



Edify™

Boags Creek Solar Farm Scoping Report

Boags Creek, NSW

Request for Secretary's Environmental Assessment Requirements (SEARs)

August 2024



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Abbreviations

ACHA	Aboriginal Cultural Heritage Assessment
AEMO	Australian Energy Market Operator
AHD	Australian Height Datum
AHIMS	Aboriginal Heritage Information Management System
LALC	Local Aboriginal Land Council
BAM-C	Biodiversity Assessment Method Calculator
BC Act	<i>NSW Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
BSAL	Biophysical Strategic Agricultural Land
CLM Act	<i>NSW Crown Land Management Act 2016</i>
CMA	Catchment Management Authority
DA	Development Application
DIRN	Defined Interstate Rail Network
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DPE	NSW Department of Planning and Environment
DPHI	Department of Planning Housing and Infrastructure
DRG	NSW Department of Resource & Geoscience
DISR	NSW Department of Industry, Science and Resources
EDC	Estimated Development Cost
EMP	Environmental Management Plan
EIS	Environmental Impact Statement
EMS	Environmental Management System
EP&A Act	<i>NSW Environmental Planning and Assessment Act 1979</i>
EPA	NSW Environment Protection Authority
EPBC Act	<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>
ETL	Electricity Transmission Line
FTE	Full Time Equivalent
GW	Gigawatt
ICNG	Interim Construction Noise Guideline
LEP	Local Environmental Plan
LGA	Local Government Area
LLS	Local Land Services
LCVIA	Landscape Character and Visual Impact Assessment
MNES	Matters of National Environmental Significance
MW	Megawatt
MVA	Megavolts
MWh	Megawatt Hour
NSW	New South Wales
O&M	Operations and Management
OEH	NSW Office of Environment and Heritage
PAC	Planning Assessment Commission
PCT	Preliminary plant community type
PHA	Preliminary Hazard Analysis
POEO Act	<i>NSW Protection of the Environment Operations Act 1997</i>
PV	Photovoltaic
RAP	Registered Aboriginal Parties
REAP¹	Renewable Energy Action Plan
REAP²	Registered Environmental Assessment Practitioner
RF Act	<i>NSW Rural Fires Act 1997</i>
RFS	Rural Fire Service
RMS	NSW Roads and Maritime Service
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SIA Worksheet	Social Impact Assessment Worksheet
SPIC	State Power Investment Corporation
SSD	State Significant Development
TEC	Threatened Ecological Community
TIA	Traffic Impact Assessment

TSR	Travelling Stock Reserve
WM Act	<i>NSW Water Management Act 2000</i>

Boags Creek Solar Farm

Scoping Report


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Approved for issue by

Adam Smith

Edify Energy

15 August 2024

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1 Introduction

1.1 Project Overview

Edify Energy Pty Ltd (ABN 85 606 684 995; Level 1 34-35 South Steyne Manly 2095) proposes to develop a Solar Farm (300MW) with an integrated battery energy storage system (BESS) (300MW / 600MWh) in the Murray Riverina region of NSW, to be known as the Boags Creek Solar Farm (referred to as the Project).

The objective of the Project is to generate new and dispatchable carbon-free electricity supply for NSW. Subject to necessary approvals, Edify Energy (Edify) anticipates construction to commence in FY 2027/28.

The Project Area is in the Murrumbidgee Council Local Government Area (LGA), approximately 8 kilometres (km) South of Darlington Point and 40km South of Griffith. Site access is proposed to be via an existing access off Kidman Way. The Project location in the regional setting is shown in Figure 1 and the Project Impact area in Figure 2.

Edify refer to their fully integrated solar farm and BESS developments, such as the proposed Boags Creek Solar Farm, as 'solar power stations'. The projects use grid forming inverters with the batteries and solar photovoltaic integrated as a single, fully integrated hybrid project, capable of controlling and dispatching the solar electricity via a control system. The key point of difference from traditional, weather-dependent 'solar farms' is that Edify's hybrid projects support the solar generation via this integrated battery system. The hybrid design provides the power system with critical services such as flexible control, congestion relief and various network support services that are integral to help maintain energy supply. To distinguish these advanced features from traditional 'solar farms', it is increasingly common to refer to fully integrated hybrid projects as 'solar power stations'.

Table 1: Site Details

Project Aspect	Description
LGA	Murrumbidgee
Address	7346 Kidman Way (corner of Ringwood Road) Darlington Point NSW
Lots	1/254627 64/750908 1/971064 160/750908 116/750908 47/750908 158/750908 48/750908 161/750908 54/750908 257/750908, 159/750908 63/750908
Project Area	845 hectares

1.1.1 Project Infrastructure

The Project includes infrastructure such as solar panel arrays, inverters, transformers, overhead lines, underground cabling, an integrated battery storage system (proposed up to 300MW / 600MW), site office and maintenance building, access tracks, road and electrical easement crossings, perimeter security fencing, and a proposed substation.

1.1.2 Project Justification

The Project represents Edify's continued investment in renewable energy projects throughout regional NSW. similar to Edify's prior undertakings in the State, the development will be consistent with the *NSW Large-Scale Solar Energy Guideline for State Significant Development* (NSW Government, 2022) and is expected to deliver several benefits including:

- the creation of local employment opportunities, including approximately 350 full-time equivalent jobs during the peak construction period
- approximately five permanent jobs during the operation of the Project (>30 years)
- direct local investment via a Community Benefit Fund
- increased electricity generation capacity and grid support, via the solar asset
- increased dispatchable electricity, firming, and system strength services, via the battery energy storage system; and
- a Voluntary Planning Agreement contribution to be negotiated with the Murrumbidgee Council

The Project will have a capital investment value of greater than \$30 million and therefore is considered a State Significant Development (SSD) under the *State Environmental Planning Policy (State and Regional Development) 2021* (SRD SEPP). Edify will prepare a Development Application (DA) for the Project that is supported by an Environmental Impact Statement (EIS). This will be submitted in accordance with Part 4, Division 4.1 of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act). The NSW Minister for Planning or the Minister's delegate is the consent authority.

1.1.3 Grid Network

There is existing TransGrid 132 kV and 220kV transmission lines that run through the eastern portion of the Impact Area, impacting Lots 63, 64 and 160 on Deposit Plans 750908.

Essential Energy also have two 132kV distribution lines running parallel to the northern boundary of Lot 158 on Deposit Plan 750908.

TransGrid's Darlington Point Substation is located east of the Impact Area, on Lot 2 on Deposit Plan 628785.

The transmission and distribution line locations are illustrated as easements in **Figure 4**.

1.1.4 Surrounding Land Use

The subject site is proximate to other rural residential properties and agricultural enterprises, including various poultry farms. The nearest non-involved receivers are approximately 200m South-west and 600m South of

the proposed development. There is a residence (associated landowner) on Lot 158 Deposit Plan 750908 which will have buffered exclusion zone surrounding it.

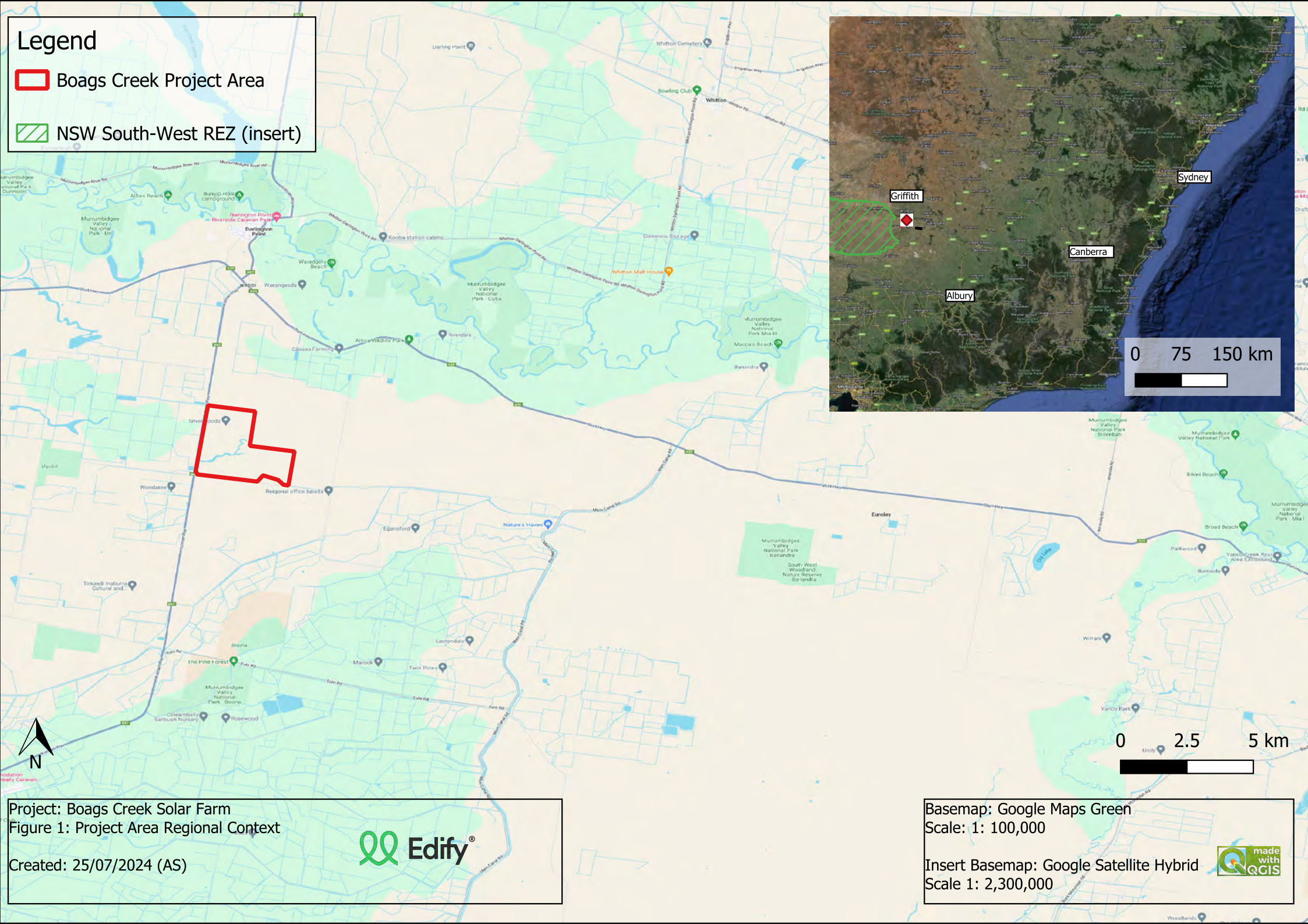
The Darlington Point Solar Farm and Riverina Energy Storage System¹ are two existing, large-scale, State Significant Developments near this proposal. Edify Energy developed these two nearby operational state significant development projects.

¹ See NSW Major Projects Portal

<https://www.planningportal.nsw.gov.au/major-projects/projects/darlington-point-solar-farm>

Legend

- Boags Creek Project Area
- NSW South-West REZ (insert)





Project: Boags Creek Solar Farm
Figure 1: Project Area Regional Context
Created: 25/07/2024 (AS)



Basemap: Google Maps Green
Scale: 1: 100,000
Insert Basemap: Google Satellite Hybrid
Scale 1: 2,300,000



Legend

-  Boags Creek Project Area
-  Existing Transmission Line Easements



Project: Boags Creek Solar Farm
Figure 2: Project Area

Created: 25/07/2024 (AS)



0 500 1,000 m

Basemap: Google Satellite Hybrid
Scale: 1:16,000



1.2 Edify Overview

Edify Energy is a market leading, Australian owned renewable energy company with significant experience in developing and project financing renewable projects across New South Wales and Australia. Edify has financed six large-scale solar generation projects (773MWp), an 84MVA synchronous condenser and three utility-scale battery energy storage systems (360MW / 720MWh) and is a leading developer of utility-scale renewable energy projects in Australia. Edify has broad energy expertise, covering project development, project design and engineering, financing, asset management and construction management.

Edify's management team has more than 150 years' experience in the power and renewables sector internationally, raised, and deployed around \$3 billion in capital bringing over 40 solar and wind projects into commercial operation, advised on over 10GW (around \$25 billion of projects during development, construction and operation and managed an operational portfolio of more than 1.7GW).

Edify supports the full life cycle of renewable energy projects during development, construction, and operation, including greenfield development, project structuring and financing, construction management and a full asset management offering, including trading and operations.

Edify's philosophy is to ensure that its interests are closely aligned with its investment partners and community stakeholders. In addition to providing long-term asset management services, Edify seeks to maintain a long-term equity interest in its projects, ensuring that Edify's long-term project view is aligned with that of its investors and host community, resulting in best-in-class assets. This long-term business model is a distinguishing feature of Edify and should further instil confidence that the community is entering into a credible, long-term partnership. This also makes an important difference in our community engagement approach since we are establishing relationships with various local stakeholders during the development phase. These relationships will endure for the lifetime of the Projects, with Edify acting as Asset Manager once the Project is operational.

Table 2: The Applicant

Applicant details	Description
Applicant	Edify Energy Pty Ltd
ABN	85 606 684 995
Address	Level 3, 201 Charlotte Street Brisbane QLD 4000
Contact	02 8790 4048

1.3 Purpose

The Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW) and the NSW Government State Significant Infrastructure Guidelines (Appendices A and B), detail the requirement for developments to follow an impact mitigation hierarchy. The hierarchy is mainly viewed as the following three step process:

- 1** Avoid
- 2** Minimise and/or mitigate
- 3** Offset

This scoping report illustrates findings of preliminary social and environmental investigations, such as the Preliminary Ecological Assessment (PEA) (Appendix F) and Agricultural Impact Assessment (Appendix H). Potential impacts identified from this scoping report and supporting technical studies allows Edify to begin to address the first step in this hierarchy by avoiding potential impact areas/matters. Detailed studies undertaken as part of the EIS will further refine Edify's understanding of the Impact Area and continue to inform our application of the hierarchy.

The Scoping Report has been prepared to support a request to the Department of Planning, Housing, and Infrastructure (DPHI) for the SEARs. The SEARs would guide the preparation of an EIS for the Project under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act). It identifies the main issues and information requirements for the assessment, considering the values of the site, the nature and extent of potential impacts, planning and regulatory requirements and the results of early consultation. This allows the assessment to efficiently focus on the most important issues.

This Scoping Report intends to:

- Justify the development in relation to policy and market frameworks (Section 2)
- Describe the Project and the site (Section 3 and 0)
- Identify statutory approval requirements (Section 4)
- Provide a summary of consultation undertaken to date and proposed further engagement (Section 5)
- Identify key potential environmental issues associated with the Project (Section 7)
- Conclude with remarks and identification of key issues raised in preparation of the Scoping Report (Section 7.2)

2 Strategic Context

2.1 Strategic Justification

2.1.1 Technical Feasibility

The Impact Area comprises predominantly flat and cleared terrain, making it a suitable location for a utility-scale solar project. The Project site is comprised of two involved landholder properties, which was selected based on proximity to the existing overhead transmission line and TransGrid's Darlington Point substation. Proximity to existing substations is considered a beneficial component of any electricity generator, to ensure energy produced is exported into the NSW transmission network with the least number of electrical losses and network augmentation.

The Project will utilise proven and mature solar and battery technologies. The Impact Area is well suited to efficient and high-yielding output of solar generation. Battery storage would also aid in storing and managing energy flows to the grid during times of grid constraints (charging) and peak electricity demand (discharging). This dispatchable capability allows the Project to de-couple its output from typical, weather dependent generation profiles, by allowing the Project to service periods of high demand during the evening (post sunlight) hours.

Furthermore, the NSW electricity market is undergoing significant change, with several major energy generators scheduled to reach the end of their lifespan and are likely to be retired. The first of such large generators to retire occurred recently at the Liddell coal-fired power station which was decommissioned earlier in 2023. This closure will likely be followed by Vales Point, Eraring, and other major generating units later this decade. There is a risk that without new investment in sufficient generation capacity, these retirements have the potential to lead to interruptions in energy security.

The preferred project connection point is direct to the Darlington Point Substation (132/220/330kV substation) 2.5km to the east of the project site via an easement with the landowner. Alternatively, Edify may consider constructing a new substation to enable the project's connection into the overhead transmission line that sits within the Project Area. The substation will include the establishment of a new step-down transformer, with varying sizing dependent on the location.

It is noteworthy that the electricity grid in New South Wales can present challenges in terms of having the capacity to connect utility scale renewable energy projects. The Project benefits from having good connection options within the site, with sufficient capacity and system strength in the transmission network to allow power generated at the Boags Creek site to be exported to the regional NSW power system.

2.1.2 Contributions to Federal and State Climate Change Targets

Electricity generation is the largest individual contributor of greenhouse gas emissions in Australia, accounting for 47.6 per cent of emissions in the 2020-21 reporting year (Australian Government Clean Energy Regulator, 2023). This proposal contributes to the decarbonisation of this emissions intensive sector, with bulk supply of firmed and dispatchable renewable energy sources, all of which are required to replace traditional, thermal electricity generators that are approaching their intended design-life.

2.1.2.1 Renewable Energy Target

The Clean Energy Regulator (CER) introduced the Renewable Energy Target in 2001, which is an Australian Government scheme designed to reduce emissions of greenhouse gases in the electricity sector and encourage the additional generation of electricity from sustainable and renewable sources.

In the context of this proposal, the Renewable Energy Target works by allowing large-scale generators to create large-scale generation certificates for every megawatt hour (MWh) of energy they generate. Certificates are then purchased by electricity retailers (who supply electricity to householders and businesses) and submitted to the Clean Energy Regulator to meet the retailers' legal obligations under the Renewable Energy Target.

The COP21, also known as the 2015 Paris Climate Conference, achieved a legally binding and universal agreement on climate, with the aim of keeping global warming below 2°C, chiefly by reducing greenhouse gas emissions (Australian Government, Department of Industry, Science, Energy and Resources, 2020). The Project would form part of the Australian effort to help meet this binding, international target.

2.1.2.2 NSW Net Zero Plan Stage 1: 2020-2030

The NSW Department of Planning and Environment (NSW DPE) *Net Zero Plan Stage 1: 2020– 2030* is a commitment to taking decisive and responsible action on climate change. The *Plan* has the goal of reducing the State's emissions by 35% by 2030, compared to 2005 levels, whilst supporting regional investments that total \$7 billion and create approximately 1,700 regional employment opportunities (NSW Government 2020).

