will be carried out if the project is approved.

5.1. ENGAGEMENT CARRIED OUT

This section outlines the engagement activities delivered throughout May and June 2024 to raise community and stakeholder awareness of and invite feedback on, the Project. This engagement methodology and its outcomes have been informed and are consistent with the NSW Department of Planning, Housing, and Infrastructure (DPHI's) *State Significant Development Guidelines – Preparing a Scoping Report* and the *Undertaking Engagement Guidelines for State Significant Projects.*

There are at least 5 other renewable energy projects proposed within the surrounds of Booroorban and Hay. These include:

- The Saltbush Wind Farm
- The Paraway Pastoral Company Mungadal Station Wind Farm
- Pottinger Energy Park
- The Plains Renewable Energy Park
- Hay Solar Farm

- In this context, the communities of Booroorban and Hay are aware of the purpose and value of renewables and therefore may not engage in community consultation. Australian Solar Farms encountered this throughout the consultation process. Only one community enquiry was received.

- The approach to consultation with community stakeholders was informed by Urbis Engagement's previous experience on solar farm projects and feedback from the site's landowner.

- The engagement approach included:

  - Prioritising close neighbours to ensure that those most impacted or interested in the Project received access to information through a number of communication channels.
  - Leveraging locally known and valued communication channels to bring awareness to the project.
  - Proactively communicating information about the planning pathway and opportunities to provide feedback via phone, email and local newspapers.
  - Responding to enquiries in a timely manner through ongoing management of project enquiry lines (phone and email).

5.1.1. Engagement approach

The engagement approach was adapted from the International Association of Public Participation's (IAP2) Public Participation spectrum. The spectrum (Figure 10) describes goals for public participation and the corresponding promise to the public.

For this Report, the engagement objective aligned to the goal of informing and consulting with stakeholders and the community. This means our objective was to obtain public feedback on the proposal.

Figure 10 Public Participation spectrum

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	To obtain public feedback on analysis alternatives and/or decisions	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision- making in the hands of the public.
PROMISE	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Source: IAP2

To achieve these objectives, the engagement approach involved:

- Providing consistent, relevant, jargon-free and up-to-date information on the proposal, impacts, benefits, and the planning report process through accessible, tailored open lines of communication.
- Providing methods for monitoring and opportunities for the community to give feedback to help inform the planning process.
- Responding appropriately and in a timely manner to concerns or questions raised by the community and stakeholders throughout the lifecycle of the project.
- Facilitating information flow to the project team by establishing working relationships to ensure stakeholder and community views and local knowledge are appropriately incorporated into the design of the project.
- Managing expectations by closing the feedback loop through sharing how stakeholder and community views influenced the proposal.

5.1.2. Key Stakeholders

As outlined in the *Undertaking Engagement Guidelines for State Significant Projects*, DPHI defines stakeholders as community, relevant agencies, landowners, land users and stakeholders involved in prospective resource developments.

5.1.2.1. NSW DPHI

Urbis' Planning team, ASF and the relevant technical consultants held a scoping meeting with DPHI on 8 July 2024. The results of these conversations are outlined in Appendix B.

5.1.2.2. Edward River Council

Urbis Planning and ASF were responsible for consultation with Edward River Council. Consultation occurred in person at Council offices, 28 May 2024,

The focus of the consultation to determine the site's suitability for a solar farm development, Council's preferred options for the community benefit sharing scheme, and any other considerations that may need to be addressed by the Environmental Impact Statement (EIS).

5.1.2.3. Publicly elected officials

Urbis Engagement was responsible for consultation with publicly elected officials at the local, state and federal levels.

This category includes councillors for the Edward River area, the State MP for the Murray electorate, Helen Dalton MP, and the Federal MP for the Murray electorate, The Hon. Syssan Ley MP.

The focus of the consultation was providing summary information about the project, seeking feedback and bringing awareness to potential community enquiries that they may receive.

5.1.2.4. Community

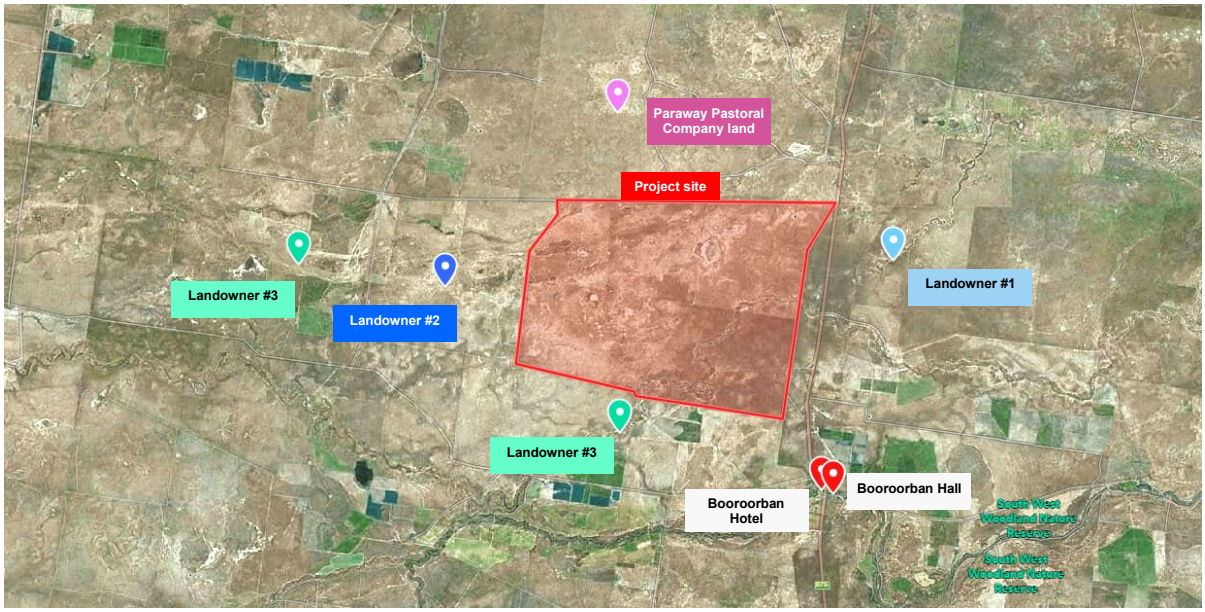
Urbis Engagement was responsible for engagement with near neighbours of the site and community groups. The approach to consultation with community stakeholders was informed by Urbis Engagement's previous experience on solar farm projects and feedback from the site's landowner.

5.1.2.5. Adjoining landowners

Adjoining landowners were identified with the landowner of the project site and based on likely impact or interest during construction and operation. These likely impacts and/or areas of interest were identified as:

- Increased traffic and impact on local road conditions (during construction).
- Visual impacts (including changes to visual amenity glint and glare).
- Environmental impacts (including weed/land management during operation).
- Construction impacts including noise, vibration and dust.
- Operational impacts, such as maintenance.

Figure 11 Land belonging to adjoining landowners



5.1.2.6. Community groups

Community groups were identified with the landowner and based on their proximity to the proposed solar farm or due to their existing interest in sustainable development in the region.

These groups included the Booroorban Sporting & Social Club, the Deniliquin Kolety Lagoons Landcare Group and the Murray Branch of Local Land Services NSW.

5.1.3. Engagement activities

Engagement activities across the community and key stakeholders throughout the planning process are included in the table below. Feedback from this consultation is included in Section 3 of this report.
The following engagement activities were undertaken in addition to the consultation to support the scoping report.

Engagement activity	Target stakeholder	Description and reach
Phone calls and letters to adjoining landowners (4) 	Adjoining landowners	On 3 June 2024, Urbis Engagement called adjoining landowners to notify them about the project and ask whether they had any immediate questions or concerns. Urbis Engagement followed up with landowners who did not respond initially with another phone call on 5 June 2024.
Adjoining landowner letter 	Adjoining landowners	A letter addressed to the adjoining landowners was shared via email on 3 June 2024. The letter provided summary information about the project and offered the opportunity to meet with the project team.
Distribution of project information via email 	Edward River Council – Councillors Publicly elected officials – State and Federal Member Community groups	On 6 June 2024, Urbis Engagement contacted the Mayor and Councillors for Edward River Council via email to provide information about the project and provide the opportunity for these stakeholders to ask questions or provide feedback. This email also indicated future opportunities to provide feedback during preparation of the Environmental Impact Statement (EIS).
		On 6 June 2024, Urbis Engagement contacted the State and Federal MPs for the local area to provide information about the proposal and provide the opportunity for these stakeholders to ask questions or provide feedback. This email also indicated future opportunities to provide feedback during preparation of the Environmental Impact Statement (EIS).
		On 12 June 2024, Urbis Engagement contacted the community groups outlined above to provide information about the proposal and provide the opportunity for these stakeholders to ask questions or provide feedback. This email also indicated future opportunities to provide feedback during preparation of the Environmental Impact Statement (EIS).

Engagement activity	Target stakeholder	Description and reach
Local media advertisements	Broader Hay and Deniliquin communities	Advertisements were placed in two (2) of the local papers, the *Riverine Grazier* and the *Deniliquin Pastoral Times.* The advertisements highlighted the location of the project site, provided summary information about the project and invited feedback. The advertisements also indicated future opportunities to provide feedback during preparation of the Environmental Impact Statement (EIS).
Enquiry management through 1800 number and email address 	All stakeholders	Urbis Engagement received one (1) phone call and one (1) email through the project enquiry lines. Urbis Engagement will continue to maintain these enquiry lines whilst awaiting SEARs and during preparation of the EIS.

5.1.4. Issues Raised

Given the preliminary nature of the project, the majority of the feedback came from Council, which raised matters about environmental constraints, waste management during decommissioning, development contributions, and planning agreement, as well as socio-economic considerations with potential positive or negative impacts on the community. Full details of the preliminary Engagement outcomes can be seen in Appendix B.

All these raised matters will be addressed during the EIS phase, and ongoing consultation will be maintained with Council to ensure positive engagement outcomes with the community.

5.2. ENGAGEMENT TO BE CARRIED OUT BY THE APPLICANT

Community and stakeholder consultation will be undertaken in the preparation and assessment of the EIS including:

- **Key Stakeholders**: it is proposed to consult with the following stakeholders during the preparation of the EIS:
  - Department of Planning, Housing and Infrastructure
  - Edward River Council
  - Agencies, including Transport for NSW, TransGrid, Heritage NSW, Fire and Rescue NSW.
  - Surrounding residents, businesses and local community groups.
- **Other Interested Stakeholders:** additional stakeholders may be identified during the preparation of the EIS.

The following actions will be undertaken to keep the community informed regarding the project, obtain feedback from the community on the project and engaged with stakeholders on the detailed assessment of key matters:

- Additional consultation actions may be identified following further engagement with key stakeholders and DPHI.
- The EIS and supporting documentation will be placed on public exhibition, providing stakeholders with an additional opportunity to review the Project, including the final development plans and the detailed specialist studies and assessment reports accompanying the final EIS.

6. PROPOSED ASSESSMENT OF IMPACTS

This section identifies the key impacts that will be further investigated and assessed within the EIS, including the proposed approach to assessing each of these matters. It also identifies some of the matters addressed in the scoping phase that are unlikely to result in significant impacts and do not warrant further consideration in the EIS.

In accordance with the Scoping Report Guidelines, the following factors have been considered in determining the level of assessment required for each matter in the EIS:

- The scale and nature of the likely impacts of the project and the sensitivity of the receiving environment.
- Whether the project is likely to generate cumulative impacts with other relevant future projects in the area.
- The ability to avoid, minimise and/or offset the impacts of the project, to the extent known at the scoping stage.
- The complexity of the technical assessment of the project.

In accordance with the Scoping Report Guidelines, a scoping summary table for each matter is included in Appendix A. A summary of the matters requiring further assessment in the EIS identified, and the level of assessment proposed can be seen in **Table 10**.