The NSW Government has also set a broader goal of net zero emissions by 2050 and has released these policies to fast-track emissions reduction over the next decade and prepare the State to take further action in the decades to follow. The Boags Creek Solar Farm proposal would contribute towards both the Renewable Energy Target and the *New South Wales Electricity Strategy* and *Net Zero Plan*.

Due to the proximity of the Project to one of the priority Renewable Energy Zones, the Southwest REZ in New South Wales, the Project will support the four goals of the NSW Electricity Strategy, which includes:

- delivering various Renewable Energy Zones
- saving energy, especially for times of peak demand
- supporting the development of new electricity generators
- setting a target to bolster the state's energy resilience

2.1.3 Electricity Market Benefits

Australian Energy Market Operator (AEMO 2020) forecasts that grid-supplied electricity consumption will remain flat for the next 20 years, despite projected 30% growth in population. Although not required to meet projected electricity demand, the Project would benefit the network by shifting electricity production closer to local consumption and regulating inputs to the grid using a Battery Energy Storage System.

The electricity network was designed to deal with a small number of very large power generating stations. The increasing localisation of power generation helps the grid to cope with the supply from diversified renewable energy projects, such as intended via this proposal.

2.1.3.1 Electricity prices

According to Deloitte, Australian households will pay \$510 million more for power in 2020 without renewable growth through the RET and up to \$1.4 billion more per year beyond 2020.

Renewables increase competition in the wholesale energy market – and, as in any market, more competition means lower prices. This is particularly true in the case of the dispatchable capability provided by the battery energy storage system, which will increase competition and capacity to satisfy peak demands and place downward pressure on electricity prices.

2.1.4 Socio-economic Benefits

2.1.4.1 Employment

In 2018/19, 26,850 Australians were directly employed in the renewable energy sector with an additional 5,770 jobs created since the 2017/18 financial year (ABS 2020). This data is yet to be updated to present industry employment figures from 2022.

This proposal would generate a significant number of new jobs (up to approximately 350 full-time employees) during the peak construction phase in regional NSW, in addition to indirect employment opportunities supported from the ancillary supply chain.

Large Scale Solar projects were the second largest contributor to Full Time Equivalent (FTE) employment related to renewable energy activities (18% of total) after contributing less than 1% in each year between 2009-10 and 2012-13. Renewable energy employment experienced the second largest increase in FTE employment of any renewable energy type, by over 50% between 2017-18 and 2018-19, increasing from 3,140 FTE jobs to 4,740 FTE jobs²

The Project will create a range of permanent employment opportunities (approximately five employees) and indirect full time equivalent staff during the operation and maintenance phase (expected to be approximately 30 years).

The employment benefits for construction extend through the local supply chains to fuel supply, vehicle servicing, uniform suppliers, hotels/motels, cafés, pubs, catering and cleaning companies, tradespersons, tool and equipment suppliers and many other businesses.

Further extension of employment benefit extends through the operation of the Project, such as panel cleaning and maintenance, electrical maintenance, fence supplies and maintenance, road grading, plus the potential grazing and shearing of sheep.

2.1.4.2 Economic diversification

The Project would diversify the use of land in the area, with the predominant land use in the area being agricultural usage. The Project would add to that and provide both local land holders and businesses in the broader area with an additional source of income and economic activity. The income created in the locality from the Project would be consistent and stable. This income will be of greater security being removed from the normal cycle and risks of agricultural activity (like flood, drought, and market pricing).

2.1.5 Land Use

It is important to note that Solar Farms do not preclude the use of land for agriculture. Some agricultural activity is still possible whilst a Solar Farm is operating (e.g. sheep grazing). The deliberate combination of solar and agricultural activities through design are referred to as Agri-Solar.

The Boags Creek Project intends to co-locate the renewable facility with the grazing of sheep, this co-location ensures agricultural land is not isolated nor fragmented. Additionally, the degree of permanent land disturbance in the construction and operation of Solar Farms is small, limited to the substation footprint, and it is expected that agricultural activities that were occurring before the Solar Farm was constructed would be able to be continued once the Project is decommissioned and removed. Further detail on this practice and Edify's own experience in Agri-Solar can be viewed on our [website](#)

² [Employment in Renewable Energy Activities, Australia, 2018-19 financial year | Australian Bureau of Statistics \(abs.gov.au\)](#)

2.1.6 Site Suitability

Key considerations for site selection are detailed within the NSW Large-scale Solar Energy Guideline for State Significant Development (DPE 2022). The key site constraints with justification as to why the site is suitable is detailed in Table 3 below:

Table 3: Key Site Constraints with Justification

Areas of constraint	Site justification
Alternative area of involved property – Where a Project is located on a portion of a substantially sized property, options analysis of site suitability, in particular constructability and environmental planning factors are assessed across the entire property.	<p>The Project area was selected based on the following key factors:</p> <ul style="list-style-type: none"> Establishes a setback distance ~200m to 400m from the nearest residential receiver. Generally flat topography Little to no clearing of native vegetation Minimal number of sensitive receptors within 1km of the Impact Area Accessibility for construction Multiple network connection options available Outside of mapped hazard areas such as flood or bushfire prone land.
Visibility and topography - Sites with high visibility, such as those on prominent or high ground positions, or sites which are in a valley with residences with elevated views looking towards the site. This is particularly important in the context of significant scenic, historic, or cultural landscapes.	<ul style="list-style-type: none"> The Impact Area and surrounds encompasses relatively flat terrain. The nearest non-involved residential receivers are located ~200m southeast of the project boundary across Ringwood Road. This distance can be further increased or mitigated as design continues, to allow for reduced potential impacts to these receivers. Early and continued engagement with the surrounding community will form part of the in-depth assessment into the potential amenity impacts. Edify have completed a Preliminary Landscape and Visual Impact Assessment, including viewshed analyses (Appendix G) to guide early discussions with stakeholders and identify viewpoints requiring further detailed assessment. Edify will prepare a detailed Landscape Character and Visual Impact Assessment (LCVIA) as a part of the EIS to illustrate the potential viewpoints of the Project from the proximate neighbours and other potential viewpoints for local motorists. Mitigation measures recommended by the LCVIA report to reduce any potential visual impact, such as planting vegetation screening, will be discussed with affected landholders.
Biodiversity – Areas of native vegetation or habitat of threatened species or ecological communities within and adjacent to the site, including native forests, rainforests, woodlands,	<ul style="list-style-type: none"> The Project Area has largely been used for current and historic agricultural activities (grazing and cropping).

Areas of constraint	Site justification
<p>wetlands, heathlands, shrublands, grasslands and geological features.</p>	<p>A preliminary Biodiversity Report has been prepared by Kleinfelder³. (Appendix F)</p> <p>A desktop review has identified primarily open, historically disturbed agricultural land with several isolated stands of vegetation (PCTs) throughout the Impact Area, which will be retained and avoided by the project infrastructure. These stands of vegetation are mapped as:</p> <ul style="list-style-type: none"> • PCT 16 (Black Box grassy open woodland wetland of rarely flooded depressions in southwestern NSW [mainly Riverina Bioregion and Murray Darling Depression Bioregion]), • PCT 17 (Lignum shrubland wetland of the semi-arid (warm) plains (mainly Riverina Bioregion and Murray Darling Depression Bioregion), • PCT 26 (Weeping Myall open woodland of the Riverina Bioregion and NSW Southwestern Slopes Bioregion), • PCT 28 (White Cypress Pine open woodland of sand plains, prior streams, and dunes mainly of the semi-arid (warm) climate zone), • PCT 44 (Forb-rich Speargrass – Windmill Grass-White Top grassland of Riverine Bioregion) and, • PCT 45 (Plains Grass grassland on alluvial mainly clay soils in the Riverina Bioregion and NSW Southwestern Slopes Bioregion). <p>Fauna records⁴ in the region records of threatened wildlife within 10km buffer of Impact Area including:</p> <ul style="list-style-type: none"> • Southern Bell Frog, <i>Litoria raniformis</i> (NSW: Endangered, Federal: Vulnerable) • Magpie Goose, <i>Anseranas semipalmata</i> (NSW: Vulnerable) • Spotted Harrier, <i>Circus assimilis</i> (NSW: Vulnerable) • White-bellied Sea Eagle, <i>Haliaeetus leucogaster</i> (NSW: Vulnerable) • Little Eagle, <i>Hieraaetus morphnoides</i> (NSW: Vulnerable) • Superb Parrot, <i>Polytelis swainsonii</i> (NSW: Vulnerable & Class 3 Sensitivity, Federal: Vulnerable) • Grey- crowned Babbler (eastern subspecies), <i>Pomatostomus temporalis temporalis</i> (NSW: Vulnerable) <p>The Superb Parrot, Spotted Harrier and Grey-crowned Babbler all had records within 3km of the Impact Area. Edify will prepare a Biodiversity Development Assessment Report (BDAR) as part of the EIS process to inform micro-siting of infrastructure. The Project will consider the small</p>

³ Preliminary Ecological Assessment, Boags Creek Solar Farm, ref 24001628, dated 29 April 2024, Kleinfelder

⁴ [Protected Matters Search Tool: Interactive Map \(awe.gov.au\)](https://www.awe.gov.au/protected-matters-search-tool/)

Areas of constraint	Site justification
Residences – Residential zones or urbanised areas.	<p>area streamlined assessment module as the Project is likely to clear less than 3ha (as set by the 100ha minimum lot size) of vegetation.</p> <p>The Project is within land zoned RU1, Primary Production under the Murrumbidgee Council Local Environmental Plan (2013), the objective of this zone is to.</p> <ul style="list-style-type: none"> • To encourage sustainable primary industry production by maintaining and enhancing the natural resource base. • To encourage diversity in primary industry enterprises and systems appropriate for the area. • To minimise the fragmentation and alienation of resource lands. • To minimise conflict between land uses within this zone and land uses within adjoining zones. <p>Although electricity generation is not listed as permissible on land zoned RU1 under the Murrumbidgee LEP, clause 34(7) of ISEPP allows development for the purpose of a solar energy system on any land with consent, including land zoned RU1.</p> <p>Murrumbidgee Council was supportive of Edify's Darlington Point Solar Farm located to the east of the site which was developed and is operational under the same land zoning.</p> <p>The Project Impact Area does not conflict with any residential zones or urbanised areas.</p> <p>Edify has prepared a register of all neighbours within 4km of the Project boundary, noting the closest residences are setback between 200m or more from the southeastern boundary of the project Area. Many of these landholders have already been consulted initially by providing information packs in the mail and then via calls/emails (Appendix C).</p>
Agriculture - Important agricultural lands, including Biophysical Strategic Agricultural Land (BSAL), irrigated cropping land, and land and soil capability classes 1, 2 and 3. Consideration should also be given to any significant fragmentation or displacement of existing agricultural industries and any cumulative impacts of multiple developments.	<p>Biophysical Strategic Agricultural Land is not mapped in the project impact area. The Project impact area has been verified⁵ to be on land classed as Soil Capability Class 3 (Moderate Limitations).</p> <p>It is anticipated that by adopting the principles of impact minimisation and targeted soil and erosion management outlined in the Minesoils report (Appendix H), that the Project will have no permanent negative impacts on agricultural resources or enterprises.</p>

⁵ Boags Creek Solar Farm – Soil and Agricultural Impact Assessment, prepared by Minesoils (ref MS-131_Draft 1), dated April 2024

Areas of constraint	Site justification
	<p>The Project is not considered likely to fragment or isolate agricultural land as the intention is to introduce a co-location with an agricultural land use (Agri-solar). Agri-solar involves land proposed for solar farms introducing an agricultural use following construction, such as sheep grazing with Dorper or Merino sheep on the subject land. Some benefits found with introducing Merino sheep to a solar farm for include:</p> <ul style="list-style-type: none"> • Merino Sheep are one of the most common breeds of sheep involved in 'agri-solar' grazing, having a reputation for a docile temperament and are not prone to jumping on equipment or damaging electrical cables. • Merino Sheep growth rate and fertility are potentially higher due to the shade provided by solar panels, as well as lower temperatures particularly during summer months. • The micro-climate under the solar panels lead to better soil quality and water retention, ultimately providing a higher quality grass for sheep to graze on.
<p>Natural Hazards – Areas subject to natural hazards, such as flooding and land instability.</p>	<p>The project area has not been identified as flood prone in the Murrumbidgee Regional Council's LEP. The project area is not identified as bushfire prone⁶ Regardless, Edify will engage with Rural Fire Service and NSW Fire & Rescue when preparing the Preliminary Hazards Assessment to ensure the Project's design and water supply infrastructure is located and installed in accordance with fire authority requirements.</p>
<p>Resources - Prospective resources developments, including areas covered by exploration licences and mining and petroleum production leases, Solar development applicants should seek advice from the Department of Planning, Division of Resources and Geoscience (GSNSW) about the coverage of resources related licences.</p>	<p>The project area is not covered by any exploration or mining leases.</p>
<p>Crown Lands – If any part of the Project or associated transmission or distribution infrastructure will cross Crown Lands, it may be subject to legislative requirements that restrict access to the land.</p>	<p>Edify will engage with Crown Lands following the SEARs to ensure suitable stakeholder engagement and access regimes are undertaken.</p>

⁶ [Geocortex Viewer for HTML5 \(nsw.gov.au\)](#) NSW Bush Fire Prone Lands

3 Project

3.1 Location

The Project is located in Darlington Point in the Murray Riverina region of New South Wales. The Project Area is in the Murrumbidgee Council Local Government Area, approximately 8 kilometres (km) South of Darlington Point and 40km South of Griffith. Site access is likely to be via an existing property access point off Kidman Way.

The project impact area spans approximately 845 hectares, including various exclusion zones, and encompasses thirteen (13) Lots located at 7346 Kidman Way, Darlington Point, and Ringwood Road, Darlington Point. The Development Footprint will constitute a segment of these 845 hectares, as determined through constraint investigations. The affected lots are detailed in Table 4

Table 4: Affected Lot/DPs

Lot	Deposit Plan	Landholder
1	254627	Landholder #1 “Silverwoods” Western project area
1	971064	
116	750908	
158		
161		
257		
63	750908	Landholder #2 Eastern Project area
64		
160		
47	750908	Landholder #3 involved for potential easement (option 2) corridor to Darlington Point Substation
48		
54		
159		
57	750908	Landholder #4 involved for potential easement (option 1) corridor to Darlington Point Substation
58		

3.2 Site Selection

The site of the Project has been selected for the following reasons:

- Excellent solar exposure.
- Excellent access to local and major roads, plus regional city resources.
- Excellent access to the overhead grid transmission networks.
- Likely low level of environmental impact – the site has been largely cleared and heavily disturbed by agricultural grazing activities.
- Suitable topography, land size and land zoning, whereby the use of the site would be based on a lease agreement between Edify and the landowner for the life of the Project.



Figure 3: Ringwood Road looking NW across Project Area (Image Edify taken 3 July 2023)

3.3 Project Components

3.3.1 Proposed Infrastructure

The Project involves the construction of a ground mounted photovoltaic solar array which would have capacity to generate up to 300MW of renewable energy. The Project proposes to connect into the Darlington Point Substation or directly into the eastern transmission line (as shown in Figure 4). The Project would consist of the following components:

- Single axis tracker photovoltaic solar panels mounted on steel frames over most of the site (maximum tilt up to 4.5m in height).
- Battery energy storage systems with a rating of up to 300MW / 600MWh.
- Underground and overground electrical conduits and cabling to connect the arrays to the inverters and transformers.
- Systems of inverter units and voltage step-up throughout the arrays.
- On site substation, with connection to the Darlington Point Substation or direct cut in the northern or eastern transmission lines.
- Site office and maintenance building, vehicle parking areas, internal access tracks and perimeter security fencing.
- Proposed site access road off Kidman Way.

The Project arrangement is flexible and adaptable and would be designed to avoid impacts where feasible and minimise and mitigate environmental impacts if avoidance is not possible. The design would consider the results of the Scoping Report, consultation with relevant stakeholders and the EIS to be prepared. The EIS would detail how these studies have been used to produce the final proposal design.

The proposed layout is shown in Figure 5. This includes all land to be directly impacted by the construction, operation and decommissioning of the Project, including auxiliary construction facilities (site compound, laydown, stockpiling, etc.) and all considered options. It is noteworthy that the proposed footprint is indicative only and will be refined as part of the EIS process (considering environmental constraints and engineering studies).

3.3.1.1 Solar Array Areas

The development will consist of several solar array areas or blocks comprised of photovoltaic modules arranged in a series of long rows. The modules are mounted on frames with tracking systems which follow the sun to optimize energy generation. The frames are fixed to piles driven into the soil. The rows interconnect to form a single array block of up to 4 MW (AC) or 8 MW (AC), depending on the MV enclosure design. In each block there will be a prefabricated, containerized inverter and integrated transformer to convert and step up the voltage level. Electrical connections will also be constructed between the PV arrays, as well as associated monitoring and protection equipment and central inverters via underground or frame secured cabling.

The solar module frames and inverter stations will be installed on piles and sit above ground level, with a maximum height of approximately 4.5m at full tilt. This ensures retention of existing grassland vegetation and habitats in situ with a minimal level of ground disturbance. Regrowth of groundcover will be enabled following temporary disturbance during installation/construction.

3.3.1.2 Medium Voltage Reticulation

Each inverter will be connected to the central 33kV switchboard by underground medium voltage cable reticulation. The cables will be installed in trenches not below 1m in depth and typically 1m in width. The excavation will comply with the Soil and Erosion Sediment Control Report and Regulations for construction

within New South Wales. The medium voltage switchboard will be connected through a step-up transformer and connect to the overhead 132 kV transmission line, owned, and operated by TransGrid.

Temporary disturbances to groundcover from the underground installation of the cables will rehabilitate naturally.

3.3.1.3 Substation

If needed, a high voltage substation, approximately 100m x 50m, will connect the Project to the national transmission network. This substation, providing switching and protection for the electrical network, will be separately fenced for safety. The T-connection into the existing transmission line will be owned and operated by TransGrid, forming part of the National Electricity Network (NEN)

3.3.1.4 Battery Energy Storage System (BESS)

Based on an economic and technical assessment that will be undertaken during the Project's Connection Application phase with TransGrid and the Australian Energy Market Operator (AEMO), the BESS would be located either:

- adjacent to the substation in the Impact Area (centralised configuration); or
- dispersed in modular enclosures throughout the site (decentralised configuration), which is similar to the typical solar inverter enclosures.

The Project will utilise hermetically sealed, lithium-ion batteries housed in a secure, climate-controlled Battery Energy Storage System (BESS). Subject to economic and technical considerations, the Project would include an approximate 300MW / 600MWh rated capacity battery storage system, with an enclosure design similar to Figure 4 below.



Figure 4: Example Battery Energy Storage System Design, Edify's Gannawarra Solar Farm and Battery Project (Kerang, VIC)

3.3.1.5 Operation and Maintenance Facility

The proposed Operation and Maintenance (O&M) building will be of a prefabricated design approx. 10m by 8m and single story. The facility will provide a working area for staff, ablutions and amenities including:

- Office
- Toilet
- Kitchen
- First Aid area
- Meeting room
- Reception area.

3.3.2 Construction

The Project is expected to operate for 30 to 50 years. The construction phase of the Project is expected to take approximately 18 months. During the peak construction period, a workforce of up to approximately 350 personnel will be required onsite.

Minor earthworks would be required for the preparation of the site, including minimal site levelling, laying of access track and site drainage works. Due to the relatively flat terrain of the Project area, minimal site preparation and civil works are anticipated prior to construction. The PV arrays and site office components will largely be built off-site and transported to the site in modulated sections. Construction on-site will be limited to the unloading and joining together of the modulated sections and trenching of electrical and control cabling to the electricity grid and control room. Construction activities are planned to occur during standard construction hours.

3.3.3 Operation

During the operational phase of the Project, approximately (5) five full-time jobs and several full-time equivalent roles that support the Project's operation will be required. These additional roles will be defined closer to construction commencing.

The primary activities conducted on site will include day-to-day routine operations, maintenance of infrastructure, and general site maintenance and security. Operation of the Solar Farm will also likely be supported by local contractors for tasks such as repairs, minor works, weed/vegetation management, fencing, sheep grazing and cleaning.

The operational lifespan of the facility is expected to be 30 to 50 years, depending on the nature of solar PV and battery technology and energy markets.

3.3.4 End of Life

After the initial operating period, a decision will be made to either decommission or re-power the facility, subject to approval requirements.

If the Project is to be decommissioned, all infrastructure shall be removed from site, including buried (cable) infrastructure) and the site will be rehabilitated to return to its existing land capability. The disposal and recycling of project infrastructure will be completed in accordance with contemporary waste management legislation and practices at the time of decommissioning. As far as possible, efforts will be made to reduce wastes disposed to landfill, in line with best practice sustainability principles.

Alternatively, the Project may be upgraded and re-powered with new PV equipment. If re-powering the Project is agreed, an appropriate stakeholder consultation process will be undertaken, and all necessary approvals will be sought and aligned with relevant legislation at such time.

3.3.5 Estimated Development Cost

The Project would have an estimated capital investment more than \$30 million, identifying the Project as a State Significant Development under Part 4 of the EP&A Act.

A quantity surveyor's report would be prepared during the EIS process as part of the Project, which would confirm the Estimated Development Cost (EDC).

3.3.6 Subdivision

Engagements with TransGrid will be undertaken with respect to how the switchyard infrastructure is to be owned and operated. The area of land to be subdivided at the switchyard site is yet to be finalised, however initial plans contemplate a location on the southeastern boundary (Lot 63 and 64 on Deposit Plan 750908) as seen in Figure 3. The land is zoned RU1 Primary Production with a minimum lot size of 200 ha therefore any proposed subdivision will require the approval of the Minister for Planning under the provisions of section 4.38 of the EP&A Act.

When land is leased from a landowner and the lease affects part of a lot or lots in a current plan, a subdivision under s.7A *Conveyancing Act 1919* (formerly s.327AA *Local Government Act 1919*, which is now repealed) is required when the total of the original term of the lease, together with any option for renewal, is more than five years. When the lease affects the whole lot in a current plan, the body of the lease identifies the area by lot and DP number with a subdivision not required.

As the Project will be executed via a long-term lease arrangement, subdivision for the purpose of the internal substation and battery facility may be required. An easement may be created by means of an appropriate dealing registered in the NSW Land Registry Service or by the inclusion in a Section 88B instrument lodged with a new deposited plan.

3.4 Alternatives to the Project

3.4.1 Alternative Sites

Alternative project sites have been considered by Edify, including alternative locations, project layouts and the option of not proceeding with the project (the do-nothing scenario).

The chosen project area is highly suitable for a solar farm and BESS due to its proximity to existing infrastructure, including road and transmission networks, the suitability of the land when environmental factors such as native vegetation, water courses and topography are considered.

After considering the above and other alternatives that offer viable capacity and available access to the transmission network), it was concluded that the proposed site remains most suitable.

Edify has also reviewed the solar generation potential of many areas in NSW using a combination of computer modelling and analysis, on the ground surveying and observation, and experience of Edify in successfully developing projects in NSW and across Australia. The site was selected because it provides the optimal combination of:

- Low environmental constraints (predominantly cleared grazing and cropping land)
- Level terrain for cost-effective construction.
- High quality solar resource
- Suitable planning context
- Acceptable flood risk
- Road access

- Access to the transmission network, and
- Available capacity on the grid transmission system.

The site is of a scale that allows for flexibility in design, allowing Edify to avoid ecological and other constraints that may be identified during the EIS process. The factors that determine the final design area would be detailed in the EIS.

3.4.2 Alternative Technologies

Photovoltaic solar technology was chosen because it is cost effective, low profile, durable and flexible regarding layout and siting. It is a proven and mature technology that is readily available for broad scale deployment at the site.

Battery technology was selected over mechanical, thermal, or physical storage methods because it enables modular installation without major infrastructure or specialised landform features. Batteries also generally have lower weight and physical volume, and better scalability compared to other technologies.

3.4.3 The ‘Do Nothing’ Option

Not proceeding with the Project would forgo the benefits of the Project, resulting in:

- The loss of a source of renewable energy that would assist the Australian and NSW Governments to reach their targets,
- The loss of cleaner energy and reduced greenhouse gas emission,
- The loss of additional electricity generation and supply into the grid, and
- Loss of social and economic benefit through the provision of direct and indirect employment.

The ‘do nothing’ option may avoid any potential impact. However, the likelihood of significant negative impacts is considered low. It is considered the benefit of the proposed Solar Farm outweighs any potential impact whilst contributing to ecologically sustainable development. In addition, the proposed development would bring broader community advantages, including enhancing the efficiency of the electricity supply and transmission network. It also has the potential to reduce costs for consumers, align with national and state renewable energy goals, and foster increased competition in the electricity supply market. Moreover, it would contribute to lowering greenhouse gas emissions by decreasing dependence on coal-fired power stations.

3.5 The Project Area

An area of 845ha has been selected for assessment (Project Area), where various avoidance areas have already been committed to based on various site constraints identified during the early scoping phase of the Project. The residual area of approximately 603.6 hectares is referred to as the **Impact Area**. The indicative layout is illustrated below in **Figure 5**. The final development footprint and Impact Area will be further refined during the EIS phase and based on the conclusions of this report and the subsequent feedback from the SEARs reports.

The Project Area is zoned RU1 - Primary Production under the Murrumbidgee Local Environment Plan 2013⁷ with a minimum lot size of 200 ha.

Figure 5 below demonstrates the preliminary Impact Area of the Project, with the proposed access point off Kidman Way. During the BDAR, Traffic Impact Assessment (TIA), and other technical studies to be undertaken

⁷ [Murrumbidgee Local Environmental Plan 2013 - NSW Legislation](#)

as part of the EIS, this access location and easement will be investigated to identify the potential environmental and planning impacts as well as provide recommendations for construction.

The Impact Area consists of agricultural land, encompassing a large property with mostly flat paddocks that have been largely cleared of vegetation. Some sections of vegetation remain within the Project Area and have been excluded from the proposed Impact Area. Within the Impact Area, there is one unnamed small creek running through the southwestern corner of the project area. This is a predominantly dry creek and does not appear connected to adjoining watercourses.

During the PEA, the Impact Area was observed to meet the criteria for Category 1 exempt land as the land was cleared prior to 1990 and only contains low conservation value groundcover (>95% introduced). The identification of native vegetation in the Impact Area and confirmation of its degraded condition state will be considered further in the EIS to guide refinement of the Impact Area and to determine the assessment method.

The full extent of final impacts will be assessed via the small area streamlined assessment module as part of the BDAR during the EIS.

3.5.1 Grid Connection

The project has three (3) proposed grid connection options:

Option 1

A connection point option is direct to the Darlington Point Substation (132/220/330kV substation) 2.5km to the east of the project site via an easement with landowner on the eastern site boundary.

Option 2

A connection point option is direct to the Darlington Point Substation (132/220/330kV substation) 2.5km to the east of the project site via an easement with landowner on the northern site boundary.

Option 3

There are existing TransGrid 132 kV and 220kV transmission lines that run through the eastern portion of the Project Area, impacting Lots 63, 64 and 160 on Deposit Plans 750908.

Edify may consider constructing a new substation to enable the project's connection into an overhead transmission line. The substation will include the establishment of a new step-down transformer, with varying sizing dependent on the location. Edify anticipate the total switching station footprint will equate to approximately 150m x 100m. The proposed new easements and current easements are shown below on

Figure 6

3.5.2 Battery Energy Storage System (BESS) Layout

Edify proposes two layouts for the BESS, a centralised or de-centralised (distributed) options.

Both options will be discussed during the Scoping Report and subsequent EIS. Edify will seek approval for both options during the EIS with one option progressed to construction post EIS approval. Both BESS layout options are outlined in Figure 5

Centralised BESS

A centralised BESS refers to a single, large-scale energy storage unit that is typically located at the grid connection point within or adjacent to the Solar Farm's substation.

De-centralised BESS

A decentralised battery (or DC Coupled) layout in a solar farm refers to the strategic distribution of multiple BESS units across the solar farm rather than relying on a single, centralised storage system. This approach can enhance efficiency, reliability, and scalability of energy storage and distribution.

The exact locations and quantities of decentralised BESS units will not be determined during the Scoping Report and EIS stages due to the uncertainty surrounding the technology that will be used during the construction and operation of the Project.

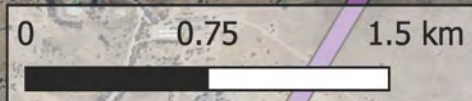
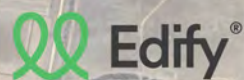
Legend

- Boags Creek Project Area
- Existing Transmission Line Easements
- Proposed Site Access Point
- Decentralised BESS (preliminary)
- Solar Arrays (preliminary)
- Substation / Centralised BESS (proposed)



Project: Boags Creek Solar Farm
Figure 5: Preliminary Project Layout

Created: 16 May 2024 (AS)



Basemap: Google Satellite Hybrid
Scale: 1: 20,000



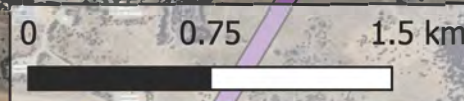
Legend

- Boags Creek Project Area
- Existing Transmission Line Easements
- Proposed Site Access Point
- Option 1 Eastern DPSF Easement
- Option 2 Northern DPSF Easement



Project: Boags Creek Solar Farm
Figure 6: Existing and Proposed Easements

Created: 27/07/2024 (AS)



Basemap: Google Satellite Hybrid
Scale: 1: 35,000



3.5.3 Project Nearby Receivers

The project land is owned by two (2) involved landholders, with an additional landholder owning the land for the proposed easement/s. One family resides within the Project Area on the property known as 'Silverwood's' (with the residence identified in the Preliminary Visual Impact Assessment as a 'LO1'). This property is excluded for the project assessment area and has appropriate buffers in place. The family propose to continue utilising the site for agricultural purposes once the Project enters operations. In line with the *Technical Supplement- Landscape and Visual Impact Assessment* document, public and private viewpoints within 4km of the Project found 39 non-associated dwellings, 0 public receivers and one (1) industry stakeholders (See Table 5 and Figure 7). Results of the Preliminary Landscape and Visual Impact Assessment are presented in Section 7.2.4 of this report and Appendix G

Table 5: Project Neighbouring Receivers

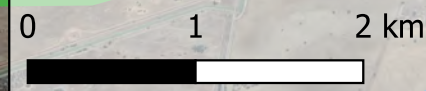
Viewpoint	Distance from Project (m)	Viewpoint	Distance from Project (m)
R1	200	R26	1554
R2	200	R19	1587
R6	280	R22	1610
R7	360	R24	1630
R5	363	R15	1690
R3	450	R38	1740
R4	470	R29	1884
R8	710	R13	1900
R9	730	R14	2000
R25	1030	R30	2000
R34	1160	R18	2212
R21	1350	R11	2326
R28	1369	R39	3312
R27	1378	R31	3316
R20	1390	R12	3433
R16	1500	R36	3433
R37	1518	R32	3485
R23	1530	R33	3900
R10	1531	R35	4167

Legend

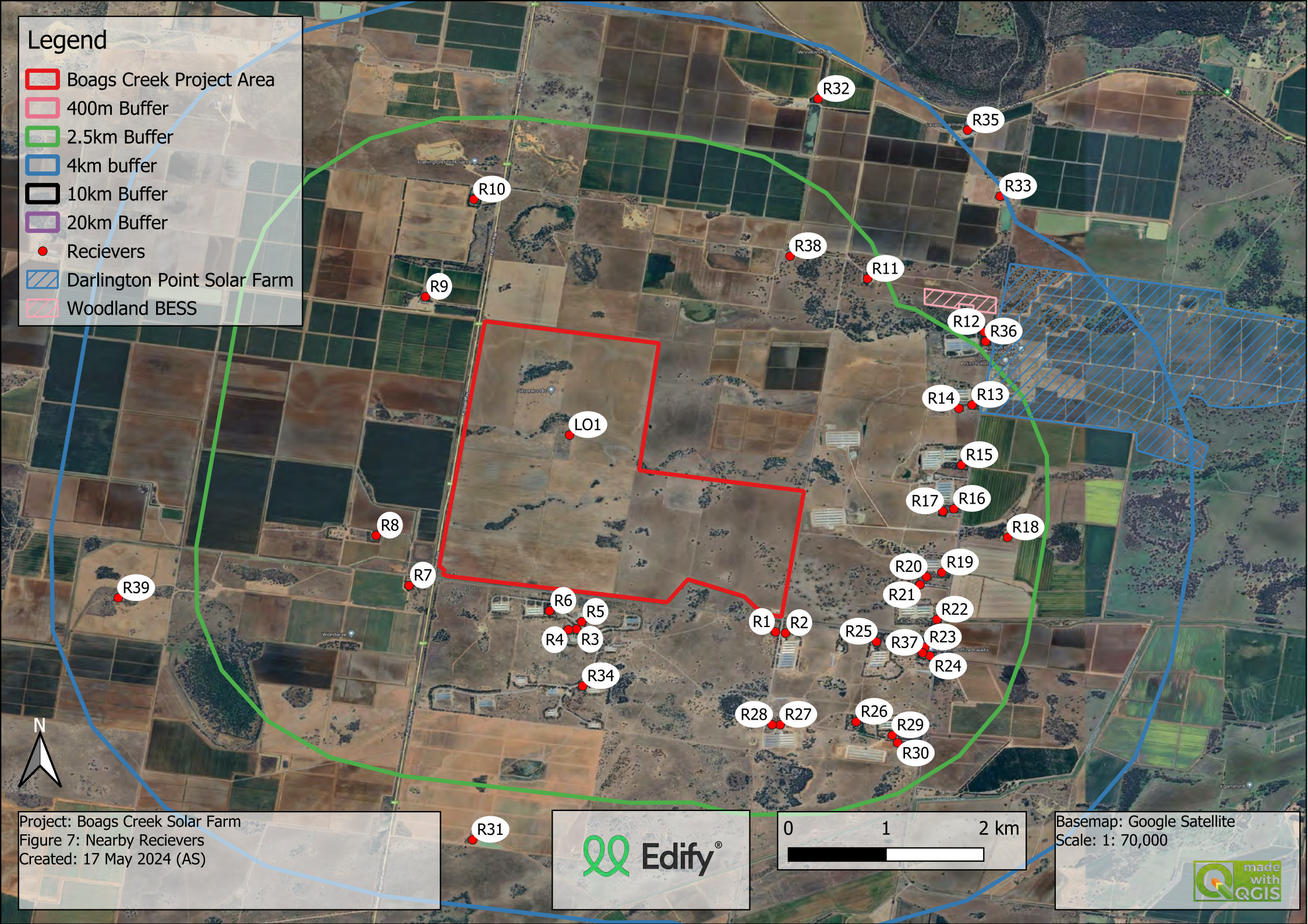
- Boags Creek Project Area
- 400m Buffer
- 2.5km Buffer
- 4km buffer
- 10km Buffer
- 20km Buffer
- Recievers
- Darlington Point Solar Farm
- Woodland BESS



Project: Boags Creek Solar Farm
Figure 7: Nearby Recievers
Created: 17 May 2024 (AS)



Basemap: Google Satellite
Scale: 1: 70,000



3.6 The Locality

The Project is approximately 8km South of Darlington Point which borders the Murrumbidgee River and 35km South of Griffith New South Wales. The Murrumbidgee LGA covers 6,880 km² with a population of 3,353, the township of Darlington Point consists of a population of 868 as at the 2021 Census (ABS 2021). See Figure 8.

The landscape around Darlington Point typically consists of expansive farmlands, dotted with crops such as wheat, barley, rice, and various other agricultural produce. The river itself not only provides a scenic backdrop but also serves as a vital water source for irrigation and sustenance of the local flora and fauna.

The project is approximately 25km east of the Southwest Renewable Energy Zone (SW REZ).