Table 10 Matters identified within the Scoping Phase and Level of Assessment proposed to be undertaken for the EIS.

Level of Assessment	Assessment Matter
Detailed	Biodiversity
	Aboriginal Cultural Heritage
	Traffic and Access
	Amenity – Landscape and Visual
	Water (Hydrology and flooding)
Standard	Social and Economic
	Amenity - Noise
	Soils and Land Capability
	Bushfire
	Hazards and Risks
	Waste Management
No Further Assessment	Historical Heritage (there are no heritage items located near the site)

6.1. MATTERS REQUIRING DETAILED ASSESSMENT IN THE EIS

6.1.1. Biodiversity

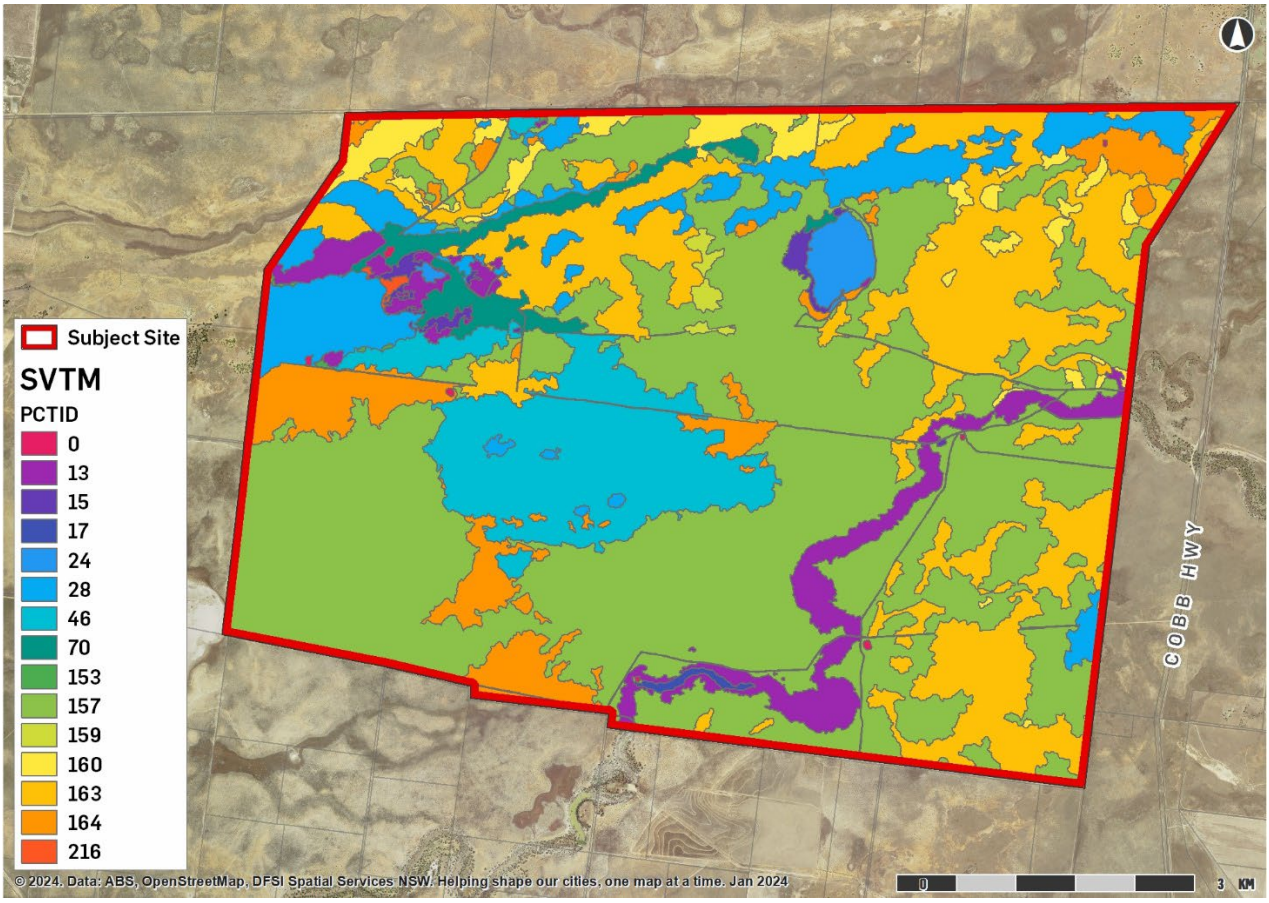
6.1.1.1. Existing Environment

A Preliminary Biodiversity Constraints Assessment was undertaken by Cumberland Ecology in May 2024. This included a preliminary desktop review and a site visit to verify desktop findings. The desktop review included:

- BioNet Vegetation Classification database (EHG, 2024b)
- NSW State Vegetation Type Map (SVTM) (EHG, 2024c)
- Threatened Biodiversity Data Collection (TBDC) (EHG, 2024d)
- NSW Biodiversity Values Map (DCCEEW (NSW), 2024)
- ePlanning Spatial Viewer – Land Zoning Maps (DPHI, 2024)
- Hydrological datasets (DPIE, 2021)
- Groundwater Dependent Ecosystems Atlas (BOM, 2024)
- Probable Vegetation Groundwater Dependent Ecosystems in NSW (NSW - Water, 2024)

A Plant Community Type (PCT) map as modelled by DPE 2023 is provided in **Figure** 12 below:

Figure 12 NSW State Vegetation Type Map (DPE 2022).



Source: Urbis, 2024

Cumberland Ecology conducted preliminary reconnaissance surveys of the Project Area between 27 – 31 May 2024. The vegetation within the Project Area was ground-truthed to examine and verify the mapping of the condition and extent of the different plant communities with particular reference to Threatened Ecological Communities (TECs) listed under the BC Act and EPBC Act.

Mapping of plant communities within the Project Area was undertaken by random meander surveys through patches of vegetation, noting key characteristics of areas in similar broad condition states such as similar tree cover, shrub cover, ground cover, weediness or combinations of these. Records of plant community boundaries were made using a hand-held Global Positioning System and mark-up of aerial photographs. The resultant information was synthesised using GIS to create a spatial database that was used to interpret and interpolate the data to produce a vegetation map of the study area.

The vegetation mapping was supported by conduction of Vegetation Integrity assessments in accordance with the Biodiversity Assessment Method (BAM) (hereafter referred to as BAM plots). BAM plots surveys included establishment of 20 x 50 m plots, with an internal 20 x 20 m floristic plot. A total of 20 BAM plots were conducted to support revised vegetation mapping with the following data being collected within each of the plots:

- Composition for each growth form group by counting the number of native plant species recorded for each growth form group within the 20 m x 20 m floristic plot
- Structure of each growth form group as the sum of all the individual projected foliage cover estimates of all native plant species recorded within each growth form group within the 20 m x 20 m floristic plot
- Cover of 'High Threat Exotic' weed species within the 20 m x 20 m floristic plot
- Assessment of function attributes within the 20 m x 50 m plot, including:
  - Count of number of large trees
  - Tree stem size classes, measured as 'diameter at breast height over bark' (DBH)
  - Regeneration based on the presence of living trees with stems <5 cm DBH
  - The total length in metres of fallen logs over 10 cm in diameter
- Assessment of litter cover within five 1 m x 1 m plots evenly spread within each 20 m x 50 m plot
- Number of trees with hollows that are visible from the ground within each 20 m x 50 m plot

The presence of fauna habitat within the proposed Project Area was also noted. Specific attention was paid to the potential occurrence of waterbodies (including artificial dams), creek lines, rocky outcrops and presence of hollow bearing trees.

Reconnaissance surveys conducted between 27 – 31 May 2024 were mainly conducted in the southern half of the Project Area where the impact footprint is currently proposed to be located.

The following PCTs were validated on-site within the Project Area during the Preliminary Biodiversity Constraints Assessment (Figure 13):

- PCT 13: Black Box - Lignum woodland wetland of the inner floodplains in the semi-arid (warm) climate zone (mainly Riverina Bioregion and Murray Darling Depression Bioregion)
- PCT 28: White Cypress Pine open woodland of sand plains, prior streams and dunes mainly of the semi-arid (warm) climate zone
- PCT 46: Curly Windmill Grass - speargrass - wallaby grass grassland on alluvial clay and loam on the Hay Plain, Riverina Bioregion
- PCT 157: Bladder Saltbush shrubland on alluvial plains in the semi-arid (warm) zone including Riverina Bioregion
- PCT 160: Nitre Goosefoot shrubland wetland on clays of the inland floodplains
- PCT 164: Cotton Bush open shrubland of the semi-arid (warm) zone

Figure 13 Preliminary Field-validated PCTs within the Project Area

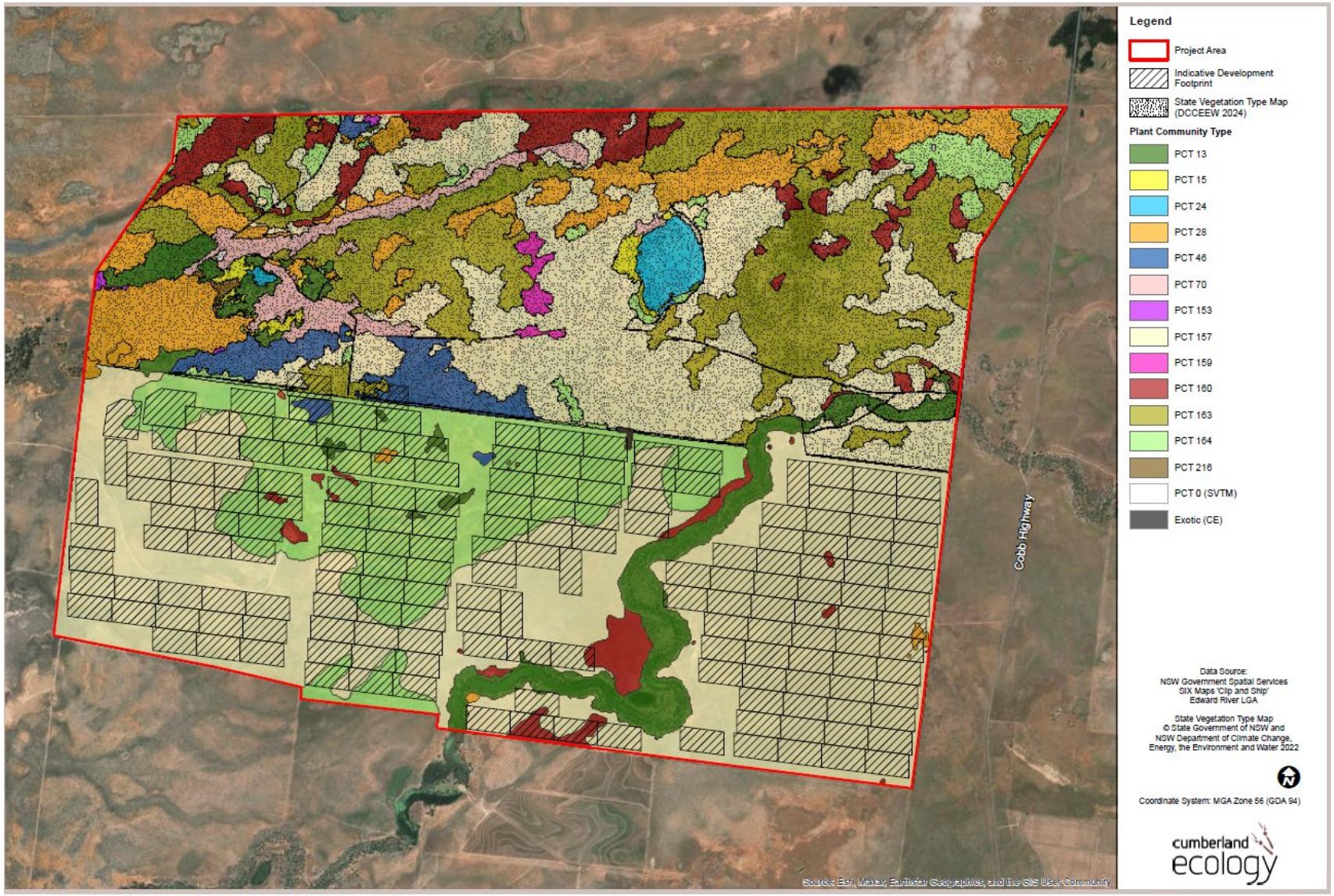


Figure 5. Plant Community types within the Project Area

Source: Cumberland Ecology, 2024

Of the 13 PCTs of the Eastern NSW SVTM mapping present in the Project Area, seven (7) are associated with a TEC under the BC Act and/or EPBC Act.