3.6.1 Regional Area

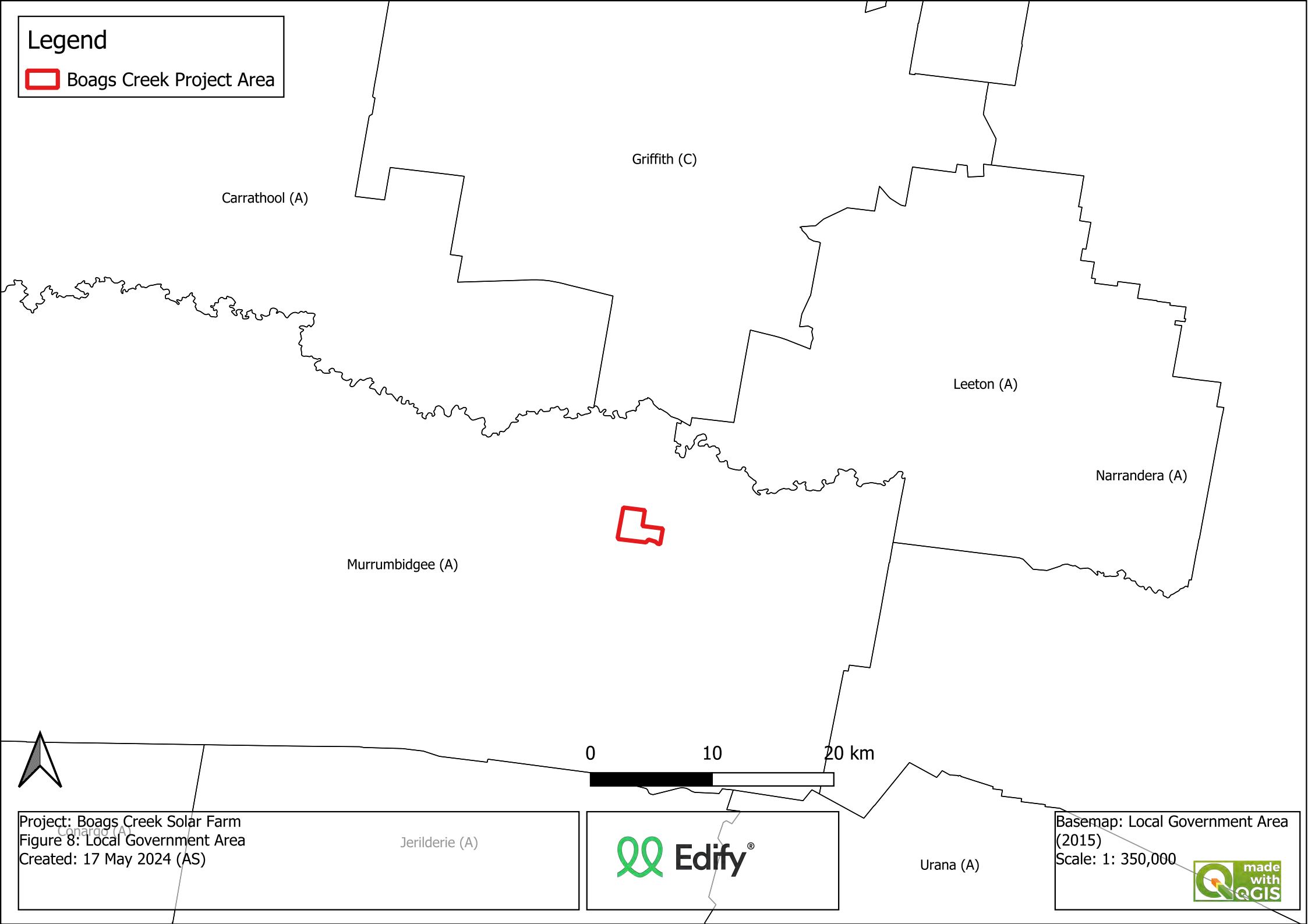
The closest major towns to Darlington Point, New South Wales, include:

1. Griffith: Located approximately 35 kilometres north of the project area, Griffith is one of the largest towns in the Riverina region. It serves as a major commercial and cultural hub, known for its vibrant multicultural community, especially with Italian heritage. Griffith offers a range of amenities, including shopping centres, restaurants, schools, and recreational facilities.
2. Leeton: Situated around 45 kilometres southeast of Darlington Point, Leeton is another significant town in the Riverina area. It is renowned for its role in irrigation and agriculture, particularly citrus fruit production. Leeton boasts a well-planned layout, with wide streets and tree-lined avenues. The town features various attractions, including historic sites, parks, and cultural events.
3. Narrandera: Approximately 60 kilometres southwest of Darlington Point lies Narrandera, a historic town nestled on the banks of the Murrumbidgee River. Narrandera offers a mix of heritage architecture, parks, and outdoor recreational opportunities. It serves as a stopover for travellers along the Newell Highway and provides essential services and facilities to both locals and visitors.

These major towns near Darlington Point contribute to the region's economic and social vitality, offering a diverse range of amenities, attractions, and services to residents and tourists alike. They also reflect the rich agricultural heritage and cultural diversity of the Riverina region.

Legend

 Boags Creek Project Area



Project: Boags Creek Solar Farm


Figure 8: Local Government Area

Created: 17 May 2024 (AS)



Basemap: Local Government Area (2015)

Scale: 1: 350,000



3.6.2 Population

The median age of persons in Murrumbidgee Regional LGA is 45, which is higher than the Australian average of 38 (ABS 2021). The 2021 census records state that 8.6% of the population are Aboriginal and Torres Strait Islander people (ABS 2021). A large portion, 82.8% of the community were born in Australia. In addition, the community in the work force full time represent 64% of the population, with the top employment industries being grain growing, cattle farming and Local government.

3.6.3 Climate

The climate in this region is generally warm and dry, with hot summers and mild winters. This climate pattern is conducive to agriculture, although it also poses challenges such as droughts during dry seasons.

The BOM (2021) climate records available from the nearest climate station at Griffith (Station number 075041 consists of data recorded since 1961. The station indicates a mean summer maximum of 33.3°C (January) and a mean winter minimum of 3.4°C (July).

Rainfall records from the station show a mean annual rainfall of 410 mm, and that rainfall is generally greatest over summer and spring. (Figure 9).

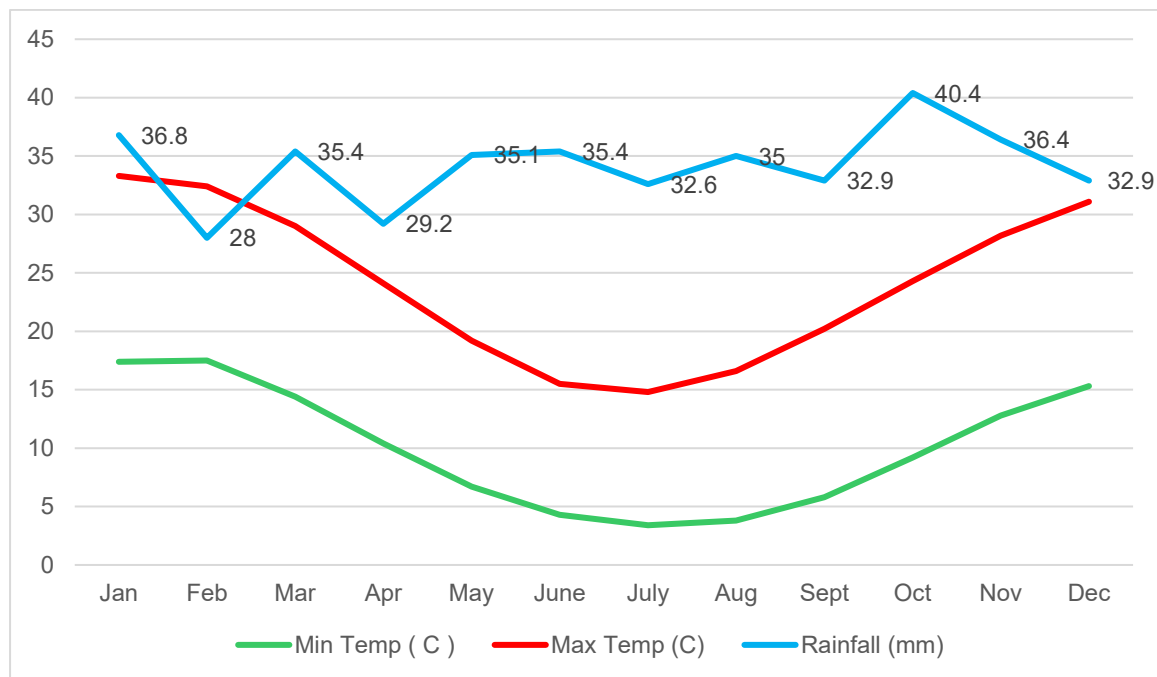


Figure 9: Average Annual Rainfall and Temp for Griffith Airport Station

3.6.4 Geology and Vegetation

The geology of the project area and predominate surrounding area includes⁸;

- Shepparton Formation (Czsws) - Unconsolidated to poorly consolidated mottled variegated clay, silty clay with lenses of polymictic, coarse to fine sand and gravel; partly modified by pedogenesis, includes intercalated red brown paleosols, and
- Alluvium 38494 (Cza) - Reworked or incised alluvium in older stream channels; alluvial terraces above younger alluvium; alluvial and colluvial outwash deposits not in defined channel systems; lateralised alluvium; sand, silt, gravel, and clay

The Riverina bioregion⁹ spans southwest NSW and central-north Victoria, from Ivanhoe to Bendigo, and Narrandera to Balranald. It's characterized by the Murray and Murrumbidgee Rivers, along with their main tributaries like the Lachlan and Goulburn Rivers, flowing westward across the plain. The climate is dry and semi-arid, with most rainfall in winter. Vegetation varies from river red gums along waterways to saltbush on the plains, with several threatened species.

⁸ [eSPADE v2.2 \(nsw.gov.au\)](#)

⁹ [Riverina bioregion | NSW Environment and Heritage](#)

4 Statutory Context

4.1 NSW Legislation

The relevant statutory requirements for the Project are summarised in Table 6: Statutory Requirements. This table has been set out in accordance with the *State Significant Development Guidelines - Preparing a Scoping Report (Appendix A)* and *State Significant Development - preparing an environmental impact statement (Appendix B)* to the state significant development guidelines (DPIE 2022) (EIS Guidelines). The following matters are considered:

- Power to grant consent (i.e., approval pathway)
- Permissibility
- Other approvals consistent with the Project
- Commonwealth approvals
- Approvals not required (pursuant to Section 4.41 of the EP&A Act), and
- Mandatory matters for consideration.

Table 6: Statutory Requirements

Approval	Requirement
Power to grant approval	
State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP)	Section 20 of Schedule 1 of the Planning Systems SEPP states that the following is considered an SSD:
<i>Environmental Planning and Assessment Act 1979 (EP&A Act).</i>	<p><i>Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that:</i></p> <p>(a) <i>has a capital investment value of more than \$30 million, or</i></p> <p>(b) <i>has a capital investment value of more than \$10 million and is in an environmentally sensitive area of State significance.'</i></p> <p>The Project would have a capital investment cost estimate of more than \$30 million. Therefore, the Project is classified as "State Significant Development" under division 4.7 of the EP&A Act.</p> <p>The Minister for Planning and Public Spaces is the consent authority for SSD, and SSD applications are assessed by DPE (unless specific conditions occur or the local council has objected to the application; and/or the applicant has disclosed a reportable political donation, whereby the Independent Planning Commission (IPC) would be the consent authority.</p>
Permissibility	
<i>State Environmental Planning Policy</i>	Division 4, Section 2.35 and 2.36(1)(b) of the TISEPP states development for the purpose of electricity generating works may be carried out by any person

Approval	Requirement
<i>(Transport and Infrastructure) 2021 (TISEPP)</i>	<p>with consent on any land in a prescribed rural, industrial, or special use zone. Therefore, the Project is permissible with consent.</p> <p>Division 4, Section 2.42 of the TI SEPP provides detail on determination of development applications for solar or wind electricity generating works on certain land. This section applies to development in a regional city for the purposes of electricity generating works using a solar or wind energy source that is –</p> <ul style="list-style-type: none"> a) State significant development, or b) Regionally significant development. <p>Development consent must not be granted unless the consent authority is satisfied that the development –</p> <ul style="list-style-type: none"> a) Is located to avoid significant conflict with existing or approved residential or commercial uses of land surrounding the development, and b) Is unlikely to have a significant adverse impact on the regional city's- <ul style="list-style-type: none"> i) Capacity for growth ii) Scenic quality and landscape character <p>In determining whether to grant development consent, the consent authority must consider measures proposed to be included in the development to avoid or mitigate conflicts referred to in subsection (2)(a) or adverse impacts referred to in subsection (2)(b).</p>
<i>Other State and Environmental Planning Policies that may be relevant</i>	<p>State environmental planning policy provisions will take precedence over the local provisions. However, local provisions will be considered by Edify during the EIS. Other relevant State and Environmental Planning Policies that may be relevant include:</p> <ul style="list-style-type: none"> – SEPP (Primary Production) 2021 (Part 2.2 addresses State Significant Agricultural Land, not yet confirmed in Schedule 1 of the SEPP) – SEPP (Resilience and Hazards) 2021
<i>Electricity Infrastructure Investment Act (2020)</i>	<p>The Impact Area is approximately 25km outside of the Southern boundary of the Southwest Renewable Energy Zone.</p>

Consistent approvals	
Overview	<p>Section 4.42 of the EP&A Act outlines that the approvals listed below cannot be refused if necessary for carrying out an approved SSD and are to be consistent with the terms of the development consent for the SSD.</p>
An environment protection licence under Part 3 of the NSW Protection of the Environment Operations Act 1997	<p>Section 48 of the <i>Protection of the Environment Operations Act 1997</i> requires an environment protection licence to undertake scheduled activities at any premises. Scheduled activities are defined in Schedule 1 of the <i>Protection of the Environment Operations Act 1997</i> and include the following premise-based activities that apply to the Project:</p> <p><i>17 Electricity generation</i></p>

Approval	Requirement
	<p>(1) ...general electricity works, meaning the generation of electricity by means of electricity plant that, wherever situated, is based on, or uses, any energy source other than wind power or solar power.</p> <p>(2) Each activity referred to in Column 1 of the Table to this clause is declared to be a scheduled activity if it meets the criteria set out in Column 2 of that Table.</p> <p>The table referred to in Schedule 1, Clause 17 specifies 'general electricity works' with capacity to generate more than 30 megawatts of electrical power'. The Project will have a capacity that is greater than 30 MW and will therefore require an environment protection licence.</p>
An approval under Section 138 of the <i>NSW Roads Act 1993</i>	<p>Under Section 138 or Part 9, Division 3 of the <i>Roads Act 1993</i>, a person must not undertake any works that impact on a road, including connecting a road (whether public or private) to a classified road, without approval of the relevant authority, being either Transport for NSW or local council, depending upon the classification of the road.</p> <p>The interaction of the Project with the local and regional road network will be addressed in the EIS.</p>
Commonwealth approvals	
<i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i>	<p>The EPBC Act aims to protect matters of national environmental significance (MNES). If an action will, or is likely to, have a significant impact on any MNES, it is deemed to be a 'controlled action' and requires approval from the Commonwealth Environment Minister or the Minister's delegate.</p> <p>A search of the Commonwealth Protected Matters Search Tool indicates that there are no World Heritage Properties or National heritage places within the vicinity of the Project Area (Table 4).</p>
<i>Native Title Act 1993</i>	<p>The Commonwealth <i>Native Title Act 1993</i> recognises and protects native title rights in Australia. It allows a native title determination application (native title claim) to be made for land or waters where native title has not been validly extinguished, for example, extinguished by the grant of freehold title to land.</p> <p>Claimants whose native title claims have been registered have the right to negotiate about some future acts, including mining and granting of a mining lease over the land covered by their native title claim. Where a native title claim is not registered, a development can proceed through mediation and determination processes, though claimants will not be able to participate in future act negotiations.</p> <p>There are currently no native title determinations over the Impact Area.</p>
Approvals not required	

Approval	Requirement
Overview	Section 4.41 of the EP&A outlines the following approvals, permits etc are not required for an approved SSD.
<i>Fisheries Management Act 1994</i>	<p>A permit under the <i>Fisheries Management Act 1994</i> to block fish passage or dredge or carry out reclamation work on water land will not be required pursuant to Section 4.41 of the EP&A Act.</p> <p>The Project may require works in the watercourse to establish new crossings and/or install the T-connection line into the existing transmission line from the substation within the Impact Area. These works will be undertaken in accordance with NSW DPI <i>Policies and Guidelines on Fish-Friendly Waterway Crossings</i> (undated), <i>Policy and Guidelines for Fish Habitat Conservation and Management</i> (DPI 2013), and NSW <i>Guidelines for Controlled Activities</i>.</p>
<i>Heritage Act 1977</i>	<p>An approval under Part 4, or an excavation permit under Section 139, of the <i>Heritage Act 1977</i> will not be required pursuant to Section 4.41 of the EP&A Act.</p> <p>Further, there are no listed heritage items within the Impact Area.</p> <p>There are (4) four Heritage locations listed under the Murrumbidgee LEP</p> <ul style="list-style-type: none"> • Former Court House, 23 Carrington Street, Darlington Point • Toganmain Woolshed Precinct, Sturt Highway • Tubbo Station Sturt Highway • 'The Homestead' (formally Kerabury Station), Sturt Highway <p>See Appendix E</p>
<i>National Parks and Wildlife Act 1979</i>	<p>An Aboriginal heritage impact permit under Section 90 of the <i>National Parks and Wildlife Act 1974</i> will not be required pursuant to Section 4.41 of the EP&A Act.</p> <p>There is potential for Aboriginal sites to occur within the Impact Area. Any Aboriginal heritage sites identified within the Impact Area will be avoided as far as practicable through the design process.</p>
<i>Rural Fires Act 1997</i>	A bushfire safety authority under Section 100B of the <i>Rural Fires Act 1997</i> will not be required pursuant to Section 4.41 of the EP&A Act. However, a bushfire assessment in accordance with NSW Rural Fire Service <i>Planning for Bushfire Protection 2019</i> will be carried out to inform the EIS.
<i>Water Management Act 2000</i>	<p>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 of the <i>Water Management Act 2000</i> pursuant to Section 4.41 of the EP&A Act.</p> <p>There are no watercourses occurring within the Impact Area, and as such construction works in a watercourse is not likely. Any works near or within the</p>

Approval	Requirement
	watercourse on the northern boundary of the Impact Area will be carried out in accordance with DPIE's various guidelines for controlled activities.
Other NSW approvals	
<i>Conveyancing Act 1919</i>	<p>The final Impact Area will require a separate lease from the owner of the affected land. Lease of a solar farm site is treated as a lease of premises, regardless of whether the lease will be for more or less than 25 years. The plan, which illustrates the Impact Area (Figure 4) will not constitute a 'current plan' within the meaning of Section 7A of the <i>Conveyancing Act 1919</i> and therefore will not require subdivision consent under Section 23G Conveyancing Act.</p> <p>Section 23G of the Conveyancing Act may also apply if subdivision for the purpose of construction, operation, and maintenance of a substation is required.</p>
Section 1.3 of the EP&A Act	<p>Relevant objectives of the EP&A Act are:</p> <ul style="list-style-type: none"> <i>(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,</i> <i>(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental, and social considerations in decision-making about environmental planning and assessment,</i> <i>(c) to promote the orderly and economic use and development of land,</i> <i>(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities, and their habitats,</i> <i>(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),</i> <i>(g) to promote good design and amenity of the built environment,</i> <i>(j) to provide increased opportunity for community participation in environmental planning and assessment.</i> <p>The above will all be considered in the EIS.</p>
Section 4.15 of the EP&A Act	<p>Pursuant to Section 4.15 of the EP&A Act the consent authority must consider the following relevant matters for consideration:</p> <p>Environmental planning instruments for the Project including:</p> <ul style="list-style-type: none"> • SEPP (Planning) 2021 • SEPP (TI) 2021

Approval	Requirement
	<ul style="list-style-type: none"> SEPP (Biodiversity and Conservation) 2021¹⁰ Other SEPPs as relevant to the project <p>Relevant development control plans for the Project including:</p> <ul style="list-style-type: none"> Darlington Point & Coleambally DCP¹¹ <p>The above will all be considered in the EIS.</p>

Mandatory considerations - Considerations under other legislation

Biodiversity Conservation Act 2016	The likely impact of the Project on biodiversity values as assessed in the biodiversity development assessment report. The Minister for Planning and Public Spaces may (but is not required to) further consider under that Act the likely impact of the Project on biodiversity values.
Environmental Planning and Assessment Regulation 2021 (EPA Reg)	<p>Section 24</p> <p>(1) A development application must—</p> <ul style="list-style-type: none"> (a) be in the approved form, and (b) contain all of the information and documents required by: <ul style="list-style-type: none"> (i) the approved form, and (ii) the Act of this Regulation, and (c) be submitted on the NSW planning portal. <p>Section 190</p> <p>(1) An environmental impact statement must contain the following information.</p> <ul style="list-style-type: none"> (a) the name, address and professional qualifications of the person who prepared the statement, (b) the name and address of the responsible person, (c) the address of the land— <ul style="list-style-type: none"> (i) to which the development application relates, or (ii) on which the activity or infrastructure to which the statement relates will be carried out (d) a description of the development, activity or infrastructure, (e) an assessment by the person who prepared the statement of the environmental impact of the development, activity or infrastructure, dealing with the matters referred to in this Division. <p>(2) The person preparing the statement must have regard to</p> <ul style="list-style-type: none"> (a) for State significant development- <i>the State Significant development Guidelines</i> <p>(3) An environmental impact statement must also contain a declaration by the person who prepared the statement of the following.</p> <ul style="list-style-type: none"> (a) the statement has been prepared in accordance with this Division, (b) the statement contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure, (c) the information contained in the statement is not false or misleading

¹⁰ The Murrumbidgee LGA is not listed in any of the relevant Schedules of the SEPP (Biodiversity and Conservation) 2021, therefore, Chapters 3 and 4 of the SEPP (Biodiversity and Conservation) 2021 do not apply to this proposal.

¹¹ [Development Control Plans & Codes | Murrumbidgee Council \(nsw.gov.au\)](https://www.nsw.gov.au/development-control-plans-codes)

Approval	Requirement
	(d) for State significant development or State significant infrastructure—the statement contains the information required under the Registered Environmental Assessment Practitioner Guidelines
	Section 192
	(1) An environmental impact statement must contain the following. <ul style="list-style-type: none"> (a) a summary of the environmental impact statement, (b) a statement of the objectives of the development, activity or infrastructure, (c) an analysis of feasible alternatives to the carrying out of the development, activity or infrastructure, considering its objectives, including the consequences of not carrying out the development, activity or infrastructure, (d) an analysis of the development, activity or infrastructure, including— <ul style="list-style-type: none"> (i) a full description of the development, activity or infrastructure, (ii) a general description of the environment likely to be affected by the development, activity or infrastructure and a detailed description of the aspects of the environment that are likely to be significantly affected, and (iii) the likely impact on the environment of the development, activity or infrastructure, and (iv) a full description of the measures to mitigate adverse effects of the development, activity or infrastructure on the environment, and (v) a list of the approvals that must be obtained under another Act or law before the development, activity or infrastructure may lawfully be carried out, (e) a compilation, in a single section of the environmental impact statement, of the measures referred to in paragraph (d)(iv), (f) the reasons justifying the carrying out of the development, activity or infrastructure, considering biophysical, economic and social factors, including the principles of ecologically sustainable development set out in Section 193

Mandatory considerations - Environmental planning instruments

Murrumbidgee LEP (2013)	The EIS will consider: <ul style="list-style-type: none"> - the relevant objectives and land uses for RU1 zone - Part 4 and relevant details for minimum lot sizes for subdivisions in Zone RU1 - Additional local provisions noted under Part 6
Murrumbidgee Local Strategic Planning Statement 2020 ¹²	Murrumbidgee Council's Local Strategic Planning Statement envisages a thriving and prosperous region over the next 20 years and identifies what needs to be done to maximise opportunities for jobs and development. The economic growth strategic agenda has identified 'EG14 Renewable energy projects' as an ongoing priority. Council's ambition is to actively engage with

¹² [Local-Strategic-Planning-Statement.pdf \(nsw.gov.au\)](https://www.nsw.gov.au/local-strategic-planning-statement.pdf)

Approval	Requirement
	proponents and ensure appropriate conditions are included in any development consents for renewable energy developments.

4.2 Local Government

4.2.1 Murrumbidgee Local Environmental Plan 2013

The Murrumbidgee LEP sets out the framework for the planning and development of land within the Murrumbidgee Shire. Even though the Boags Creek proposal is considered SSD and will be determined by the Minister for Planning and Environment, the land uses and objectives prescribed in the Murrumbidgee LEP have still been considered.

The Project Area is located on land zoned RU1 - Primary Production. The objectives of zone RU1 as stated in the Murrumbidgee LEP are:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base
- To encourage diversity in primary industry enterprises and systems appropriate for the area
- To minimise the fragmentation and alienation of resource lands
- To minimise conflict between land uses within this zone and land uses within adjoining zones.

Although electricity generation is not listed as permissible on land zoned RU1 under the Murrumbidgee LEP, Division 4, Section 2.35 and 2.36(1)(b) of the TISEPP states development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed rural, industrial, or special use zone.

During operation, sheep grazing may continue on the property, preserving, in part, the historical RU1 land use. The site on decommissioning would be returned to its full existing land capability.

4.3 Commonwealth Legislation

4.3.1 Environmental Protection and Biodiversity Conservation Act 1999

The EPBC Act provides an assessment and approval process for actions likely to cause a significant impact on Matters of National Environmental Significance (MNES). These include:

- World Heritage properties.
- National Heritage places.
- Wetlands of international importance (listed under the Ramsar Convention).
- Listed threatened species and ecological communities.
- Migratory species protected under international agreements.
- Nuclear actions (including uranium mines).
- Commonwealth marine areas.
- The Great Barrier Reef Marine Park.
- A water resource, in relation to coal seam gas development and large coal mining development.

Approval by the Commonwealth Environment Minister is required if an action is likely to have a significant impact on a MNES. Assessments of significance based on criteria listed in Significant Impact Guidelines 1.1 issued by the Commonwealth (Commonwealth of Australia 2013) are used to determine whether the proposed action is likely to have a significant impact (i.e. is likely to be considered a 'controlled action').

A search of the Commonwealth Protected Matters Search Tool (refer to Appendix J of the PEA) indicated five (5) threatened ecological communities, 29 threatened species and eight (8) migratory species in the search area (5km buffer of Impact Area). Studies to determine the presence and likelihood of impact to these species/communities would be undertaken during the preparation of the EIS.

A summary of the EPBC Act search report is provided in Table 7 and the full search results can be found in the PEA in Appendix F

Table 7: Summary of EPBC Protected Matters Search Report

Protected Matter	Entities within the search area
World Heritage Properties	None
National Heritage Places	None
Wetlands of International Significance (Ramsar)	4 ¹³
Threatened Ecological Communities	5
Threatened Species	29
Migratory Species	8
Listed Marine Species	15
Commonwealth lands	None
Commonwealth Heritage places	None
Critical habitats	None
Commonwealth reserves (terrestrial)	None
State and Territory reserves	None
Regional Forest Agreements	None
Nationally Important Wetlands	None
EPBC Act Referrals	3
Bioregional Assessments	None

Bilateral Agreement

The NSW Assessment Bilateral Agreement (the Agreement) streamlines the assessment process for major projects that require both NSW and Australian Government environmental approvals. It is made under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Under the Agreement, the NSW Government assesses development applications on behalf of the Australian Government. The Australian Government remains the decision-maker for the EPBC Act approval, considering the assessment report prepared by NSW's Department of Planning and Environment.

¹³ The closest being Hattah-kulkyne lakes 300-400km upstream of the site, no RAMSAR sites are downstream.

This process will be investigated following further targeted ecological surveys of the site and as part of the EIS process.

4.3.2 Native Title Act 1993

The *Native Title Act 1993* provides a legislative framework for the recognition and protection of common law native title rights. Native title is the recognition by Australian law that Indigenous people had a system of law and ownership of their lands before European settlement. Where that traditional connection to land and waters has been maintained and where government acts have not removed it, the law recognises this as native title.

People who hold native title have a right to consult or continue to practise their law and customs over traditional lands and waters while respecting other Australian laws. This could include visiting to protect important places, making decisions about the future use of the land or waters, hunting, gathering, and collecting bush medicines.

Further, when a native title claimant application is registered by the National Native Title Tribunal, the people seeking native title recognition gain a right to consult or negotiate with anyone who wants to undertake a project on the area claimed. Where native title does exist in relation to the Impact Area, Edify will comply with the provisions of the *Native Title Act 1993*. A search of the National Native Title Tribunal website (NNTT 2018) indicates no native title claims, land use agreements, applications, or determinations within the Impact Area.

5 Community Engagement

Edify is a long-term owner and operator of renewable energy projects. This makes an important difference in our community engagement approach since we are establishing relationships with communities during the development phase that will endure for the lifetime of the Projects.

Community and stakeholder consultation will be integral to the Project. Edify has begun consultation with a wide range of relevant Local Government and State government agencies, neighbours, community groups and other interested parties.

In accordance with the NSW DPE Social Impact Assessment Guidelines, Edify has conducted the first phase of the SIA. This involved SIA scoping and initial assessment, as well as refining and planning for further engagements with local stakeholders. The SIA Worksheet is provided in Appendix B

Refer to Appendix C for copies of correspondence with stakeholders. In addition, Table 8 summarises Edify's proposed consultation and community engagements.

Table 8: Consultation and Community Engagement throughout EIS

Consultation Guide		
Phase	Actions/Tools	Stakeholders
Pre-lodgement and development of EIS	FAQ's Meetings – one on one Presentations Project email address Project Website Letterbox drop Feedback collation and mitigation options	Community Landowners Council Government departments Neighbours Local businesses Media
EIS public exhibition and determination	FAQ's Drop-in session(s) Letters Letterbox drop status update Community Information Sessions	Community Neighbours Landowners
Post approval (assuming approval granted)	Letters Letterbox drop status update Local Contractor Presentation and EOI Register	Community Local businesses Neighbours Landowners Council
Construction and commissioning	Local consultation with landowners and neighbours Local Contractor Presentation and EOI Register Local Council Presentations FAQ's Drop-in session(s) Letters Letterbox drop status update Support to landowner team	Community Neighbours Landowners Council

Edify has prepared a Community Engagement Plan (CEP) during early phases of the Project to provide a framework to further engage with the community and stakeholders about the Project and ensure opportunities to provide input into the assessment and development process are understood. Stakeholders were identified as those potentially being impacted by the project or having an interest in the Project itself. The CEP will set out the Project's community engagement approach and minimum requirements with interested parties including representative bodies (e.g. Murrumbidgee Council, Local Aboriginal Land Council group, community groups, and neighbours to the site).

As the CEP is implemented, the following activities will occur:

- Keep the residents and broader community informed in all stages of the Project through media avenues including advertisements in local radio and newspaper.
- Face to Face meetings with adjacent landholders, stakeholders and residents as required.
- A project website that will be updated at each project milestone and email address to inform the broader community.
- Preparation and dissemination of a feedback form to better understand the community's sentiment toward solar development and the development of the project. This will be made available at meetings and on Edify's project website.
- Hold an information session during the development stages providing access to specialists and project information.
- Develop and implement a benefit sharing scheme in consultation with the community and stakeholders.
- Establishment of a register to record contact with stakeholders including potentially affected landholders.

The CEP would aim to ensure that there is effective, ongoing liaison with the community. Measures to reduce adverse impacts and promote positive impacts would be identified in the EIS and appropriate management plans developed for the Project. Agency consultation would also take place in accordance with any requirements of the SEARs.

5.1 Aboriginal Community Consultation

Edify Energy acknowledges the Wiradjuri People as the traditional owners of the lands encompassing Boags Creek and the broader vicinity where our project is situated, and as such will be inviting the Wiradjuri people to participate in and be an integral part of the Aboriginal Cultural Heritage Assessment (ACHA) for the project.

The NSW DPHI, Office of Environment, Energy and Science (formerly OEH), acknowledges that Aboriginal people are the primary determinants of the significance of their heritage. It is acknowledged that Aboriginal people should be involved in the Aboriginal heritage planning process and are the primary source of information about the value of their heritage. This includes the best management and conservation measures for Aboriginal heritage and the way in which their cultural information (particularly sensitive information) is used (OEH 2011:2). Edify considers that proactive engagement and consultation with the local Aboriginal community is regarded as an integral part of the process of investigating and assessing Aboriginal cultural heritage.

As the Project's SEARs are being requested to inform the forthcoming EIS process, consultation with the Aboriginal community will be commenced under the due legislative process and accordingly undertaken as part of EIS studies. Aboriginal community consultation undertaken for this project will follow the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010) (Consultation Requirements). The Consultation Requirements outline a four stage Aboriginal consultation process and mandate specific timeframes for each stage.

5.2 Consultation to date

Adjacent landowners and those situated within 4.0 km of the Impact Area have been initially contacted via registered mail containing Project specific materials such as an introductory letter, concept site map and FAQ's, to inform them about the Project and offer them the possibility to meet Edify staff. Following the registered mail, various calls and emails have been shared with the neighbouring landholders. Additional one on one meetings will be proposed with adjacent landholders or community groups that wish to discuss the Project more and raise any opportunities or concerns.

Edify's Development Manager plans to conduct site visits starting in H2 2024 and continuing throughout the project's proposed timeline into 2025. During these visits, the manager will aim to meet with most of the stakeholders and any additional individuals who are available for consultation.

Edify has initially provided a Q&A sheet to community inquiries by drawing from our extensive experience in previous projects, focusing on key discussion points such as:

- Visual amenity changes to the site
- Fragmentation and isolation of agricultural land
- Site access roads and their usage
- The viability of grazing sheep within the solar farm ('Agri-solar')
- Implications for neighbouring landholders regarding insurance or property values, and
- Alternative sites and other potential projects occurring in the area.

During the EIS phase, Edify plans to meet with all neighbours within 4km of the Project and will maintain regular emails, calls, and letters with non-associated receivers within 4km of the Project. Furthermore, Edify will identify and maintain regular contact with any non-associated receiver or community group that wishes to be updated on a regular basis. All stakeholders will be encouraged to visit Edify's dedicated project website, to receive regular updates once the website is established during the EIS phase.

5.2.1 Griffith Local Aboriginal Land Council (LALC) and other representative Aboriginal parties

In advance of the submission of this Scoping Report, Edify Energy have consulted with the Griffith LALC and provided information on the proposed Project.

An initial email was sent 13 June 2024 to introduce the Edify Development Manager and the Boags Creek Solar Farm site, Edify proposed to follow up with regular Project updates. Details of this communication are provided in Appendix C.

This represents a continuation of Edify's relationship with Griffith LALC, as Edify have maintained relations with Griffith LALC since the inception and through operation of Edify's Darlington Point Solar Farm (approx. 2.5km NE of the proposed Boags Creek project).

5.2.2 TransGrid

Edify will liaise with TransGrid once connection studies commence.

5.2.3 Murrumbidgee Regional Council

Edify have initially met with Murrumbidgee Council (20th June 2024) to begin consultation for the project. As the project progresses, we will establish meetings with Council representatives as required, to provide Council with an update on the Project, and gather feedback on the initial planning efforts that support this Scoping Report. Edify will continue to share correspondence with Council as the planning process matures.

5.2.4 State and Federal Members

In conjunction with community member engagements, a letter of information was sent on 13 June 2024 to the office of the Federal Member for the Farrer Electorate (Susan Ley) as well as the Member of Parliament of NSW for the Murray electorate (Helen Dalton) (See Appendix C).

5.2.5 Industry

The Project area has numerous Poultry Farms on the southern and eastern boundaries. Edify has been liaising with Baiada Poultry since 2022 regarding the proposed easement.

5.3 Community Investment

As a leading renewable energy developer, Edify is committed to supporting the communities that host our clean energy projects with positive and lasting social, environmental, and economic benefits.

Edify has begun early consultation with Murrumbidgee Council, Edify has acknowledged the need for a voluntary planning agreement (VPA) for the Project. Council provided Edify with correspondence on 2 July 2024 outlining expectations surrounding the developer contributions associated with the VPA. These conversations with Council will progress as the Project moves through the EIS process.

Edify and Murrumbidgee Council have previously negotiated a successful VPA for Darlington Point Solar Farm.

5.4 Consultation Summary

5.4.1 Consultation Feedback to date

Council

Feedback positive, Council shared expectations around VPA and advised the local community is well experienced in understanding first-hand risks and opportunities associated with utility-scale renewable energy projects, due to various operational projects such as Edify Energy's Darlington Point Solar Farm (333MWdc) and Riverina Energy Storage System (150MW/300MWh). However, Council also cautioned that the local community is experiencing 'engagement fatigue' in recent times, recommending that Edify undertake targeted consultation with community members once detailed studies are drafted during the EIS-preparation phase

Griffith LALC

No feedback received yet.

State and Federal Parliament Members

No feedback received yet.

Industry

Neutral feedback, Edify and surrounding industry are continuing discussions.

Wider Community

Positive feedback based on Edify's Darlington Point Solar Farm and BESS.

5.4.2 Consultation Commitments

Edify commits the following consultation methods during the EIS phase.