Following revision of TEC thresholds and local ecological values, small sections of *Sandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregions* listed as Endangered Ecological Community (EEC) under the BC Act 2016 is considered to be present on-site, both within the development footprint of the project and on the northern half of the site, albeit in a highly degraded form. This EEC has been nominated for assessment under the EPBC Act, due April 2025.

TECs *Acacia loderi shurblands* and *Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray- Darling Depression, Riverina and NSW South Western Slopes bioregions* are regarded to have the potential to occur on the northern half of the site, but this potential occurrences have been completely avoided within the current development footprint.

The mapped distribution of TECs within the Project Area is shown in Figure 14.

As per the GDE Atlas (BOM, 2024), the Project Area is mapped as containing the following types of GDEs:

- Aquatic - Low Potential GDE (national assessment)
- Terrestrial – Low Potential GDE (regional study)

The NSW BioNet Wildlife Atlas search, Commonwealth PMST search and threatened flora species associations with recorded PCTs for the Murrumbidgee IBRA subregions identified 17 threatened flora species known or with potential to occur within a 10 km radius of the Project Area. An Assessment of likelihood is presented below in **Table 11**.

Table 11 Threatened flora potentially occurring in the Project Area

Scientific name	Common name	BC Act Status	EPBC Act Status	Candidate SAII entity	Likelihood of occurrence
Austrostipa wakoolica	A spear-grass	E	E	No	Moderate
Brachyscome muelleroides	Claypan Daisy	V	V	Yes	Moderate
Brachyscome papillosa	Mossgiel Daisy	V	V	No	High
Caladenia arenaria	Sand-hill Spider Orchid	E	E	Yes	Low
Calotis moorei	A burr-daisy	E	E	Yes	Low
Convolvulus tedmoorei	Bindweed	E	-	Yes	Low
Diuris tricolor	Pine Donkey Orchid	V	-	No	Moderate
Eucalyptus leucoxylon subsp. pruinosa	Yellow Gum	V	-	No	Low
Lepidium monoplocoides	Winged Peppercress	E	E	No	High
Leptorhynchos orientalis	Lanky Buttons	E	-	No	Moderate
Maireana cheelii	Chariot Wheels	V	V	No	High
Pilularia novae-hollandiae	Austral Pillwort	E	-	Yes	Moderate
Sclerolaena napiformis	Turnip Copperburr	E	E	No	Low
Solanum karsense	Menindee Nightshade	V	V	No	Low
Swainsona murrayana	Slender Darling Pea	V	V	No	High
Swainsona plagiotropis	Red Darling Pea	V	V	No	Low
Swainsona sericea	Silky Swainson-pea	V	-	No	Low

Figure 14 Threatened Ecological Communities within the Project Area.

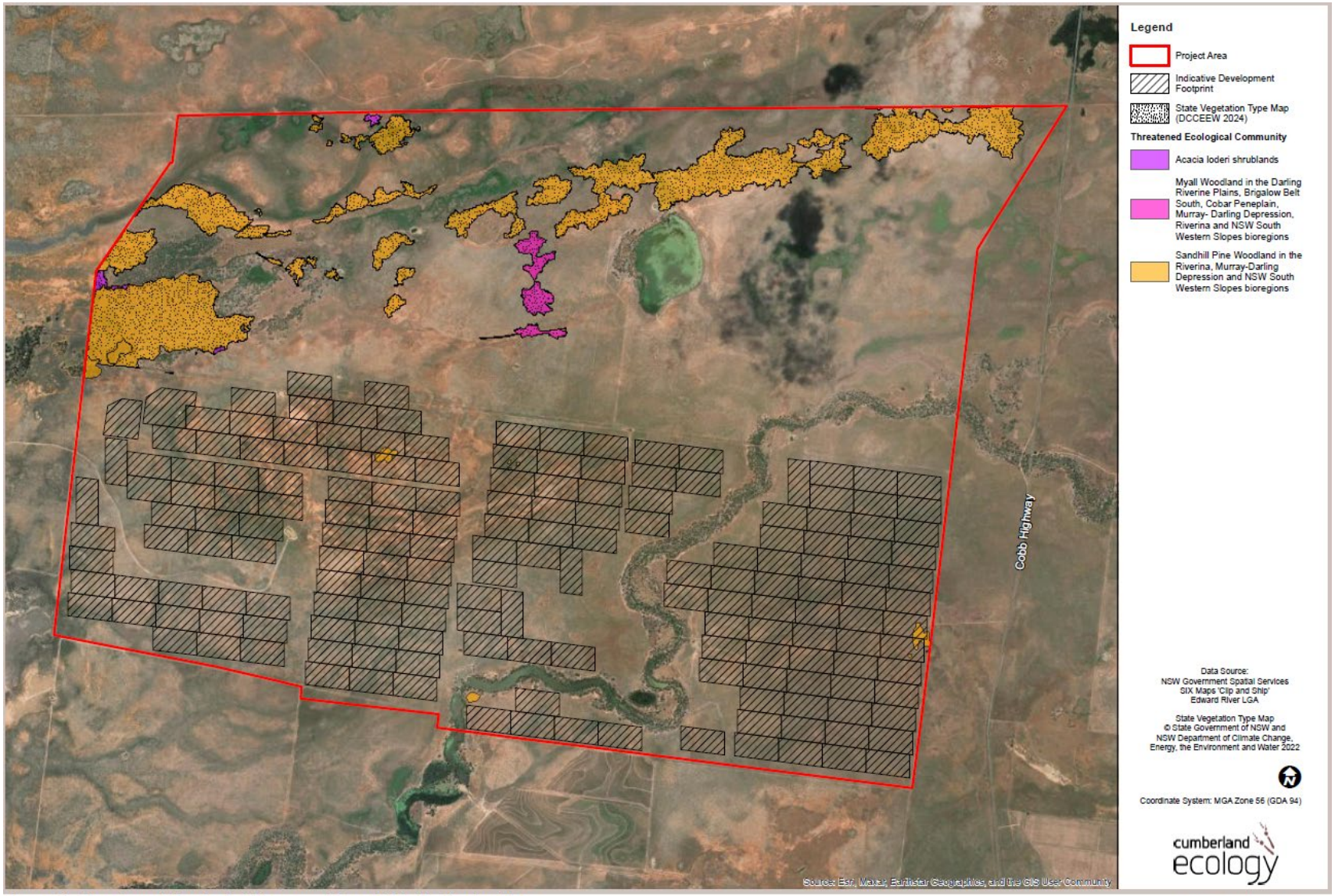


Figure 6. Threatened Ecological Communities within the Project Area

Source: Cumberland Ecology, 2024

The NSW BioNet Wildlife Atlas search, Commonwealth PMST search and threatened fauna species associations with recorded PCTs for the Murrumbidgee IBRA subregion collectively identified 84 threatened fauna species (excluding fish) known or with potential to occur within a 10 km radius of the Project Area. Threatened fish, as per the PMST search, were assessed unlikely to occur in the Project Area and were not included in assessments for the constraints assessment. An Assessment of likelihood is presented below in **Table 12**.

Table 12 Threatened fauna species potentially occurring in the Project Area

Scientific name	Common name	BC Act Status	EPBC Act Status	Candidate SAII entity	Likelihood of occurrence
Amphibians					
Litoria raniformis	Southern Bell Frog	E	V	No	Low
Crinia sloanei	Sloane's Froglet	E	E	No	Low
Birds					
Aphelocephala leucopsis	Southern Whiteface	V	V	No	High
Ardeotis australis	Australian Bustard	E	-	No	Low
Artamus cyanopterus cyanopterus	Dusky Woodswallow	V	-	No	High
Botaurus poiciloptilus	Australasian Bittern	E	E	No	Moderate
Burhinus grallarius	Bush Stone-curlew	E	-	No	High
Calidris acuminata	Sharp-tailed Sandpiper	-	V	No	Unlikely
Calidris ferruginea	Curlew Sandpiper	E	CE	Yes	Unlikely
Circus assimilis	Spotted Harrier	V	-	No	High
Climacteris picumnus victoriae	Brown Treecreeper (south-eastern)	V	V	No	High
Epthianura albifrons	White-fronted Chat	V	-	No	High
Falco hypoleucos	Grey Falcon	V	V	No	Moderate
Falco subniger	Black Falcon	V	-	No	High
Gallinago hardwickii	Latham's Snipe, Japanese Snipe	-	V	No	Unlikely
Grantiella picta	Painted Honeyeater	V	V	No	Low

Scientific name	Common name	BC Act Status	EPBC Act Status	Candidate SAII entity	Likelihood of occurrence
Haliaeetus leucogaster	White-bellied Sea-Eagle	V	-	No	Low
Hieraaetus morphnoides	Little Eagle	V	-	No	Moderate
Lathamus discolor	Swift Parrot	E	CE	Yes	Low
Lophochroa leadbeateri	Pink Cockatoo	V	E	No	Moderate
Lophoictinia isura	Square-tailed Kite	V	-	No	Moderate
Melanodryas cucullata cucullata	South-eastern Hooded Robin	E	E	No	Low
Neophema chrysostoma	Blue-winged Parrot	V	V	No	High
Ninox connivens	Barking Owl	V	-	No	Low
Pedionomus torquatus	Plains-wanderer	E	CE	Yes	High
Polytelis anthopeplus monarchoides	Regent Parrot (eastern subspecies)	E	V	No	Moderate
Polytelis swainsonii	Superb Parrot	V	V	No	High
Pomatostomus temporalis temporalis	Grey-crowned Babbler (eastern subspecies)	V	-	No	High
Rostratula australis	Australian Painted Snipe	E	E	No	Low
Stagonopleura guttata	Diamond Firetail	V	V	No	High
Tyto novaehollandiae	Masked Owl	V	-	No	Low
Fish					
Galaxias rostratus	Flathead Galaxias	-	CE	n/a	Unlikely
Maccullochella peelii	Murray Cod	-	V	n/a	Unlikely
Macquaria australasica	Macquarie Perch	-	E	n/a	Unlikely
Mammals					
Nyctophilus corbeni	Corben's Long-eared Bat	V	V	No	Low
Phascolarctos cinereus	Koala	E	E	No	Low
Reptiles					
Aprasia parapulchella	Pink-tailed Legless Lizard	V	V	No	Moderate

Scientific name	Common name	BC Act Status	EPBC Act Status	Candidate SAII entity	Likelihood of occurrence
Hemiaspis damelii	Grey Snake	E	E	No	Low

Important Habitat of the Plains-Wanderer is adjacent to the site and especial consideration has been given to avoid any potential impacts on this species. Indirect and direct impacts on other fauna and flora species with a considerable likelihood of occurrence within the subject site will be avoid, minimised and mitigated when necessary.

Although no threatened fish species listed under the Fisheries Management Act 1994 are modelled to be present on-site, Nyangay Creek is categorised as a *Key Fish Habitat*.