- Face to face meetings with neighbours and stakeholder groups as required.
- Maintenance of the project website to provide updates on progress and enable stakeholders to contact the project team.
- Notification and provision of project information to stakeholders as the outcomes of investigations become available and concept design parameters are formulated.
- Actively pursuing opportunities for developing a local community benefit sharing scheme in partnership with the community.
- Maintaining a communication's register to accurately record all contact with stakeholders whilst respecting people's privacy.
- Hosting further drop-in sessions prior to lodgement of the Development Application, with access to specialists from within the project team as required

5.4.3 Consultation Monitoring and Evaluation

The effectiveness of the proposed engagement will be closely monitored, reviewed, and adapted to ensure robust community participation throughout the project. Regular feedback will be solicited from stakeholders during meetings, site visits, and through various communication channels such as calls, emails, and the project website. This feedback will be systematically reviewed to identify any emerging concerns or areas for improvement.

To adapt the engagement strategy as needed, Edify will schedule periodic evaluations of the outreach efforts, incorporating insights gained from community interactions. This will include assessing the responsiveness of the engagement activities, the clarity of information provided, and the overall satisfaction of stakeholders with the consultation process. Based on these evaluations, the engagement plan will be adjusted to better meet community needs, such as increasing the frequency of updates, offering additional one-on-one meetings, or expanding the scope of information shared.

By maintaining an open line of communication and being responsive to feedback, Edify aims to foster ongoing community involvement and ensure that the engagement process remains effective and inclusive throughout the project's duration.

6 Proposed Assessment of Impacts

This section highlights the issues that require further analysis in the EIS and specifies the level of assessment needed for each issue. A preliminary environmental assessment was conducted to identify potential concerns related to the proposed construction and operation of the Project. The following factors were considered in determining which issues need further evaluation in line with the Scoping Report Guidelines:

- The scale and nature of the Project's potential impacts and the sensitivity of the receiving environment
- The likelihood of the Project contributing to cumulative impacts alongside other upcoming projects in the area
- The extent to which impacts can be avoided, minimised, or offset, based on the knowledge available at the scoping stage.
- The complexity of the technical assessment required for the Project.

Each issue and its corresponding level of assessment (detailed or standard) are outlined in Table 9. Detailed assessments are necessary for environmental aspects that pose a potential high constraint to development, as well as for other aspects that, while not presenting an elevated risk, still require thorough evaluation. The issues have been categorised to align with those identified in the Scoping Report Guidelines.

A Scoping Summary Table is included in Appendix A. Key issues requiring more detailed assessments have been identified based on a preliminary review of the Project Area and consideration of other renewable developments in NSW.

The EIS will be prepared in accordance with the SEARs to be issued by DPHI in response to this Scoping Report, and will incorporate the issues, which have been outlined in this section and matters requiring further assessment in the EIS and the level of assessment that should be undertaken for each matter.

Table 9: Proposed Assessments

Level of Assessment	Aspect
Detailed	Amenity – Landscape and Visual Biodiversity Heritage - Aboriginal Access - Traffic and Transport
Standard	Amenity – Noise and Vibration Social Heritage – Historic Hazards and Risks - Hazards, Bushfire Air Quality Land Resources (agriculture and soils) Water Resources (flooding and hydrology) Waste Management

6.1 Assessment of Impacts

6.1.1 Biodiversity Assessment Approach

The construction and operation of the Project may impact threatened species and Threatened Ecological Communities (TECs) listed under the BC Act and EPBC Act, necessitating their consideration in the EIS prepared under Part 4 of the NSW EP&A Act.

Given the presence of recorded biodiversity values within the Project Area, the Biodiversity Assessment Method (BAM) will need to be applied, and a streamlined Biodiversity Development Assessment Report (BDAR) is proposed to be prepared. Candidate species for further assessment will be selected based on their potential vulnerability to the Project and the impact on their habitat. A preliminary list of these species has been provided.

The following impacts upon biodiversity have been considered as having potential to occur during the construction and operation of the Project:

- Clearing, removal and disturbance of vegetation
- Disturbance within the watercourse
- Introduction and spread of invasive species and weeds
- Disturbance or displacement of fauna
- Microclimate impacts due to shading, water availability, temperature, and
- Movement barrier and collision hazard by perimeter fencing.

Mitigation measures for threatened species, TECs, native vegetation communities, hydrology, and construction impacts will be addressed within the EIS. There is also a risk of spreading weeds on and off-site, and mitigation measures to reduce this risk will be considered in the EIS.

6.1.1.1 Biodiversity Further Assessment

Based on the results of the Preliminary Environmental Assessment (PEA) (Section 7), the Impact Area has been selected on the basis that it avoids native vegetation.

Features of relevance in the Impact Area include two (2) farm dams and a waterway that exists on the properties, as well as several stands and patches of vegetation within and along the boundaries of the proposal site. The site has a generally flat topography at around 135m elevation and lies over a predominantly granite geology and associated landform.

Methodology

Edify has conducted a preliminary desktop assessment of the Project to identify potential high-level constraints and major risks. For a more detailed analysis, Edify engaged Kleinfelder Australia to carry out a PEA of the Project Area. Additionally, Kleinfelder was commissioned to perform a Land Category Assessment to confirm potential Category 1-exempt land within the Project Area.

Kleinfelder completed these reports by performing desktop database searches and a preliminary field assessment conducted over two days, 30 and 31 May 2023. The detailed findings of the PEA, including the identification of Category 1 land are provided in Appendix F.

A BDAR will be completed after the SEARs have been received and a final Impact Area is determined. The BDAR will aim to follow the small area streamlined assessment module under the BAM, as clearing of native vegetation is likely to be under the 3ha limit for a 100ha minimum lot size property.

The following is a summary of the desktop and field surveys completed to-date, featuring key biodiversity matters that may pose constraints within the Survey Area that include:

- Plant Community Types listed as threatened under the NSW *Biodiversity Conservation Act 2016* (BC Act) or Commonwealth *Environment Protection and Biodiversity Act 1999* (EPBC Act).
- Likelihood of occurrence for threatened species listed under the BC or EPBC Act.
- Habitat for threatened species listed under the BC or EPBC Act.
- Prescribed biodiversity impacts under the Biodiversity Assessment Methodology (BAM).
- Biodiversity Values mapped under the BC Act.
- Serious and Irreversible Impacts (SII).
- Riparian and/or terrestrial corridors and connectivity and wetland inundation areas
- Groundwater Dependent Ecosystems

6.1.2 Aboriginal Heritage

The Project area is within the Wiradjuri Region, whose people are the largest Aboriginal Nation in NSW. Wiradjuri people are originally from the land that spans a vast area in central New South Wales, on the plains running north and south to the west of the Blue Mountains Snowy Mountains.

It is likely that the Wiradjuri people who inhabited the region surrounding the Impact area lived in small, mobile family groups, which frequently congregated for trade, marriage, and ceremonial events. Periodically, Wiradjuri groups participated in the Bogong moth collections during the summer months in the Great Dividing Range mountains. These moths were harvested from caves and rock crevices between October and March, coinciding with their aestivation period.

This food source held significant importance, particularly for the Aboriginal Ngunawal and Ngarigo peoples residing in the highlands. The abundance of these high-energy resources facilitated the assembly of large groups in one location, enabling gatherings of people from various tribes, including the Wiradjuri, whose usual territories extended up to 300 kilometres away. These gatherings served as occasions for initiation ceremonies, marriage arrangements, corroborees, trade, and the exchange of knowledge, including discussions and establishment of lore and laws¹⁴.

A search of the Aboriginal Heritage Information Management System (AHIMS) on 3 May 2024 identified 47 Aboriginal sites recorded in or near the Project site (1km buffer). No Aboriginal places were declared in or near the project location. Refer to AHIMS search results in Appendix D.

Landforms, vegetation, and soils over much of the Project site have been heavily disturbed by paddock levelling, grazing, and clearing for agriculture. This is likely to reduce the potential for Aboriginal heritage places of significance in the affected areas. It is noted that field assessment is required to confirm this and that any Aboriginal heritage sites, items, artefacts identified would be a moderate to high constraint, requiring impact mitigation.

6.1.2.1 Aboriginal consultation

Edify has consulted with Griffith LALC and provided information on the proposed Project. An initial call was shared 25 May 2024 to introduce the Edify Project Manager and the Boags Creek Solar Farm site, followed by regular emails with Project updates.

¹⁴ Edify Energy, Darlington Point Solar Farm, Environmental Impact Statement, 16 April 2018 prepared by ARUP ref: 254766

During the EIS phase, additional consultation with Aboriginal stakeholders would be undertaken in accordance with clause 80C of the *National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010* following the consultation steps outlined in the Aboriginal Cultural Heritage Consultation Requirements for Proponents provided by OEH/NSW Heritage. A summary of the consultation process includes:

1. Registration and initial consultation and registration of Aboriginal community members.
2. Review of survey methodology by Registered Aboriginal Parties (RAPs).
3. Completion of field work and reporting.
4. Review of report by RAPs.
5. Report finalisation.

6.1.2.2 Potential Impacts and Further Assessment

Construction has the potential to disturb unknown sites of Aboriginal cultural heritage significance. Impacts during operation and decommissioning are expected to be minimal.

An Aboriginal Cultural Heritage Assessment Report (ACHAR) and associated stakeholder consultation will be completed as part of the EIS. This would include further consultation with the Wiradjuri people as well as any other relevant stakeholders in accordance with the *Aboriginal Cultural Heritage Requirements for Proponents* (DECC 2010). Should any Aboriginal heritage sites be identified that may be potentially affected by the Project, mitigation measures will be determined in accordance with the *Guide to Investigating, assessing, and reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011).

The required mitigation measures will be implemented during construction activities through a specific Cultural Heritage Management Plan (CHMP) as part of the Construction and Environmental Management Plan (CEMP) that would be prepared for the Project. Similarly, any ongoing management and mitigation measures would be implemented through an Operational Environmental Management Plan (OEMP).

6.1.3 Visual Amenity and Landscape Character

The preliminary visual assessment stage is used to identify viewpoints that require a detailed assessment in stage 2. Preliminary Assessment Tools provided in the Technical Supplement – Landscape and Visual Impact Assessment, Large-Scale Solar Energy Guideline (NSW Department of Planning and Environment, 2022) have been used to undertake this assessment. The tools are designed to identify where community and landholder consultation should be focused, and to eliminate the need to assess viewpoints that are likely to experience very low impacts. The tools rely on quantitative data collected during the desktop assessment, including.

The methodology for the preliminary visual assessment, as outlined in the Technical Supplement, is as follows:

- Identify all viewpoints from public roads and rail lines within 2.5 km of the proposed development.
- Identify other public and private viewpoints within 4 km of the proposed development.
- Calculate the distance of each of these viewpoints from the nearest point of the proposed development.
- Determine the 'relative height difference' between the proposed development and each viewpoint.
- Plot each viewpoint on the Preliminary Assessment Tool

- Vertical Field of View (within Technical Supplement) to determine the indicative vertical field of view (as either 1,2,3 or 4+ degrees)
- Measure the worst-case horizontal field of view of the project from each viewpoint (not considering topography or vegetation)
- Compare the vertical and horizontal fields of view using the matrix in Table 1 of Technical Supplement, to determine whether detailed visual assessment of each viewpoint is required.

Edify conducted an initial evaluation of the visual impact of the project, the outcome of this initial assessment is shown in Appendix G

Table 10: Preliminary Visual Assessment Tool Results

Viewpoint (sorted - closest to furthest from Project)	Relative Height difference ¹⁵ (m)	Distance from viewpoint (m)	Vertical field of view (degrees)	Horizontal field of view (degrees)	Level of assessment required
Kidman Way (general, along western site boundary)	0	150	2	130+	Detailed Assessment Required
Intersection Kidman Way and Ringwood Rd (SW Project boundary)	0	150	2	90	Detailed Assessment Required
R1	1	200	2	87	Detailed Assessment Required
R2	1	200	2	75	Detailed Assessment Required
R6	1	280	2	145	Detailed Assessment Required
R7	0	360	1	80	Detailed Assessment Required
R5	3	363	2	148	Detailed Assessment Required
R3	3	450	1	130+	Detailed Assessment Required
R4	3	470	1	130+	Detailed Assessment Required
R8	0	710	1	102	Detailed Assessment Required
R9	3	730	1	56	No Assessment Required
R25	0	1030	1	52	No Assessment Required
R34	2	1160	1	111	Detailed Assessment Required

¹⁵ Assuming a maximum panel tilt height of 4.2m

Viewpoint (sorted - closest to furthest from Project)	Relative Height difference ¹⁵ (m)	Distance from viewpoint (m)	Vertical field of view (degrees)	Horizontal field of view (degrees)	Level of assessment required
R21	0	1350	0	57	No Assessment Required
R28	3	1369	0	63	No Assessment Required
R27	3	1378	0	61	No Assessment Required
R20	0	1390	0	57	No Assessment Required
R16	0	1500	0	62	No Assessment Required
R37	0	1518	0	44	No Assessment Required
R23	0	1530	0	42	No Assessment Required
R10	3	1531	0	49	No Assessment Required
R17	0	1550	0	60	No Assessment Required
R26	1	1554	0	53	No Assessment Required
R19	0	1587	0	61	No Assessment Required
R22	0	1610	0	47	No Assessment Required
Intersection Ringwood Rd and Donald Ross Drive (SE Project boundary)	0	1620	0	43	No assessment required
R24	0	1630	0	44	No Assessment Required
R15	0	1690	0	68	No Assessment Required

Viewpoint (sorted - closest to furthest from Project)	Relative Height difference ¹⁵ (m)	Distance from viewpoint (m)	Vertical field of view (degrees)	Horizontal field of view (degrees)	Level of assessment required
R38	0	1740	0	78	Detailed Assessment Required
R29	1	1884	0	44	No Assessment Required
R13	0	1900	0	65	No Assessment Required
R14	0	2000	0	68	No Assessment Required
R30	5	2000	0	49	No Assessment Required
R18	0	2212	0	54	No Assessment Required
R11	0	2326	0	68	No Assessment Required
Donald Ross Drive (Darling Point Solar Farm site access)	0	2600	0	56	No Assessment Required
R39	0	3312	0	43	No Assessment Required
R31	2	3316	0	53	No Assessment Required
R12	0	3433	0	46	No Assessment Required
R36	0	3433	0	52	Detailed Assessment Required
R32	0	3485	0	49	No Assessment Required
R33	0	3900	0	43	No Assessment Required
R35*	0	4167	0	43	Detailed Assessment Required

*R35 is outside of the required 4km (See Figure 7) assessment radius as noted in the Technical Supplement. Edify will liaise with these landowners during EIS phase and determine if further assessment and mitigation are required.

6.1.3.1 Further assessment

A detailed LCVIA will be undertaken as part of the EIS, which would include photomontages at viewpoints nominated by the Preliminary Landscape Visual Impact Assessment as requiring detailed assessment. The EIS would also consider the potential for the Project to affect local landscape character. Additional consultation following this report with specific affected residences would be undertaken to identify the nature and significance of impacts and the need for mitigation measures. The level terrain in the Impact Area improves the potential effectiveness of vegetation plantings as screening around the site.

6.1.4 Noise

Existing background noise levels within and surrounding the Impact Area are likely to be low and typical of the rural setting. Sources of background noise would include vehicle use along Kidman Way, in addition to equipment used on adjacent rural landholdings.

There are 38 potentially sensitive receivers within 4 km of the Impact Area (Figure 7). Noise impacts, for the most part, only occur during construction (generated by construction vehicles and machinery), with minimal noise likely to be generated during operation. Edify and the construction contractor will adopt best practice mitigation measures during construction such as standard work hours and regular vehicle and machinery maintenance to reduce the risk of adverse noise impacts.

During the operation of the Project, low level noise would be potentially produced by the solar tracking system, the substation and switchgear, battery (HVAC), and any maintenance works undertaken at the site. Noise impacts during operation of the Solar Farm are expected to be very low or, in any case, not expected to be discernibly different than those existing in the surrounding rural environment.

6.1.4.1 Further assessment

A construction and operational noise assessment would be undertaken as part of the EIS to assess potential noise impacts. The assessment would be undertaken in accordance with the *Interim Construction Noise Guideline* (DECC 2009) and *NSW Noise Policy for Industry* (NSW EPA 2017).

6.1.5 Access, Traffic and Transport

The preferred access route to the Project Area is via Kidman Way, which is a designated Local Road Council asset. Further technical studies completed as part of the EIS will investigate the utilisation of Kidman Way for accessing the site from the relevant key Port, to inform management measures to mitigate impacts to the environment or road users.

For additional intrastate logistics, which illustrate the approved highway networks between the surrounding area and the Impact Area, see Figure 10: NSW Combined Higher Mass Limit and Restricted Access Vehicle Map.