Figure 15 Biodiversity Values mapped within the Project Area

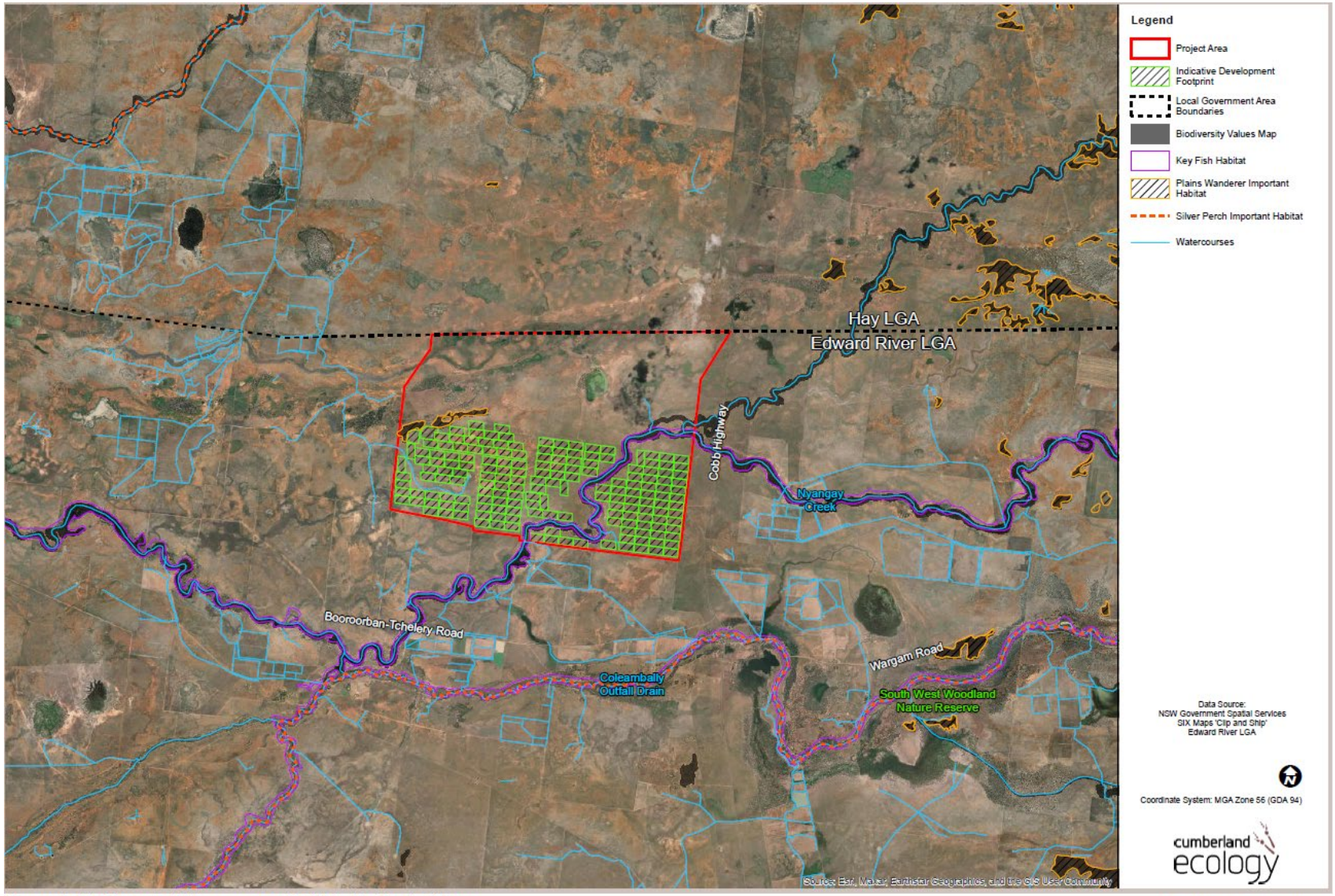


Figure 4. Biodiversity Values mapped within the Project Area

Source: Cumberland Ecology, 2024

6.1.1.2. Assessment Approach

A BDAR would be prepared by a suitably qualified specialist to complete a detailed assessment of potential biodiversity impacts resulting from the construction and operation of the Project in accordance with the Biodiversity Conservation Act 2016.

The BDAR and all associated site investigations would be undertaken as per the Biodiversity Assessment Method (BAM) (DPIE, 2020). It is expected that the project will be referred to DCCEEW – BCS and that the project SEARs will address their requirements. A detailed assessment of the MNES may also be undertaken and included within the EIS, if it is expected that an EPBC referral will be necessary.

It is expected that the BDAR will inform the concept layout and iterative refinements will be undertaken to avoid and minimise impacts on local biodiversity. Further proposed measures to avoid, minimise, mitigate, and offset will be included within the BDAR to ensure a nature positive outcome for the project.

Consideration will be given within the BDAR to the Key Fish Habitat, which will include an aquatic ecological assessment that addresses all direct and indirect impacts of the development. The Aquatic Ecological Assessment should cover the assessment requirements outlined in Chapter 3 of the *Policy and Guidelines for Fish Habitat Conservation and Management* (2013), including an assessment of the potential loss of riparian vegetation and any indirect impacts.

6.1.2. Aboriginal Cultural Heritage

Aboriginal cultural heritage incorporates tangible and intangible cultural heritage, that are connected in most contexts and can be assessed either in that context or under separate methodologies. Tangible cultural heritage can include Aboriginal stone tools, scarred trees, earth mounds, burials, engraved or painted rock art, while intangible examples are dreaming stories, cultural landscape and cultural connections through the landscape. Aboriginal cultural heritage is governed by the *NSW National Parks and Wildlife Act 1974* in NSW.

In this due diligence component, Urbis is only able to provide early constraint assessment for tangible Aboriginal cultural heritage. Please note that investigating and managing intangible Aboriginal cultural heritage in this rural environment is an important aspect of gaining the trust of the community and should be started early in the process.

Urbis has undertaken the following tasks for the due diligence component:

- Basic and extensive search of the Aboriginal Heritage Information Management System (AHIMS).
- High level constraints analysis of landscape features in line with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW, 2010)*

This preliminary Opportunities & Constraints Assessment is not a comprehensive archaeological assessment of the subject area. It does not include historical archaeology. It also does not meet the requirements of a formal Aboriginal Objects Due Diligence Assessment, or Aboriginal Cultural Heritage Assessment. Further, the Assessment of the subject area is based on desktop analysis only.

The assessment does not consider the impact of any specific works. Further assessment should be undertaken to determine the impact of any proposed works on the heritage items in proximity and the surrounding landscape.

6.1.2.1. Existing Environment

6.1.2.1.1. Native Title

A desktop review was undertaken to identify any Native Titles or Claims on 7 June 2024. The review comprised of a search within the National Native Title Register (NNTR), the Register of Native Title Claims (RNTC), and the Native Title Applications Registration and Determinations.

The assessment did not reveal any active Native Title or Claim under the Commonwealth's Native Title Act 1993 within the subject area. However, the southern boundary of the subject area is located approximately 1.5km north of an active application named Wamba Wemba (VC2021/001).

6.1.2.1.2. Registered Aboriginal Objects

Basic and Extensive search of the AHIMS was conducted on the 31st of May 2024 (AHIMS Client Service ID: 897319 & 897323) that identified:

- The search identified a total of 25 Aboriginal sites. Of the total identified sites, 17 Aboriginal sites were recorded within or on the boundary of the subject area (see Figure 16).
- Aboriginal site types included artefacts, hearths, modified trees and PADs.
- There are no declared Aboriginal places in or near the site.
- Five site cards were unavailable on AHIMS and could not be identified.

6.1.2.1.3. Natural Landscape

The purpose of reviewing the natural landscape of the subject area is twofold. It assists in the prediction of the intensity and nature of Aboriginal land use and deposition of archaeological material in the subject area by considering the landforms and resources that would have played a part in the everyday lives of Aboriginal people. It also assists in determining the likelihood that material remains would have survived any natural geomorphological process or historical ground disturbance.

The Site has been historically used for agricultural purposes. The site is currently being used for livestock grazing. The subject area is intersected by several ephemeral waterlines including Nyangay Creek.

The general geology of the subject area is part of the Shepparton formation (Czsws) which features quaternary alluvial sediments. Deposits in these contexts can include buried soil activities which are connected with prior paleochannels and stream activity. Specifically, vertosols (cracking clay soils) cover the entire subject area.

The subject area also has underlying geology of Booroorban Granite (DNlb) in the eastern portion of the site and Hay-Booligal Zone (NPn_hb) which is characterised by ultramafic and sedimentary rock in the western part of the site.

Therefore, landscape features with potential for Aboriginal objects under the Due Diligence Code exist in the subject area are the following:

- Within 200 m of waters.
- Located within a sand dune system.

Figure 16 below shows the constraints mapping for Aboriginal cultural heritage incorporating both the AHIMS results and the landscape feature context of the due diligence assessment.

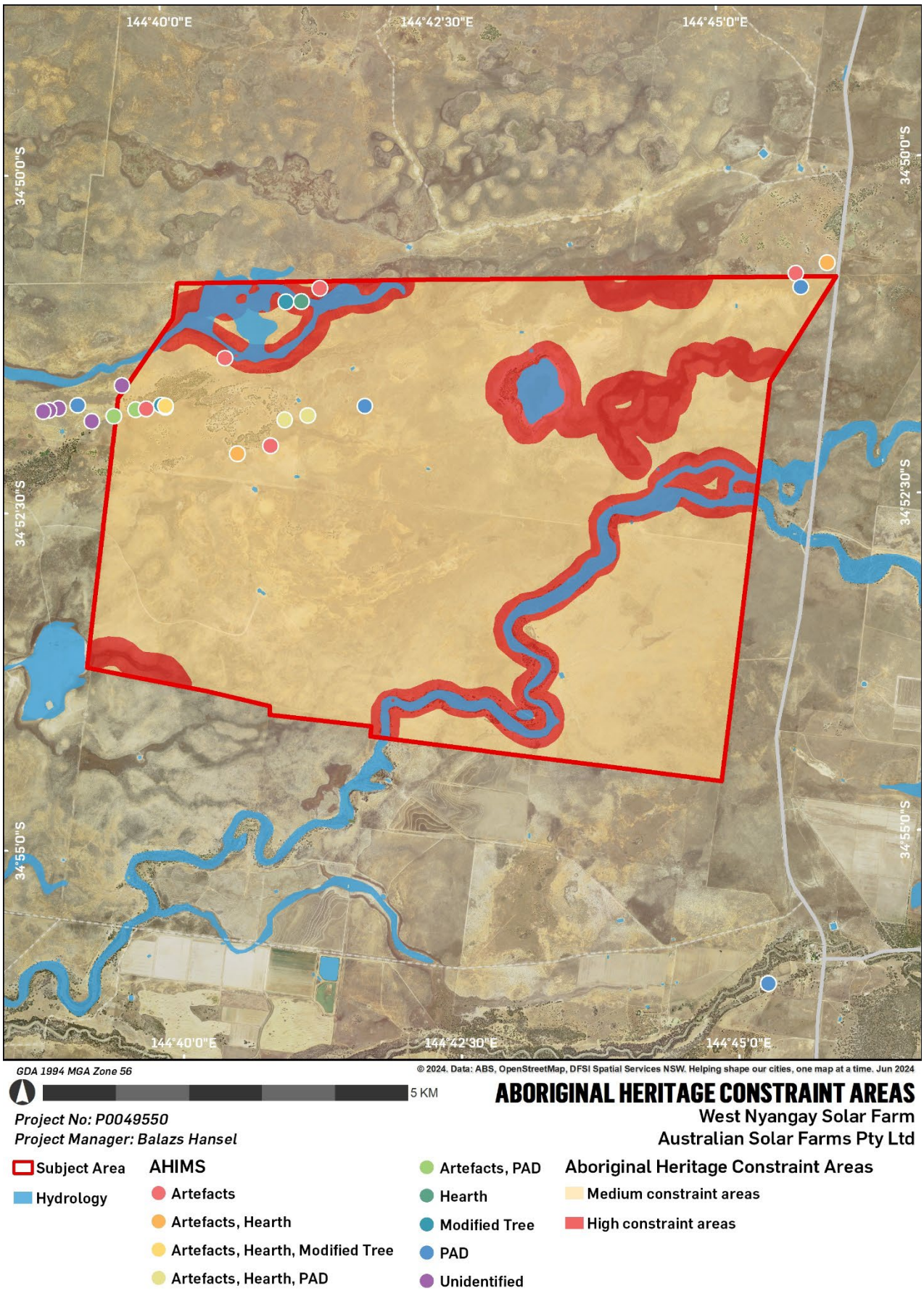


Figure 16 Aboriginal Heritage Constraint Areas

Source: Urbis

6.1.2.1.4. Previous Archaeological Investigations

Previous Aboriginal archaeological investigations undertaken within or near to the subject area may provide information about known Aboriginal sites that have not previously registered on the AHIMS database. Additionally, Aboriginal archaeological investigations undertaken in the broader region may provide information on the types of archaeological site features that are likely to occur within the subject area.