NSW Combined Higher Mass Limits (HML) and Restricted Access Vehicle (RAV) Map



Transport
for NSW

Map last updated: 18/03/2024

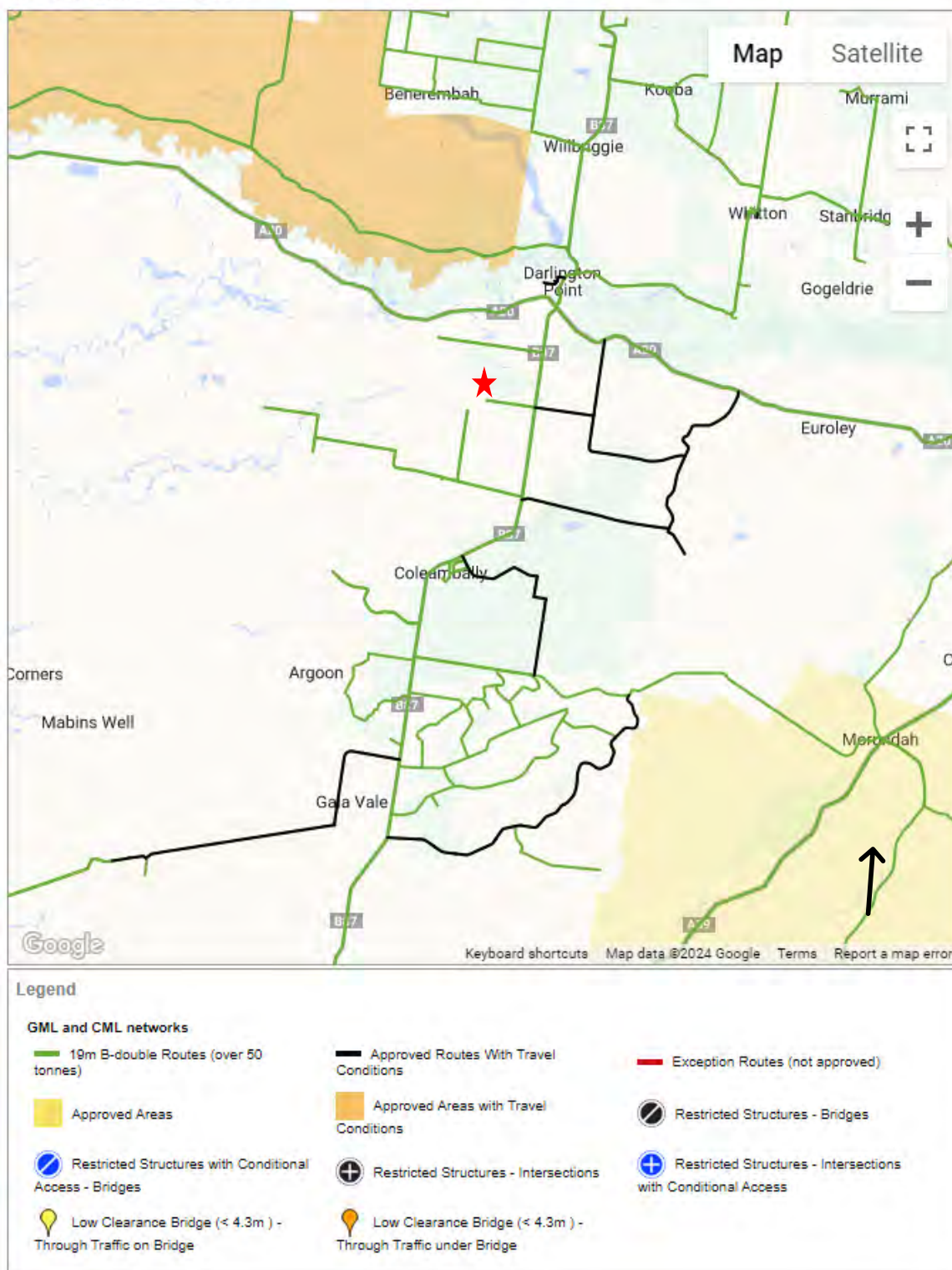


Figure 10: NSW Combined Higher Mass Limit and Restricted Access Vehicle Map

6.1.5.1 Potential Impacts and Further Assessment

During construction there will be a temporary increase in traffic along Kidman Way and surrounds as components are brought to site and construction workers travel to/from the site. This will indirectly lead to some increase in localised noise levels during the main construction period. Traffic management during construction will also need to consider activities during key agricultural activities such as harvesting periods, peak tourism seasons and the associated vehicle movements and their timing. In addition, site access will require the establishment of a new access track to accommodate the delivery of materials to site.

Traffic impacts during operations will be minimal, with approximately five full-time staff at the Solar Farm. Traffic is predicted to be limited to employee vehicle movements for full-time staff, plus a small number of daily vehicle movements associated with ongoing maintenance and associated activities performed by local contractors/consultants.

During the decommissioning phase, a temporary increase in construction traffic would be expected as infrastructure is removed.

A detailed TIA will be included as part of the EIS, implementing the SEARs requirements provided by DPHI, Murrumbidgee Council and Transport for NSW. The TIA will identify the impacts and assess the significance of any impacts on the road network and community during construction, operation, and decommissioning phases. The TIA will also consider the requirement for road upgrades, including turn treatments for main access off Kidman Way. The required mitigation measures would be implemented during construction and operational activities through implementation of detailed Traffic Management Plan (TMP) that would be prepared for the Project for each relevant phase.

6.1.6 Land Use and Resources

The rural land within the region is used primarily for agricultural grazing and homesteads. The Impact Area comprises multiple large rural paddocks which has been largely cleared for pastures and grazing. Land and agricultural activities like those of the Impact Area are widespread in the region. There are no mining or exploration leases over the Impact Area.

There is no BSAL or CICs mapped within the Project Area or the Project locality. The nearest BSAL is located approximately 120 km east of the site.

The land and soils in the Project Area are classified as Class 4 and 6 Figure 12 according to the Land and Soil Capability Assessment Scheme (OEH 2012). This classification indicates slight to moderate limitations for high-impact land uses, which can be managed effectively through specialised practices requiring advanced knowledge, expertise, inputs, investments, and technology. The Soils and Agricultural Assessment confirmed that the Project Area consists of Class 3 soils Figure 19: Verified Land and Soil Class for Impact Area. The impact on agricultural production in the surrounding area and region is expected to be low, temporary, and confined to the Impact Area. More details can be found in the Soils and Agricultural Impact Assessment (Appendix H).

The intention for this Project site will be to retain the current 'agricultural' land use through a re-introduction of sheep grazing to the facility following a rest period after construction is completed. This intended co-location of agri-solar, has been introduced by Edify on the operational Gannawarra Solar Farm in Kerang¹⁶, Victoria with an initial success of 500 head within approximately 125 hectares. In addition, since December 2023 Edify introduced 255 Dorper Ewes to graze within the Darlington Point Solar Farm, which is located approximately 4km east of the Project site. Edify intends to progressively increase the quantity of sheep within Darlington Point Solar Farm based on the successful management of this initial grazing stock. Additional information can be found via Edify's website, with further elaboration provided by the Clean

¹⁶ [See Edify's Gannawarra Solar Farm and 'Agri-solar' practices, with 500 merino sheep](#)

Energy Council¹⁷. As such, the quantity of sheep carrying capacity at Boags Creek will be investigated further throughout the EIS.

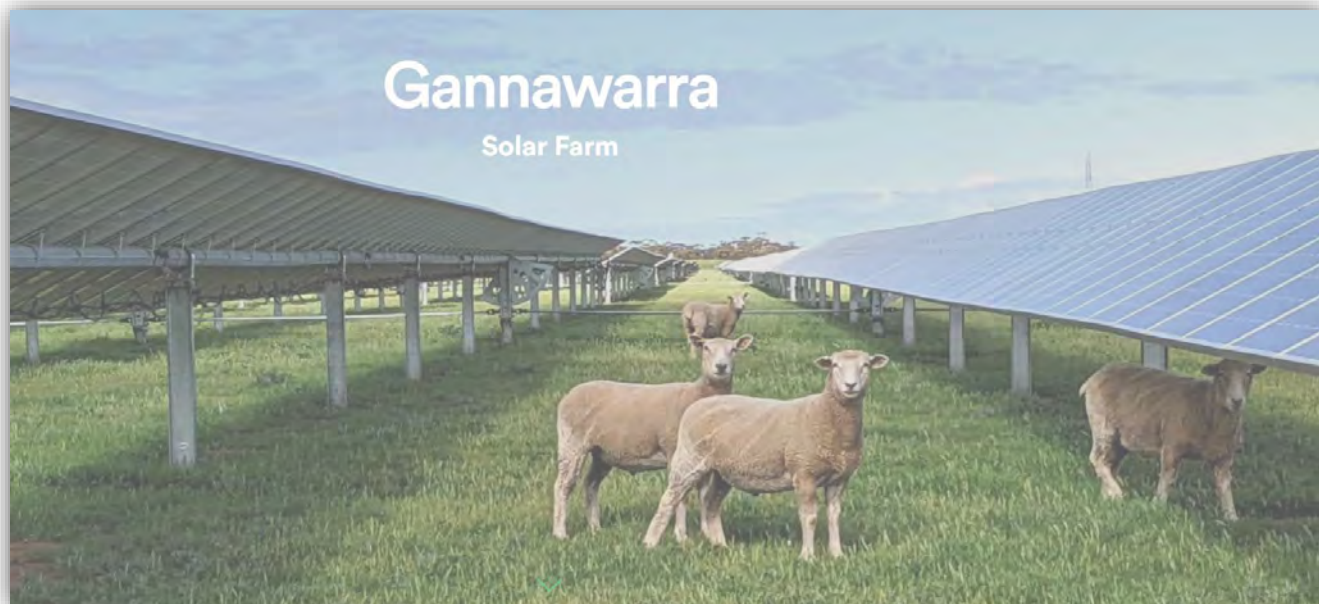


Figure 11: Edify's Gannawarra Solar Farm Sheep.

6.1.6.1 Land Category Assessment

The site is located on land zoned as RU1- Primary Production. This zoning is compatible with Category 1 classification. According to section 6.8(3) of the BC Act, land defined as Category 1 (exempt land) is rural land where clearing can occur without needing an approval. Category 1 - exempt land is to be excluded from assessment under the BAM. For this reason, impacts to Category 1 land do not contribute to the clearing threshold for entry into the NSW BOS. Category 1 exemption applies to rural land (zoned RU1, RU2, or RU3) that was cleared of native vegetation as of 1 January 1990 or lawfully cleared of vegetation between 1 January 1990 and 25 August 2017.

The gazettal of a draft Native Vegetation Regulatory map for the state of New South Wales has been recently completed.

The regulatory map for transitional native vegetation designates a small section of Lot 63 DP750908 as Category 2 Sensitive Regulated Land. The preliminary native vegetation regulatory map indicates that most of the area falls under Category 1 exempt land.

Additionally, all patches of vegetation and isolated trees on the site proposed for development are categorised as Category 2 regulated land, except for the existing Category 2 sensitive regulated land patch which has been avoided in the design.

6.1.6.2 Further assessment

Confirmation of the Land Category mapping in accordance with the requirements Biodiversity Assessment Report (BAR) will be undertaken in the EIS.

¹⁷ [See Clean Energy Council's 'Australian Guide to Agri solar for Large-scale Solar Farms'](#)

6.1.7 Project Land and Soils

Desktop Mapped Project Land and Soils

The Project Area is mapped as Class 4 and 6 Soil Capability Land under the Land and Soil Capability Assessment Scheme.

These classes are defined as:




- **Class 4 High Capability Land:** Land has moderate limitations and can sustain high-impact land uses, such as cropping with cultivation, using more intensive, readily available, and widely accepted management practices. However, careful management of limitations is required for cropping and intensive grazing to avoid land and environmental degradation.
- **Class 6 Low capability land:** Land has very high limitations for high-impact land uses. Land use restricted to low-impact land uses such as grazing, forestry and nature conservation. Careful management of limitations is required to prevent severe land and environmental degradation.

This suggests that agricultural land capable of a wide variety of land uses (cropping, grazing, horticulture, forestry, nature conservation) (OEH 2012).

6.1.7.1 Further Assessment

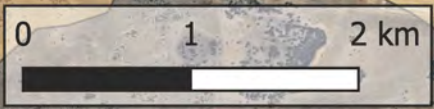
Assessment of the Soil Capability has been undertaken and is outlined in the Soil and Agricultural Assessment in Section 7.2 and Appendix H. No further assessment in the EIS is seen to be required.

Legend

-  Boags Creek Project Area
-  LSC Capability 4
-  LSC Capability 6



Project: Boags Creek Solar Farm
Figure 12.1 LSC Desktop Mapping
Created: 25/07/2024 (AS)



Basemap: Google Satellite
Scale 1: 25,000



6.1.8 Social Impacts

The initial phase of the Social Impact Assessment (SIA) involves a preliminary desktop review to identify potential impacts. This preliminary assessment will be expanded into a comprehensive report in the second phase of the SIA, which will be incorporated into the Environmental Impact Statement (EIS). The full report will offer an in-depth analysis of potential impacts, incorporating feedback from key stakeholders.

The process of identifying potential social impacts began with the use of the updated SIA Scoping Tool, which aligns with the SIA Guideline. This tool helps identify likely social impacts and determines the appropriate level of assessment needed. In this instance, a detailed assessment was deemed necessary.

Key social impacts and benefits identified in the SIA scoping worksheet:

- **Livelihood impacts:** Potential disruptions to farming could lead to decreased agricultural productivity, along with biosecurity concerns and weed risks from increased vehicle traffic.
- **Health and wellbeing impacts:** Increased noise and public safety issues may arise due to heightened truck and vehicle movements.
- **Access and surroundings impacts:** The project's construction and operation could alter the landscape and accessibility in the area.
- **Cultural and community impacts:** The arrival of a new workforce might lead to changes in the community dynamic and pose risks to cultural heritage.
- **Employment and training opportunities:** The project could create new jobs and offer occupational training.
- **Economic benefits:** The local community could experience economic growth from the project's financial contributions.
- **Landholder income diversification:** The project presents opportunities for landholders to diversify their income streams.

The project aims to implement strategies that enhance positive impacts and benefits, such as employing a local workforce and sourcing local supplies, while also mitigating potential negative effects.

6.1.8.1 Further Assessment

Social impacts and benefits will be evaluated according to the guidelines set in the Social Impact Assessment Guideline for State Significant Projects (DPIE 2021e), using the risk assessment matrix outlined in the Technical Supplement Social Impact Assessment Guideline for State Significant Projects (DPIE 2021f). The identification of social impacts will be guided by community and stakeholder engagement activities, alongside SIA field studies, ensuring an integrated approach that maintains consistency, minimises redundancy, and mitigates consultation fatigue. Additionally, the results from technical assessments will be considered to gauge the effects on the community, with insights from existing research and previous SIAs helping to identify social impact.

6.1.9 Hazards and Risks

6.1.9.1 Resilience and Hazards SEPP Screening

A risk screening and risk assessment will be undertaken for the Project, which evaluates the likely risks to public safety, focusing on the transport, handling and use of hazardous materials. The assessment will also consider whether the Project should be considered a hazardous or potentially hazardous industry under Resilience and Hazards SEPP. Appendix 3 of the Applying SEPP 33 Guidelines (DoP, 2011) lists the

industries that may fall within Resilience and Hazards SEPP (former SEPP 33), which do not include solar farms.

6.1.9.2 Bushfire

The EIS will include a Bushfire Risk Assessment and will aim to identify potential hazards and risks associated with bushfires / use of bushfire prone land. The assessment will aim to demonstrate that the proposed solar farm can be designed, constructed and operated to minimise ignition risks and provide for asset protection consistent with the NSW Rural Fire Service Guidelines - Planning for Bushfire Protection 2019.

The Bushfire Risk Assessment and mitigation strategies will be guided by the following factors that contribute to bushfire risk:

- fuels, weather, topography, predicted fire behaviour and local bushfire history.
- suppression resources, access (roads, tracks) and water supply; and
- values and assets.

Mitigation will be a combination of complementary strategies, all of which are required to provide the best possible protection outcome for the solar farm and the community.

6.1.9.3 Hazards Further Assessment

The following assessments are proposed during the EIS Phase

- a preliminary risk screening completed in accordance with the State Environmental Planning Policy (Resilience and Hazards).
- Battery Energy Storage System - a Preliminary Hazard Analysis (PHA) prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 – Guideline for Hazard Analysis (DoP, 2011) and Multi-Level Risk Assessment (DoP, 2011). The PHA must consider all recent standards and codes and verify separation distances to on-site and off-site receptors to prevent fire propagation and compliance with Hazardous Industry Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning (DoP, 2011).

6.1.10 Other Environmental Issues

There are a range of potential environmental issues associated with the Project which are not considered to be key issues. These are considered secondary issues for investigation, given the characteristics of the Project and the availability of appropriate safeguards for mitigation. These issues are outlined in Table 11 below.

The impacts and any required mitigation relating to these issues would be addressed at an appropriate level of detail in the EIS, and in response to relevant requirements outlined in the SEARs.

Table 11: Other Environmental Issues

Existing Environment	Potential Impacts	Management and Mitigation
Soils		
The nearest eSpade soils profiles (OEH, 2023) are approximately 7km south of the impact area, the profile indicated a prior stream in stagnant alluvial plain on sand, alluvium lithology and used for quarry/mining.	Construction activities would include minor excavations and vegetation removal which have the potential to cause soil erosion and sedimentation and dust issues, if there is presence of pre-existing erosion and poor soil composition.	<p>The design would provide all weather access at the site during construction and operation to avoid erosion/sedimentation impacts and tracking of soil, after rain events.</p> <p>Soil surveys have been undertaken and an Agricultural Impact Assessment completed for the Scoping Report (Appendix H). Recommendations and mitigations will be highlighted in the EIS with thorough consideration of soil impacts, runoff and potential for erosion and proposed mitigation measures during construction and operation.</p>
Historic Heritage		
<p>A search of the Australian Heritage Database indicated no records within the Project area.</p> <p>Four items are within 10km of the Project area.</p> <ul style="list-style-type: none"> • Tubbo station • Warangesda Aboriginal Mission and Station • Waddi Creek Scar Trees • Court House Group 	Edify considers there to be a low risk of impact to heritage items.	The heritage status of the site would be assessed during fieldwork undertaken as part of the archaeological assessment. Appropriate management measures would be implemented if required.
Contamination		

Existing Environment	Potential Impacts	Management and Mitigation
<p>The EPA contaminated land register did not identify any records for the Murrumbidgee LGA</p> <p>Contamination associated with agricultural activities (e.g. pesticides, petrochemicals) or asbestos construction or insulation materials may still be present on the site.</p>	<p>There is potential that contaminants may be uncovered during excavation activities at the site.</p>	<p>Risks associated with contamination at the site are considered low and therefore no detailed investigation is likely to be required within the EIS. The mitigation measures would require a CEMP to be prepared to manage any contamination identified during site construction.</p>
Air quality		
<p>The air quality in the Project Area is expected to be good and typical of rural settings in NSW with low population density and few industrial pollution sources. Existing sources of air pollution are expected to include vehicle emissions, smoke from seasonal burning. During colder months, solid fuel heating may result in a localised reduction in air quality, particularly if temperature inversions operate overnight.</p>	<p>The construction of the Project is not anticipated to have a significant impact on air quality and would mostly be related to dust during dry periods and vegetation removal. Impacts to air quality during operation would be negligible.</p>	<p>The mitigation measures would require a CEMP to be prepared to manage air quality impacts during the construction phase. There is an opportunity to improve local air quality by maintaining ground cover vegetation under the panels. Water tanks will also be utilised during the Project's construction phase, to suppress potential dust impacts.</p>
Hazard and risk – electric and magnetic fields (EMF)		
<p>Existing powerlines produce EMF at the site. Additional infrastructure which forms part of the Project such as connecting powerlines and substation would produce additional electromagnetic emissions at the site.</p>	<p>The substation, battery storage and network connection would be in the Impact Area. The EMF that would be generated by the proposed powerlines, battery storage and substation is expected to be below the guideline for public exposure and would not be expected to have an adverse impact on human health.</p>	<p>The EMF levels of the proposed powerlines, battery storage and substation would be assessed as part of the EIS.</p>
Utilities		

Existing Environment	Potential Impacts	Management and Mitigation
<p>Transmission Network Service Provider (TNSP) TransGrid, manage and operate the high voltage electricity network in this region of NSW.</p> <p>TransGrid have restrictions on development within powerline easements. For example, TransGrid guidelines state that activities and encroachments are prohibited within a transmission line easement, including 'the installation of fixed plant or equipment', and 'the placing of obstructions within 30 metres of any part of a transmission line structure or supporting guy wire'.</p> <p>Roads or tracks within 20 metres of the centreline of a transmission line 132 kV are prohibited, although roads that cross the transmission line as a thoroughfare may be permitted.</p>	<p>The proposed works would involve works adjacent to the TransGrid utility. The Solar Farm proposes to connect to the TransGrid electricity network at the Darlington Point Substation.</p>	<p>The EIS would assess the Project against the setback and approval requirements of TransGrid. The Solar Farm would be designed to comply with required setback, approval, and consultation requirements network operators.</p>
Waste Management		
<p>The Project would generate several waste streams and utilise a variety of materials during the construction phase.</p>	<p>During construction, general office and refuse materials would be generated as waste. Packaging from panels and other components would require disposal. Limited operational waste would be associated with the Project.</p>	<p>A Concept Waste Management Plan would be incorporated into the CEMP, applying the principles to avoid, re-use and recycle to minimise wastes. Whilst efforts have been taken to limit the quantity of vegetation disturbance, any cleared trees would be repurposed as fauna habitat where possible.</p> <p>Excavated soils for facilities and cable trenches would be re-used to level areas of depressions or rehabilitate any degraded areas on site.</p>

Existing Environment	Potential Impacts	Management and Mitigation
Watercourses and Hydrology		
One minor creek is mapped within the South-western portion of the Impact Area. This was assessed and noted in the PEA, as not considered as a stream order watercourse as it meandered out of a typical line and was braided and diffused.	The Project does not include the extraction of groundwater; however, contamination from construction operations could have an impact on the quality of groundwater if adequate mitigation measures are not taken.	The EIS would assess the impacts to hydrology during construction and operation and include a flood impact assessment and appropriate mitigation measures as required. The dams within the site will be retained.
Aerial mapping shows these waterlines have been highly modified with farm dams created within the water path. The PEA noted Waterbodies on the site include agricultural dams and agricultural channels.	The Project has avoided the farm dams as part of design of the facility.	