The following archaeological investigations were identified as being located within the vicinity of the present subject area:

ERM, 2024, ACHA, The Plains Renewable Energy Park – Wind Farm

ERM was engaged by Engie Australia and New Zealand to prepare an Aboriginal Cultural Heritage Assessment for the construction of the Plains Wind Farm. The study area encompassed a 53,894 ha and is located on either side of Cobb Highway directly north of the present subject area (see Figure 17).

The ACHA included two survey programs which found 108 new sites within the project area. The most common site type were artefacts, however PADs, Hearths and Modified Trees were also identified. The report identified an association between Aboriginal sites and scalded red earths, red brown earth and siliceous sand which were part of dune and lunette landforms. Areas where these landscape features occurred were found to have high sensitivity for Aboriginal heritage.

Areas with red-brown earth or grey-brown cracking clays adjacent to aeolian dune fields and associated with paleochannel rangelands which were associated with were found to have moderate sensitivity for Aboriginal heritage. The Aboriginal sites identified were assessed as having moderate (hearth sites) to low (isolated finds, artefact scatters and culturally modified trees) scientific significance.

The report recommended the development of an Aboriginal Cultural Heritage Management Plan and archaeological test/salvage excavations of the Aboriginal sites within the development footprint.

Due to the close proximity of The Plains Energy Park to the present subject area it is likely for Aboriginal sites to also occur within this site.

Navin Officer Heritage Consultants Pty Ltd, 2022, ACHA, EnergyConnect (NSW – Eastern Section) Buronga to Wagga Wagga, NSW

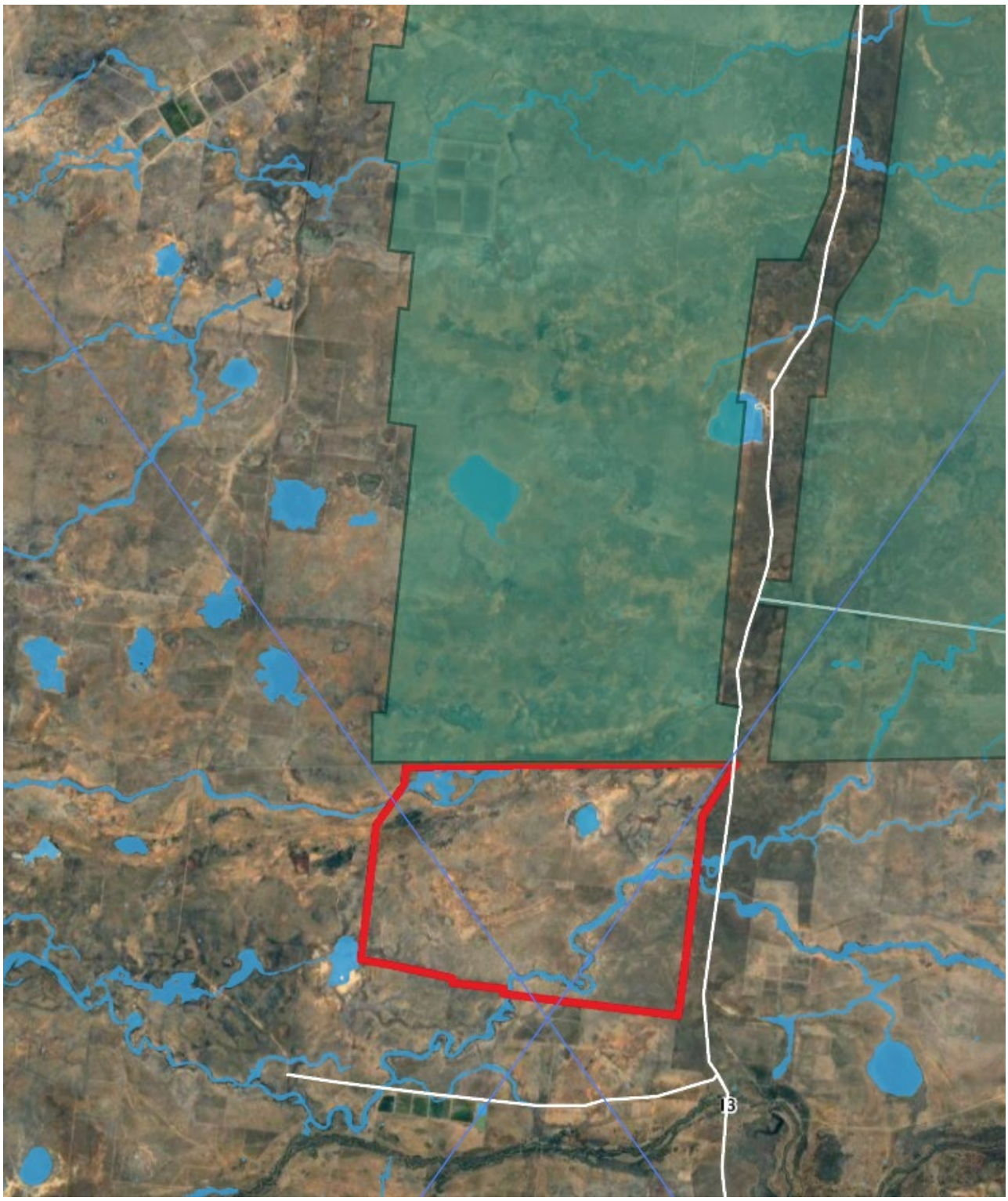
Navin Officer Heritage Consultants Pty Ltd were engaged by Transgrid and ElectraNet to prepare an Aboriginal Cultural Heritage Assessment for the construction of a new high voltage interconnector between NSW and SA. The study area included a portion of Cobb Highway located approximately 20 km to the north of the present subject area.

A survey was undertaken as part of the ACHA which found 105 new aboriginal sites including the following that are relevant to the present subject area:

- an artefact scatter located 560 meters west of the Cobb Highway.
- an isolated find located 700 meters north of Boorooban-Tchelery Road.
- Two hearths located 400 meters west of Cobb Highway.
- Hearth and artefacts located 1.2km northwest of Boorooban-Tchelery Road.
- Modified tree and artefact scatter located 250 meters north of Boorooban-Tchelery Road.
- Modified tree located 150 meters north of Boorooban-Tchelery Road.

The locations of these items were not included on maps, so it is unclear exactly where they were located in relation to the current subject area. The report also found that there was high potential for stone artefacts in the areas surveyed. All new Aboriginal sites were recorded on AHIMS. The finding of Aboriginal sites in the subject area informed the proposed development in order to mitigate the impact of such on these sites.

This study is relevant to the present assessment because it is both located in relatively close proximity to the subject area and vertosols (cracking clay soils) occur at both sites. Therefore, they have a similar soil landscape and Aboriginal objects may also occur within the subject area.



GDA 1994 MGA Zone 56

© 2024. Data: ABS, OpenStreetMap, DFSI Spatial Services NSW. Helping shape our cities, one map at a time. Jun 2024

5 KM

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

West Nyangay Solar Farm
Australian Solar Farms Pty Ltd

Project No: P0049550
Project Manager: Balazs Hansel

Subject Area ERM Survey

Hydrology

Figure 17 Previous Archaeological Investigations.

Source: Urbis

Aboriginal Archaeology Conclusions

- 17 Aboriginal sites were recorded within or on the boundary of the subject area.
- Aboriginal site types included artefacts, hearths, modified trees and PADs.
- There are no declared Aboriginal places in or near the site.
- The presence of both ephemeral waterways and quaternary alluvial sediments, which are associated with prior paleochannels and stream activity, within the subject area indicates high archaeological sensitivity.
- Previous archaeological investigations in the surrounding area indicate that there is potential for Aboriginal sites in nearby and similar environmental contexts.
- Based on the above information, constraints for Aboriginal cultural heritage are mapped in Figure 16.
- The subject area is determined to have moderate-high Aboriginal archaeological potential.

6.1.2.2. Assessment Approach

An Aboriginal Cultural Heritage Assessment will be required to accompany a State-significant development application for a renewable energy project on the site. In addition to this, there will be an emphasis on preparing a Cultural Values and/or Landscape assessment that would provide an assessment of the intangible cultural heritage values.

The investigation and management of Aboriginal tangible and intangible cultural heritage will be a complex and time-consuming process and should be initiated early in the process. Emphasis will need to be placed on early engagement with the local Aboriginal community and map all Aboriginal cultural heritage resources, as well as finding ways of celebrating Aboriginal cultural heritage through the design of the project.

The ACHAR, will need to be prepared in accordance with the following guidelines:

- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011).*
- *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010).*
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010a)* ('the Consultation Guidelines')

The following principles will ensure that the proposed development will assess and manage Aboriginal cultural heritage in most efficient and transparent way:

- Urbis recommends the preparation of an Aboriginal Cultural Heritage Assessment Report (ACHAR) as a priority to assess tangible and intangible heritage.
- The ACHAR should also be supported by the early preparation of a Cultural Values and Landscape Assessment to assess intangible cultural heritage. Urbis recommends that both these reports are commenced as soon as possible to prevent delays to the project.
- Opportunities also exist for engagement with Aboriginal community members through consultation as part of the ACHA process and the Connecting with Country Framework issued by the Government Architect NSW to inform development of the subject area.

  It should be noted, that the ACHA and the Connecting with Country reports are separate documents with distinct purposes. The purpose of the ACHA is to investigate and assess whether Aboriginal cultural heritage values and objects are present within a site and the harm a proposed activity may cause to them.

  The Connecting with Country Framework is used to respond to and preserve Aboriginal cultural heritage which informs the design of a proposal. Large-scale solar farm developments do not typically include a requirement for a Connecting with Country report. However, Connecting with Country Framework may be able to inform any landscaping works as part of the proposal and for site naming purposes, which would ensure best-practice aboriginal cultural management on-site.

6.1.3. Traffic and Access

6.1.3.1. Existing Environment

Due to its location, it is expected that the major components (including PV panels) will be delivered to the Port of Melbourne or Port of Geelong and transported by road to the project area. The subject site is approximately 420 km north of Melbourne.

However, due to the preliminary stage of the procurement of the project, the logistics of the delivery may not be limited to these transport hubs, with Adelaide, Portland, Sydney, Wollongong and/or Newcastle also considered as viable options. The transport route of project-related components is subject to a Transport Route Assessment, which will be included as part of a Transport Impact Assessment.

Access to the project area during construction and operation is proposed via existing entrances via the Cobb Highway, which will connect to the site boundary through a perimeter road. The project may require upgrades to some roads near the subject site, which will be identified and proposed during the EIS phase depending on the anticipated vehicle sizes and movements.

6.1.3.2. Assessment Approach

A Transport Impact Assessment report will be provided within the EIS to consider the potential impact of the project on the road network. The reporting will analyse existing and expected traffic impacts (including cumulative impacts) on the local road network during construction and operation, including assessment of the proposed entry points to the site. Further considerations will relate to potential road infrastructure upgrades related to the project and anticipated haulage routes.

The Transport Impact Assessment (**TIA**) will identify management and mitigation measures to maintain road safety. The TIA will be prepared in accordance with the *Austroads Guide to Traffic Management Part 12*, Australian Standards and any complementary TfNSW Supplements, and *Roads and Maritime Guide to Traffic Generating Developments*.

6.1.4. Amenity – Landscape and Visual

6.1.4.1. Existing Environment

The site is in the New South Wales Riverina bioregion, which is predominantly characterised by a series of overlapping, low gradient alluvial fans, floodplains with overflow lakes and tributaries leading to the Murray River on the Victorian border. Typical features of this region include wetlands, stands of vegetation, open plains with gradual changes in topography and patches of remnant vegetation interspersed with modified landscapes for agricultural purposes. Nyangay Creek and The Forest Creek converge 4.5km southwest of the southern boundary, with both creeks connecting to a constructed irrigation channel, Coleambally Outfall Drain.

The site is characterised by open, flat to undulating plains, where the landscape gently rises to the east towards riparian corridors and areas of vegetation.

There are no existing structures or properties located within the project site. Nyangay Creek runs through the lower portion of the site, winding northeast from the centre of the southern boundary, toward the centre of the eastern boundary. Several ponds of various sizes and ephemeral creeks are present and visible in aerial photography.

Vegetation is present in the northwest corner of the site, including isolated stands of trees, areas of low grass and the riparian corridor associated with Nyangay Creek. Vegetation patterns may contribute to potential screening effects in views to the site from close locations along Cobb Highway.

Urbis have used elevation and topographical data to understand potential visibility to any part of the site or proposed development from the surrounding visual catchment. The potential visual catchment is the theoretical area within which parts of the site, including the proposed solar arrays (approximately 5.2m above natural ground level), may be visible.

Boorooban is the closest town, located approximately 2.8km from the southeastern corner of the site along Cobb Highway, near Coleambally outfall Drain. There are approximately 15 rural residential properties within 20km of the town centre.

The immediately surrounding landscape and visual context within 7km reflects the bioregion characteristics, in that the subregional landscape is relatively flat, open but culturally modified to facilitate cropping and grazing as evidenced for example by visible structures, striations in form and colour across the land, water diversion structures including for example, Coleambally Outfall Drain. Built form is minimal, limited to sheds and ancillary structures associated with agricultural production.

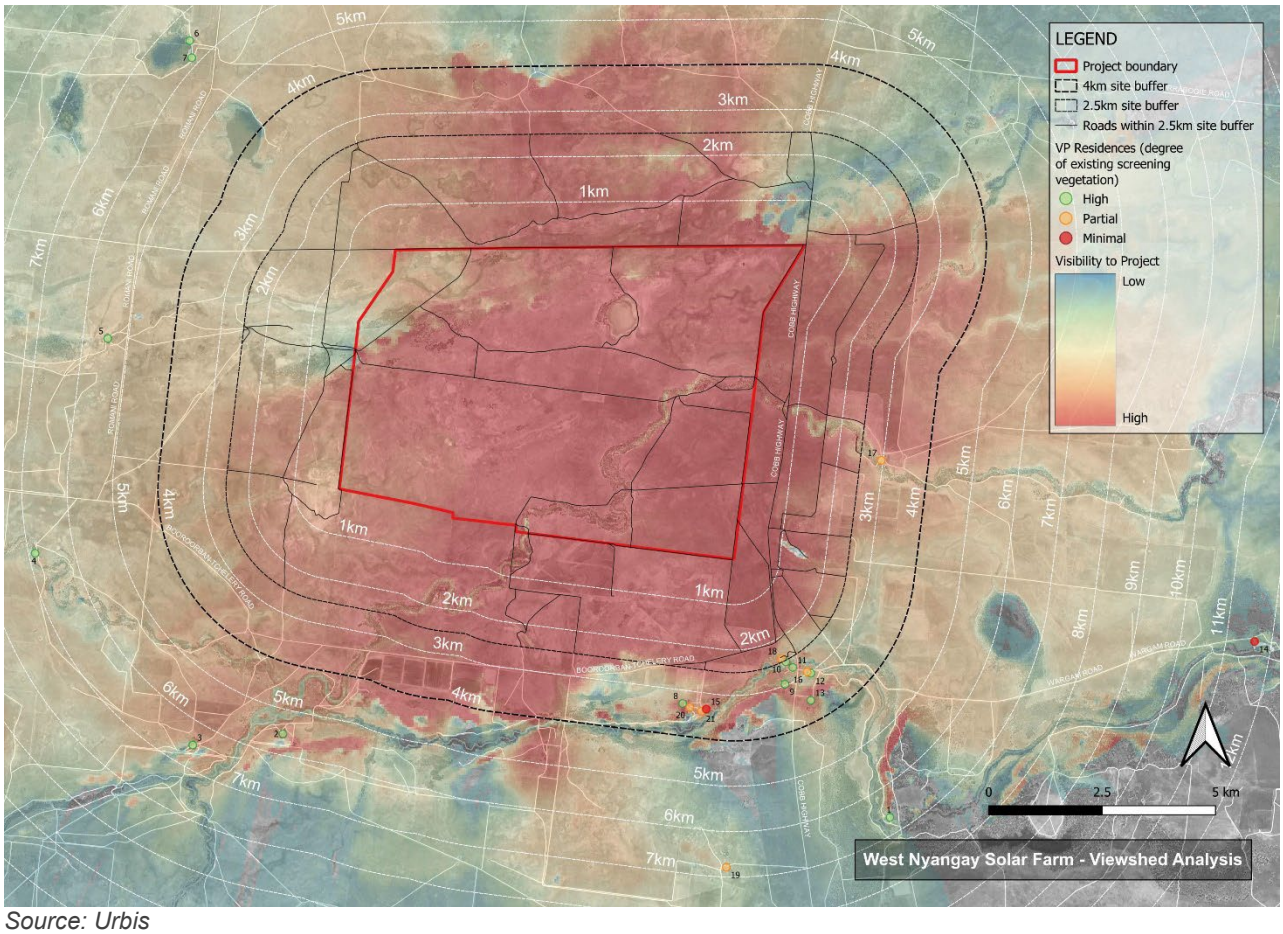
Other built forms include dwellings typically with pitched roof forms, sheds, silos, water tanks, livestock fencing, damns and solar panel installations (of a residential scale). Surrounding residential settlement patterns are disparate, where rural residential dwellings are widely dispersed. The closest dwellings are between 2 and 6km from the site. Surrounding vegetation patterns are highly modified, where linear plantings along road reserves, shelter belts along property boundaries and access trails are the most evident. We note the presence of some riparian vegetation and stands of remnant or regenerating native vegetation.

The visibility of any proposed development varies depending on constraints such as the blocking effects of topography, vegetation, and any intervening built form. Visibility also considers the extent to which the proposal would be physically visible, identifiable for example as a new, novel, contrasting element or alternatively as a recognisable but compatible feature. Considering the accuracy of the view map based on numerical inputs, the actual potential visibility will need to be 'ground truthed' or accurately tested from specific view places.

The viewshed map (Figure 18) shows the likely visibility based on a 2P configuration at maximum tilt (60 degrees) to the top of the proposed panels and is based upon topography only (no vegetation).

Urbis have determined the extent of localised potential visibility to the proposed development by analysing aerial imagery and Google Earth data to consider potential blocking effects of topography (indicated by viewshed) and intervening vegetation (indicated by coloured dots) in relation to surrounding dwellings within 7km of the site.

Figure 18 Viewshed mapping, indicating potential visibility (topography only, no vegetation)



Source: Urbis

The viewshed indicated that the visual catchment is likely highly constrained given the landscape is predominantly flat and there are limited elevated viewing opportunities surrounding the site. Visibility to the site is limited to close locations and is unlikely to extend beyond any areas indicated in yellow or orange. The viewshed indicates potential visibility to the proposal is likely to be constrained to immediate surrounding areas as follows:

- High visibility is concentrated across the centre of the site and a short distance beyond the southeastern corner of the site.
- High visibility is constrained to within 1-2km of the eastern site boundary and reaches a maximum distance of 4.5km beyond the southern site boundary.
- Visibility to the proposal from the north is intermittent and constrained to within 3km of the northern site boundary.
- Visibility to the proposal from the southwest, west, northwest, north and north-east is limited.
- The northwestern and southwestern corners of the site are identified as areas of low visibility, indicating there is limited visibility to the proposal from within the site itself.

The closest public domain locations within the visual catchment include sections Cobb Highway, located within 1km of the site's eastern boundary and Boorooban-Tchelery Road approximately 3km from the site's southern boundary. Wagam Road is located approximately 3km east of the south-eastern corner of the site and falls outside the visual catchment.

It is likely that blocking effects from riparian vegetation (Nyangay Creek and Coleambally Outfall Drain) and the Southwest Woodland Nature Reserve – Boorooban will further constrain visibility to the site from more distant locations within the visual catchment.

Urbis has followed the *DPHI Technical Supplement to the Large-Scale Solar Energy Guidelines 2022* to determine whether the identified viewpoints will require further detailed assessment. The calculations principally determine the vertical and horizontal field of view that a development is likely to occupy when viewed from each viewpoint, and is influenced by distance, height elevation changes and width of a project.

It is noted that additional factors can reduce the ability to perceive solar farms in the landscape, such as lighting conditions, reflections of sky on the horizontal form, visual prominence and contrast with surrounding landscape features as well as the screening effects of vegetation. Based on the preliminary assessment, analysis within 7km of the site, and our knowledge of solar panels within the natural landscape, Urbis provides the following summary of potential visual effects or impacts for private dwellings:

- Private domain view impacts are likely to be low to negligible.
- There are a total of 17 residential dwellings located within 10km of the site, the majority of which **are not included in a high visibility zone** and are, effectively, situated **outside the visual catchment.**
- 11 of the 17 residential dwellings are located in either low visibility zones or fall outside of the visual catchment and have high levels of vegetative screening (green dots).
- The 5 remaining residential dwellings have partial vegetative screening (orange dots).
- It is Urbis conclusion that there is likely to be **low risk of any significant visual effects** – that is, there is **potential ability** to perceive the low-height, linear visual change, and identify it within the surrounding landscape setting.
- The **majority of dwellings within 7km** are at **low risk** of potential exposure to any significant visual effects and are highly unlikely to be subject to any significant visual effects.
- The results of the Preliminary Visual Assessment Tool found that no viewpoints within 4km of the site met the threshold for further assessment under Section 3.1 of the NSW *Technical Supplement for Landscape and Visual Impact Assessment*.

6.1.4.2. Assessment Approach

It is proposed that a detailed Visual Impact Assessment prepared in accordance with the *Technical Supplement to the Large-Scale Solar Energy Guidelines* will be undertaken by a qualified expert as part of the EIS phase.

The assessment will highlight ground-truthed visual impacts on surrounding residences, key locations and significant vistas in the public domain. Any identified impacts will be proposed to be mitigated, when necessary, which may include a draft landscaping plan on on-site perimeter areas for affected landowners. This would be prepared in conjunction with a Glint and Glare Assessment to identify and mitigate potential glint and glare impacts on adjoining neighbours and vehicles along the Cobb Highway.

6.1.5. Water (Hydrology and flooding)

6.1.5.1. Existing Environment

The site is flat, gently sloping towards the west. The highest elevation of the site is approximately 88 m on the eastern part of the site. The lowest elevation of the site is approximately 81 m near Booroorban-Tchelery Road in the south-west.

Nyangay Creek is categorised as a Strahler Order 6 and a Key Fish Habitat as mapped by DPI Fisheries under the *Fisheries Management Act 1994*. Traversing the site there are several unnamed, nonperennial creeks, three of which are tributaries of Nyangay Creek. More than 20 small dams are scattered across the site.

There exist two different Flood Studies near the area, none of which covers the subject site:

- Flood Study for Deniliquin.
- Draft Floodplain Management Plan for Hay.
- There are four groundwater bores within the site (
- Table 13).

Table 13 Groundwater Bore Data

Site ID	Drilled Date	Bore Depth (m)
GW064353	1987-08-01	36.9
GW064354	1987-10-01	42.7
GW044774	1976-02-01	67.1
GW503396	2000-10-11	38.0
Average Bore Depth		**46.2**

Source: MinView, 2024

The subject site is not mapped as Groundwater Vulnerable under the Conargo LEP 2013.

6.1.5.2. Assessment Approach

Following a review of the existing desktop existing environment, it is considered unlikely that any Groundwater Impacts can be anticipated, given the average depth of surrounding boreholes.

A suitably qualified specialist would undertake a Hydrology Assessment to evaluate the surface water and flooding impacts. It is proposed that the Hydrology Assessment will analyse:

- Existing flooding behaviour through a deeper review of available data, developing computer models that consider flood level and hazard based on the site topography.
- Post-development flood behaviour, including appropriate assessment of downstream flooding and erosion hazards and increased risk (if any) once the project structure is installed.

The Hydrology Assessment will identify any flood risk on site having regard to adopted flood studies (if applicable) and will include the potential effects of long-term climate change effects and any other provisions considered necessary under the *NSW Flood Risk Management Manual* (DPE, 2023).

Industry-standard installation of solar farms generally tends to have a low to negligible impact on the flooding behaviour within their respective catchments, given the relatively low disturbance footprint on the soil. However, the Flooding Impact Assessment will have regard to potential changes in flood behaviour and potential hazard. Where the development could alter these matters, a Flood Impact and Risk Assessment (FIRA) will be prepared in accordance with the *Flood Risk Management Guide LU01* (DPE, 2023), and solutions and mitigation measures will be adopted where required.

The Hydrology Assessment will also evaluate any potential impacts to water quantity and quality on surface and groundwater resources. This will include careful consideration of the *Managing Urban Stormwater: Soils & Construction (Landcom, 2004)* guidelines and the *Australian and New Zealand Environment and Conservation Council (ANZECC) & Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) (2000)* guidelines to ensure avoidance or minimisation of land degradation and water quality impacts, including soil erosion, compaction, geomorphic instability, contamination, acidity, waterlogging, a decline of native vegetation or, where appropriate, salinity.

A desktop review of the *Water Management (General) Regulation 2018* spatial data has identified Nyangay Creek and three ephemeral creeks overlapping the project boundary. Significant buffer zones have been provisionally provided to each of these watercourses according to their Strahler Orders, including a >40 metre buffer to each side from the top of the banks of Nyangay Creek.

Therefore, potential impacts on waterfront land may only be limited to future crossing roads over Nyangay Creek that could be necessary during the detailed design phase. The Hydrology Assessment will include an assessment against *Guidelines for Controlled Activities on Waterfront Land (DPI, 2018)* and provide design recommendations for the avoidance of further impacts and mitigation measures where necesarry.

Furthermore, the Hydrology Assessment will be taken in accordance with the following resources to ensure that Fish Habitat Conservation and Management is appropriately considered during the design, construction, and management and to avoid, minimise and mitigate any potential impacts on Key Fish Habitat:

- *Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI 2003)*
- *Policy & Guidelines for Fish Habitat Conservation & Management (DPE, 2013)*

6.2. MATTERS REQUIRING STANDARD ASSESSMENT IN THE EIS

6.2.1. Social and Economic

6.2.1.1. Existing Environment

The Project is located in the Edward River LGA, approximately 70km north of Deniliquin township and approximately 40 kilometres south of Hay. According to the AIATSIS (1996) map of Indigenous Australia, the subject area is located on Nari Nari, Wemba Wemba and Wiradjuri Country.

Deniliquin and Hay are reported to have a population of 6,431 and 2,208 respectively (ABS, 2021). This suggests a 5.9% short-term decrease in population for Deniliquin, from 6,833 people, while Hay's population decreased by 4.7%, from 2,316 people (ABS, 2016). Booroorban is reported to have a population of 36 people in 2021, a relative increase of 3 people since 2016.

The median age at Deniliquin and Hay is 47 and 49 respectively. Australian and English are the most common ancestry across both localities. Between 5.6% and 9.3% of the population identified as Aboriginal and/or Torres Strait Islander.

Latest unemployment data from the site is as follows (ABS, 2021):

- Edward River LGA: 140 people – 3.6%
- Deniliquin: 124 people – 4.4%
- Hay: 48 – 4.9%

In a wider regional context, the larger population centre relative to the Project is the urban area of Echuca-Moama, approximately 130 kilometres south of the project with a combined population of 22,568 people and a 3.6% unemployment rate.

6.2.1.2. Assessment Approach

Potential social impacts during the construction phase could entail stress on regional and social infrastructure and services, such as accommodation. Moreover, there could be concerns and loss of social cohesion about other topics, such as environmental issues or perceived or actual inequity when receiving impacts and benefits, for example. This could be exacerbated by the cumulative effect of surrounding projects being proposed within the region.

Potential benefits to the community could include significant economic stimulus to the area, working opportunities, and positive agreements with the government authorities, which could help fund community services and infrastructure. The project would also assist in building intergenerational value by assisting in the renewable transition and decarbonisation of the economy.

A summary of the project activities with potential for social impacts or benefits is provided in Appendix F – Social Impact Assessment (SIA) Worksheet, which follows the *SIA Guideline Technical Supplement (DPIE, 2023)*.

Social and economic impacts will be assessed in accordance with the Social Impact Assessment Guideline (DPE, 2021) and the Technical Supplement Social Impact Assessment Guideline for State Significant Projects (DPE, 2023) and their objectives and requirements. The Social and Economic Impact Assessment (SEIA) will include an evaluation of the economic impacts and benefits of the project undertaken as a holistic evaluation with the rest of the social component.

6.2.2. Amenity – Noise

6.2.2.1. Existing Environment

The site is located in rural Boororban, zoned RU1 Primary Production under the Conargo LEP. The surrounding environment is rural and used for agricultural production. It is anticipated that the existing background noise levels are typical of a rural setting with the predominant noise sources being from vehicle movement along Cobb Highway.

There are a total of 3 sensitive receivers within 3 km of the Site. These are believed to correspond with one commercial establishment and two residences.

6.2.2.2. Assessment Approach

It is anticipated that most acoustic impacts will predominantly occur during the construction phase of the project, associated with the operation of equipment and heavy machinery needed. However, most acoustic impacts during the construction phase would be short term and manageable with appropriate mitigation measures and construction activities.

Operational noise levels would be limited mainly to the location of the inverters, BESS and other noise-generating ancillary infrastructure. The location of inverters can be reviewed during detailed design, so they are located further away from sensitive receivers to minimise any impacts generated by the development. Additional noise mitigation measures can be implemented based on recommendations in an Acoustic report to be submitted within the EIS.

A suitable qualified specialist would prepare an assessment of the noise impacts of the development in accordance with the *Interim Construction Noise Guideline (ICNG)* for its inclusion in the EIS. Furthermore, operational noise impacts will be assessed in accordance with the *NSW Noise Policy for Industry (2017)*. Other considerations, such as cumulative noise impacts (considering other similar developments in the area), will also be included as part of the acoustic assessment. In the unlikely case that the proposal is assessed as likely to exceed applicable noise criteria, a draft noise management plan will be also submitted as part of the EIS.

6.2.3. Land Capability

6.2.3.1. Existing Environment

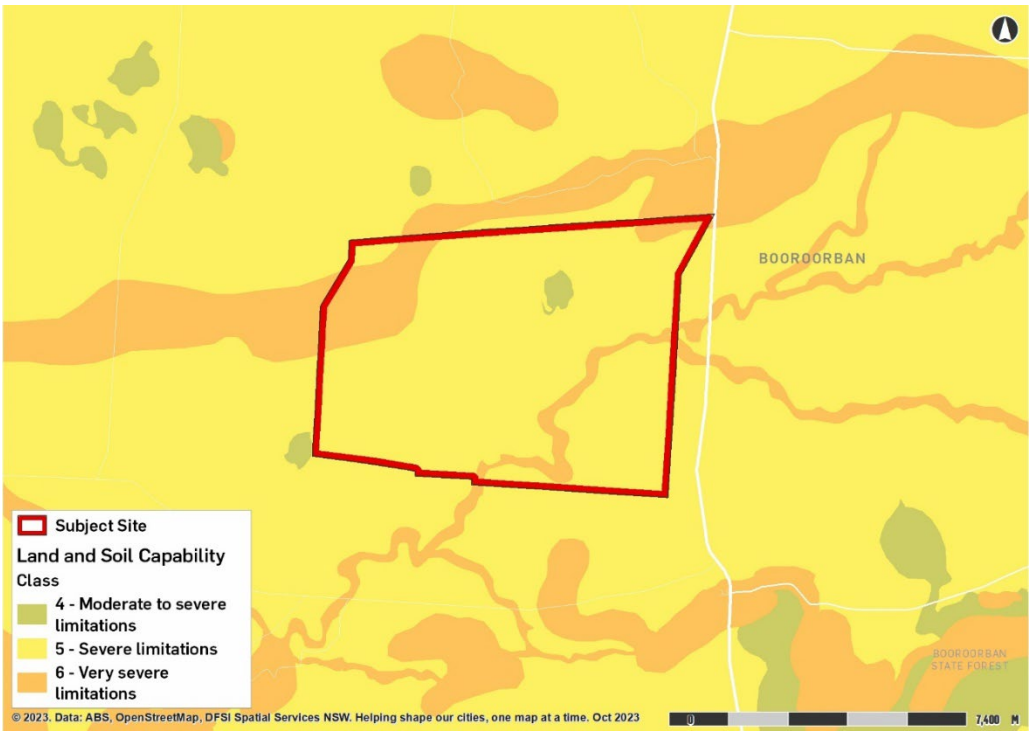
The Land and Soil Capability Assessment Scheme (OEH, 2022) evaluates the inherent physical capability of the land to sustain a range of land uses and management practices in the long term without degradation to soil, land, air and water resources.

The LSC assessment scheme uses the biophysical features of the land and soil including landform position, slope gradient, drainage, climate, soil type and soil characteristics to derive detailed rating tables for a range of land and soil hazards. These hazards include water erosion, wind erosion, soil structure decline, soil acidification, salinity, waterlogging, shallow soils and mass movement. Each hazard is given a rating between 1 (best, highest capability land) and 8 (worst, lowest capability land). The final LSC class of the land is based on the most limiting hazard.

A preliminary review of the Land and Soil Capability (**LSC**) Mapping data for NSW (DPIE, 2021) suggests that the majority of the project area is within LSC *Class 5 – Severe Limitations*, with some portions of the subject site being within LSC *Class 6 – Very Severe Limitations* (Figure 19) along some watercourses. However, a small portion of the subject site is considered LSC *Class 4 – Moderate to severe limitations*.

A search of the Australian Soil Classification (ASC) Soil type Map of NSW (DPE, 2017a) indicates that the site is comprised largely of Vertosols, generally considered to have high agricultural potential and align with the LSC 5 and 4 parts of the site, and Chromosols, considered to have moderate agricultural potential and aligning with LSC 6 parts of the site. The modelled Inherent Soil Fertility within the site is considered 'Moderate' (eSPADE, 2024).

Figure 19 Land and Soil Capability Map



Source: Urbis, 2024

A review of the Biophysical Strategic Agricultural Land (**BSAL**) data (DPE, 2013) showed that the site does not contain any BSAL areas, nor there are any BSAL areas in close proximity to the subject site. The site does not contain land mapped via the draft State Significant Agricultural Land map (DPI, 2022).

No exploration and mining titles or respective applications are located at the project site boundary.

6.2.3.2. Assessment Approach

Appendix A of the *Large-Scale Solar Energy Guideline* (DPIE, 2022) facilitates direction to determine whether or not an Agricultural Impact Assessment is required, and the level of assessment needed in case it is required.

As a conservative approach, the Large Scale Solar Energy Guidelines recommends utilising the lowest LSC class present on site for any assessment.

As the Project Area and its vicinity are zoned RU1, and are not mapped BSAL but are mapped as LSC Class 4, a site verification will be needed to determine the level of assessment that will be required. Since the adjacent land is zoned RU1, at least a Level 1 Assessment will be required.

A Level 1 Assessment will:

- Present LSC mapping and the results of any site verification completed to confirm land capability.
- Include consultation with neighbouring landholders to identify potential project impacts (if any) on immediately adjacent land.
- Describe project impacts (if any) on immediately adjacent land.
- Describe consultation undertaken.
- Consider measures to reduce impacts on neighbouring agricultural land.

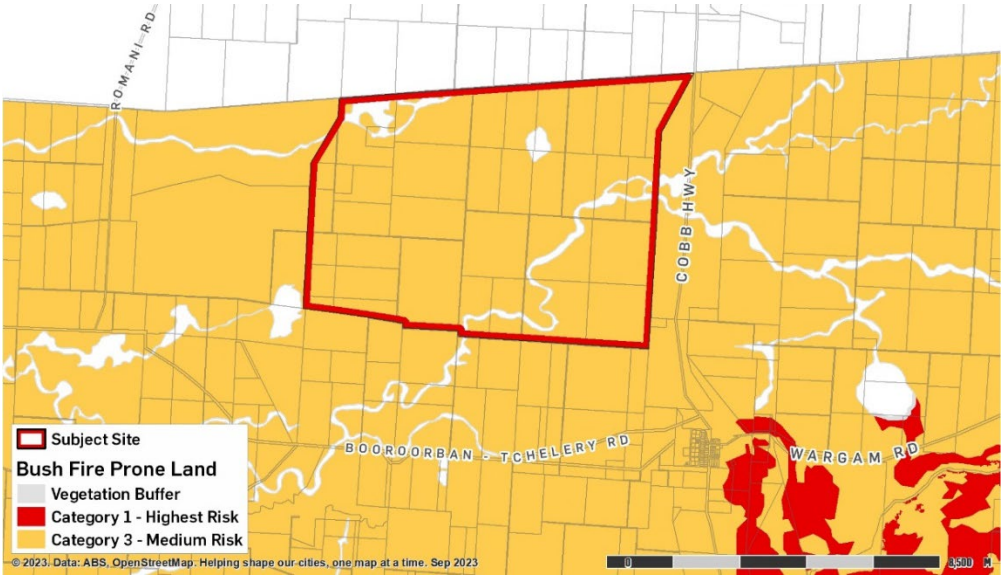
Depending on the outcomes of the site verification, further requirements will need to be addressed within an Agricultural Impact Assessment and a Land Use Conflict Risk Assessment that would be included as part of the EIS.

6.2.4. Bushfire

6.2.4.1. Existing Environment

The majority of the subject site is included in Category 3 – Medium Risk of the Bushfire Prone Land Map as published by NSW Rural Fire Service (**Figure 20**).

Figure 20 Bushfire Prone Land Map



Source: Urbis, 2024

6.2.4.2. Assessment Approach

A Bushfire Risk Assessment will be undertaken by an appropriately qualified specialist to be included in the EIS. At a minimum, the Bushfire Risk Assessment will include:

- Appropriate Asset Protection Zones (**APZs**) across the site.
- Design Considerations for bushfire protection according to the assessed Bushfire Attack Level (BAL).
- Ongoing management practices to ensure a decreased bushfire hazard level.

6.2.5. Hazards and Risks

6.2.5.1. Existing Environment

Electric and Magnetic Fields (**EMFs**) are associated with a wide range of sources and occur both naturally as well as man-made. Electric and Magnetic fields are created due to differences in voltage and current flows respectively with the surrounding area.

EMFs are highly likely present on the site due to the existing 220 kV overhead power line. There are currently no existing Australian standards considering the exposure limits to low EMFs. Notwithstanding, the International Commission on Non-Ionizing Radiation Protection (ICNIRP) has provided some guidelines around exposure limits for prolonged exposure which limits the exposure to 2,000 milligauss (mG) in a 24-hour period.

It is anticipated that some dangerous goods will be required to be transported, stored, and used as part of the project construction and operational phases, such as transformer oil and diesel fuel. Lithium Batteries from the proposed Battery Energy Storage System (BESS) will be present as part of the project with their associated risks (battery fault, thermal runaway, and fire.)

6.2.5.2. Assessment Approach

A standard assessment of EMF during the Project would be undertaken to be included within the EIS. The assessment would evaluate potential electromagnetic field risks against the following International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines.

A Preliminary Hazard Analysis (**PHA**) would be prepared by a suitably qualified Risk Engineer to assess potential hazardous risks relating to the transport, storage and use of dangerous goods on site. The PHA would be completed in accordance with the appropriate legislation and guidelines to be included within the EIS:

- Resilience and Hazards SEPP 2021.
- Multi-Level Risk Assessment Guidelines (DoP, 2011)
- HIPAP No. 3 – Risk Assessment (DoP, 2011).
- HIPAP No. 6 – Guideline for Hazard Analysis (DoP, 2011).
- HIPAP No. 12 – Hazards-Related Conditions of Consent (DoP, 2011).

6.2.6. Waste

A Waste Management Plan will be prepared to be included within the EIS in accordance with the *Large Scale Solar Guidelines.* It is proposed that the Waste Management Plan would identify, quantify and classify the likely waste stream to be generated during construction and operation in accordance with the Waste Classification Guidelines (NSW EPA 2014).

The Waste Management Plan would also describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste, including appropriate waste management practices within the decommissioning phase according to the local and regional context.

6.3. MATTERS REQUIRING NO FURTHER ASSESSMENT IN THE EIS

6.3.1. Historical Heritage

6.3.1.1. Existing Environment

A review of the Conargo Local Environmental 2013 and State Heritage Register reveals that there is one known Local Historical Heritage Item within four kilometres of the subject site, the *Royal Mail Hotel* at Booroorban. This item is known as ‘I3’ within the Conargo LEP (**Figure 21**).

Figure 21 State and Local Heritage Items Map

Source: Urbis, 2024

6.3.1.2. Assessment Approach

The development footprint avoids any historical heritage structure entirely, and construction impacts are predicted to be negligible on any historical heritage in the area. Therefore, it is considered that no further assessment is needed for this matter in the EIS.

7. CONCLUSION

This Scoping Report has been prepared on behalf of Australian Solar Farms Pty Ltd and in support of a proposed large-scale solar farm at Cobb Highway, Booroorban. This Scoping Report has outlined and established the planning and general environmental context of the Proposal. The Proposal would be assessed under Part 4 of the EP&A Act and classed as SSD under the Planning Systems SEPP 2021.

The Scoping Report has categorised the potential environmental impacts of the proposed project as key issues or other issues. Based on this Scoping Report, an indicative scope for the EIS has been developed, focusing on the key issues:

- Biodiversity
- Aboriginal Cultural Heritage
- Traffic and Access
- Amenity – Landscape and Visual
- Water (Hydrology and flooding)
- Social and Economic
- Amenity – Noise
- Soils and Land Capability
- Bushfire
- Hazards and Risks
- Waste Management

The EIS will be prepared in accordance with the specific SEARs. Mitigation measures will be developed for inclusion in the EIS and will address the management of key issues and other issues identified in the assessment and community and stakeholder engagement process.

DISCLAIMER

This report is dated June 2024 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Ltd **(Urbis)** opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Australian Solar Farms **(Instructing Party)** for the purpose of Scoping Report **(Purpose)** and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A – SCOPING SUMMARY TABLE

Table 14 Scoping Summary Table

Level of assessment	Matter	CIA	Engagement	Relevant government plans, policies and guidelines	Scoping report reference
Detailed	Biodiversity	Y	Specific	▪ Biodiversity Conservation Act 2016 (NSW Government) ▪ Biodiversity Assessment Method (DPIE, 2020) ▪ Policy and Guidelines for Fish Habitat Conservation and Management (Department of Primary Industries, 2013)	Section 6.1.1
Detailed	Aboriginal Cultural Heritage	Y	Specific	▪ NSW National Parks and Wildlife Act 1974 ▪ Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) ▪ Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010) ▪ Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010a) ▪ Connecting with Country Framework (Government Architect NSW, 2023)	Section 6.1.2
Detailed	Traffic and Access	Y	General	▪ Guide to Traffic Management Part 12, Australian Standards (Austroads, 2020) and any complementary TfNSW Supplements ▪ Roads and Maritime Guide to Traffic Generating Developments (Roads and Traffic Authority, 2002)	Section 6.1.3
Detailed	Amenity – Landscape and Visual	Y	General	▪ Technical Supplement to the Large-Scale Solar Energy Guidelines (DPHI, 2022)	Section 6.1.4

Level of assessment	Matter	CIA	Engagement	Relevant government plans, policies and guidelines	Scoping report reference
Detailed	Water – Hydrology and Flooding	Y	General	▪ Guidelines for Controlled Activities on Waterfront Land (DPI, 2018) ▪ Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI, 2003) ▪ Policy & Guidelines for Fish Habitat Conservation & Management (DPE, 2013) ▪ Managing Urban Stormwater: Soils & Construction (Landcom, 2004)	Section 6.1.5
Standard	Social and Economic	Y	Specific	▪ Social Impact Assessment Guideline (DPE, 2021) ▪ Technical Supplement Social Impact Assessment Guideline for State Significant Projects (DPE, 2023)	Section 6.2.1
Standard	Amenity - Noise	Y	General	▪ Interim Construction Noise Guideline (DECC, 2009) ▪ NSW Noise Policy for Industry (EPA, 2017)	Section 6.2.2
Standard	Soils and Land Capability	Y	General	▪ The Land and Soil Capability Assessment Scheme (OEH, 2022) ▪ Land and Soil Capability Mapping data for NSW (DPIE, 2021) ▪ Australian Soil Classification Soil type Map of NSW (DPE, 2017a) ▪ Biophysical Strategic Agricultural Land data (DPE, 2013) ▪ State Significant Agricultural Land map (DPI, 2022).	Section 6.2.3
Standard	Bushfire	Y	General	▪ Planning for Bushfire Protection (NSW Government and NSW Rural Fire Service, 2019)	Section 6.2.4
Standard	Hazards and Risks	Y	General	▪ Resilience and Hazards SEPP 2021. ▪ Multi-Level Risk Assessment Guidelines (DOP 2011) ▪ HIPAP No. 3 – Risk Assessment (DOP, 2011). ▪ HIPAP No. 6 – Guideline for Hazard Analysis (DOP, 2011). ▪ HIPAP No. 12 – Hazards-Related Conditions of Consent (DOP, 2011).	Section 6.2.5

Level of assessment	Matter	CIA	Engagement	Relevant government plans, policies and guidelines	Scoping report reference
Standard	Waste Management	N	General	▪ Large Scale Solar Guidelines ▪ Waste Classification Guidelines (NSW EPA, 2014)	Section 6.2.6

APPENDIX B – ENGAGEMENT OUTCOMES REPORT

APPENDIX C – PRELIMINARY VISUAL ASSESSMENT

APPENDIX D – BIODIVERSITY CONSTRAINTS ASSESSMENT

APPENDIX E – INDICATIVE SITE PLAN

APPENDIX F – SOCIAL IMPACT ASSESSMENT WORKSHEET