6.1.11 Cumulative Impacts

Cumulative impacts, for the purpose of this assessment, relate to the combined potential effects of several types of impacts (e.g. traffic combined with noise, reduction in available accommodation, etc.) as well as the potential for combined impacts with other significant projects either under construction or already established land uses in the local area.

The cumulative impact assessment to be undertaken as part of the EIS is scoped during the Scoping Report phase and is to include consideration of six key questions as outlined Table 12.

Table 12: Key questions - Cumulative Impacts

Scoping Questions	Considerations	Commentary
What to assess	Government strategic planning framework for the area having regard to any relevant legislation, plans, policies or guidelines	Consideration of policies is outlined in Strategic Context
	The Project and other potentially relevant future projects that may be developed over the same time period or similar timeframes as the Project	Consideration of surrounding projects is considered in Table 13
	Potentially material impacts on features including National Parks and other protected areas, environmentally sensitive areas, threatened species and ecological communities, important natural resources, culturally significant resources, key infrastructure and industries, sensitive land use zones, population centres, settlements and residential areas.	Consideration of these impacts is in Proposed Assessment of Impacts (<i>Section 6</i>) and Preliminary Environmental Assessments (<i>Appendix F</i>) and will be further assessed in the EIS
	The likely scale and nature of the cumulative impact of these projects.	Preliminary assessment is outlined in Table 13: Cumulative Impact Scale and will be further assessed in the EIS
What study area	Study area selected for the cumulative impact assessment of each matter will vary depending on the specific characteristics of the assessment matter and the scale and nature of the potential impacts on the matter resulting from the project with other relevant future projects.	The study area for matter subject to cumulative assessment will be guided by the relevant technical assessments and locality features

Scoping Questions	Considerations	Commentary
Over what time period	<p>Like the study area, the time period selected for the cumulative impact assessment on each matter will vary depending on the characteristics of the matter and the scale and nature of the potential impacts on the matter.</p> <p>In most cases, the period selected is likely to match the life of the project (e.g. 25 years). However, in some cases the period selected may be much shorter than this and cover a single phase of the project, or much longer.</p>	As outlined in Table 13
What projects to include	Build upon past and current operating project assessments by considering the cumulative impacts of the proposed project on key matters when other future proposed projects are included in the assessment.	As outlined in <i>Table 14</i> and <i>Figure 13</i>

Table 13: Cumulative Impact Scale and Duration

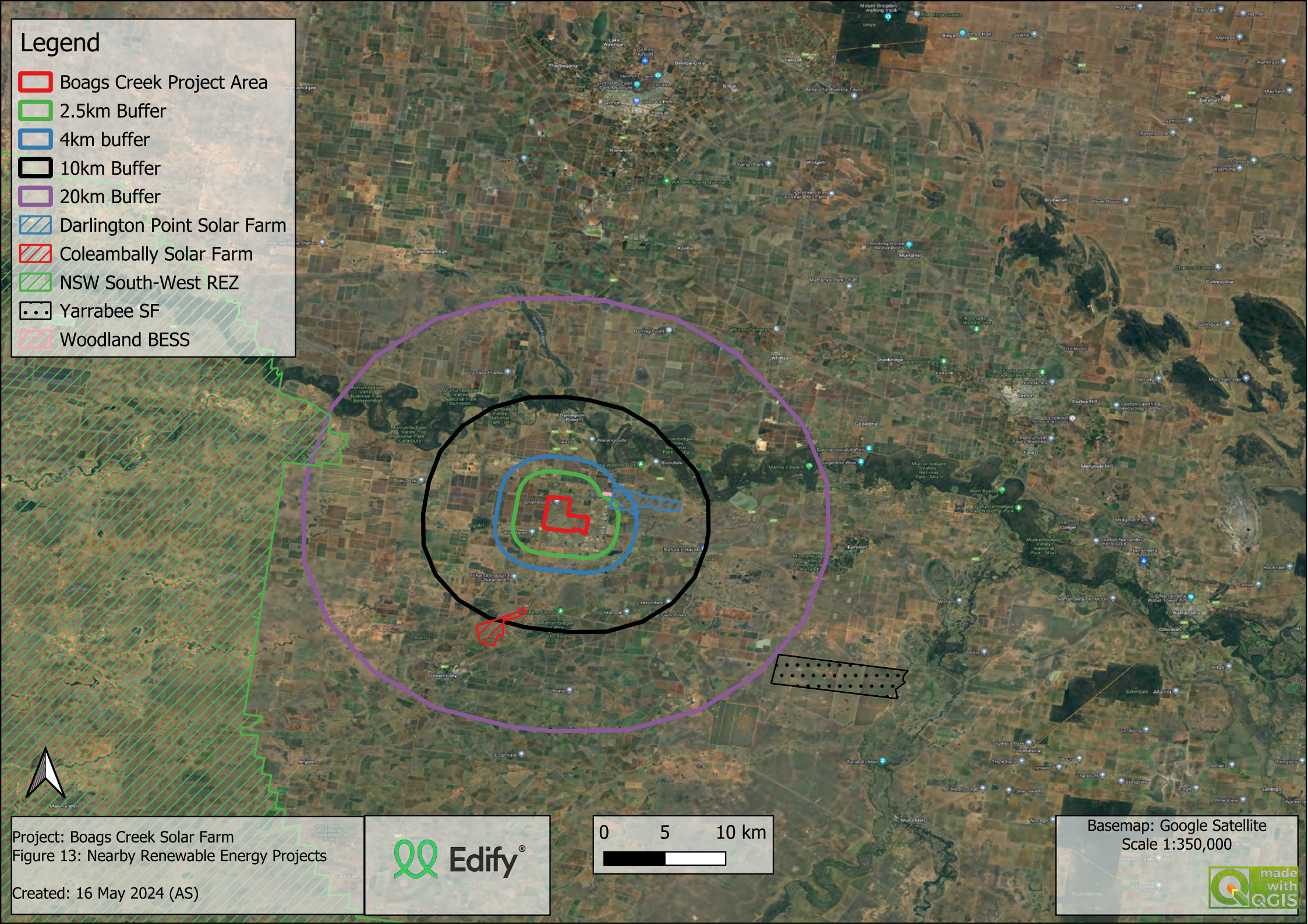
Project Phase	Estimated Timeframe	Likely Scale of Impact	Duration of Impact	Potential Cumulative Impacts
Assessment	2024 - 2025	Minor	Temporary	Social – community health and wellbeing
Approval	2025	Minor	Temporary	Social – community health and wellbeing
Construction	2026 - 2027	Moderate to Major	Temporary	Social – community health and wellbeing Amenity – visual Amenity – noise Transport and traffic Other environmental (biodiversity, heritage)
Operation	2026-2056	Minor to Moderate	Ongoing during operations	Amenity – visual
Decommissioning	Post 2056	Moderate	Temporary	Social – community health and wellbeing Amenity – visual Amenity – noise Transport and traffic

Table 14: Nearby Renewable Energy Projects

Nearby Project	Status	Distance to Boags Creek Solar Farm
Darlington Point Solar Farm	Operational	2.2km Northeast
Coleambally Solar Farm	Operational	8km South
Dinawan Substation (connection for VNI West and Project Energy Connect)	Construction	45km south
Woodland BESS	Approved	2.6km Northeast
Yanco Delta Wind Farm	Approved	50km South
Yarrabee Solar Farm	Approved	20km Southwest
Argoon Wind Farm	Planning	45km South
Bullawallah Wind Farm	Planning	60km Southwest
Dinawan Solar Farm	Planning	40km South
Dinawan Wind Farm	Planning	40km South
Victoria to NSW Interconnector West (VNI West)	Planning	45km South

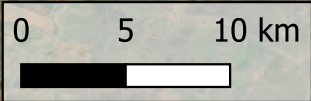
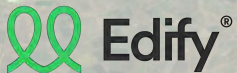
Legend

- Boags Creek Project Area
- 2.5km Buffer
- 4km buffer
- 10km Buffer
- 20km Buffer
- Darlington Point Solar Farm
- Coleambally Solar Farm
- NSW South-West REZ
- Yarrabee SF
- Woodland BESS



Project: Boags Creek Solar Farm
Figure 13: Nearby Renewable Energy Projects

Created: 16 May 2024 (AS)



Basemap: Google Satellite
Scale 1:350,000



7 Preliminary Environmental Assessments

7.1 Biodiversity

A preliminary environmental assessment¹⁸ has been conducted to assist in the identification of key environmental matters that would require detailed assessment within the EIS. Risks were identified for both the construction and operation phase of the Project and analysed in relation to their possible consequence and likelihood of occurrence. From this analysis, some environmental matters were deemed to be key issues on the basis that they had the potential, without suitable mitigation, to have a significant impact on the environment.

The assessment is based on a desktop review and preliminary site inspection (involving initial flora and fauna surveys) to identify potential high-level constraints and major risks to the Project. A preliminary PCT constraints map is provided in Figure 14 showing the vegetation composition of the Impact Area.

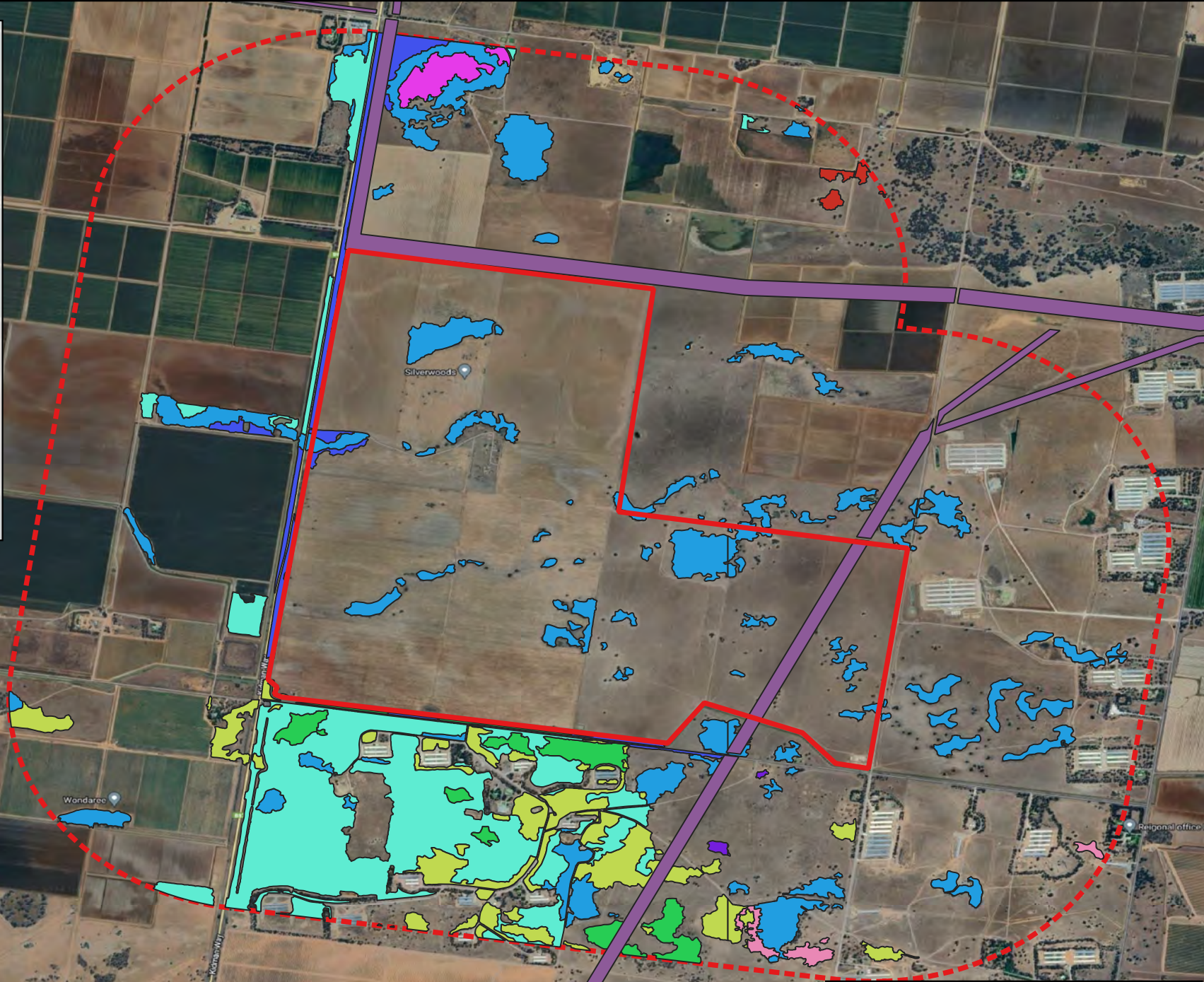
This will be used to guide further detailed investigations and ultimately the site infrastructure layout. Constraints mapping will also be refined based on these investigations prior to submission of the EIS.

A summary of the key environmental impacts is provided in Section 8. The intent of the discussion is to demonstrate an understanding of the issues that require further environmental assessment and likely mitigation measures for these key issues. The potential impacts and management of other (less significant) issues are discussed in Section 7.3.

¹⁸ Preliminary Ecological Assessment, Boags Creek Solar Farm, ref 24001628, dated 29 April 2024, Kleinfelder, and Boags Creek Solar Farm – Soil and Agricultural Impact Assessment, prepared by Minesoils (ref MS-131_Draft 1), dated April 2024

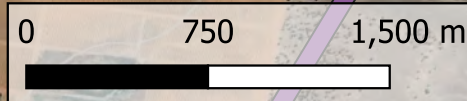
Legend

- Boags Creek Project Area
- Transmission Line Easements
- 1500m Buffer
- PCTs
 - PCT : 16
 - PCT : 17
 - PCT : 20
 - PCT : 26
 - PCT : 28
 - PCT : 44
 - PCT : 45
 - PCT : 74
 - PCT : 75



Project: Boags Creek Solar Farm
Figure 14: Plant Community Types (PCTs)

Created: 27/07/2024 (AS)



Basemap: Google Satellite Hybrid
Scale: 1: 35,000



7.1.1 Flora

Plant Community Types

Under the NSW Department of Planning and Environment (DPE) Biodiversity Conservation and Sciences (BCS) Plant Community Type's (PCTs) are the lowest level of classification and the accepted standard for describing plant communities.

Four (4) PCTs are mapped to occur on site (PCT 16, 28, 44 and 45), only three (3) of these PCTs were verified on site by Kleinfelder (PCT 16, 28 and 45).

- PCT 16 (Black Box grassy open woodland wetland) was noted as being in generally good condition, and areas of PCT 16 in cropped areas without grazing were in significantly better condition than in those areas being currently grazed. PCT 16 does not have a conservation status listing under the BC Act or EPBC Act and does not have any SAI constraints.



Figure 15: Example of PCT 16 within the Impact area.

- PCT 28 (White Cypress Pine open woodland) was identified as being highly degraded in the project area. A small area of PCT 28 was mapped to occur on the site but was not evident from examination in the field instead being noted to be an area of PCT 16. PCT 28 does not have a conservation status listing under the BC Act. It may be considered rare and endangered under EPBC Act, however likely to not meet size thresholds and does not have any SAI constraints.



Figure 16: Example of PCT 28 within the Impact area.

- PCT 45 (Plains Grass grassland) was noted to be in a few areas with a dominance by species of the family Poaceae. Intensive grazing by stock has reduced cover of grasses and appears to have favoured their replacement with shrubs and groundcover of the family Chenopodiaceae. PCT 45 does not have a conservation status listing under the BC Act or EPBC Act and does not have any SAI constraints.



Figure 17: Example of PCT45 within the Impact area.

State and Federal Threatened Ecological Communities

The site did not show any Threatened Ecological Communities (TEC) listed under the BC Act or EPBC Act. Additionally, none of the PCTs identified through PCT mapping or observed during BAM surveys were found to be associated with listed TECs or Critically Endangered Ecological Communities (CEECs).

PCT 28 is being evaluated for potential listing under the EPBC Act, with an assessment deadline of 30 April 2025. During this period, due to extensive clearing and disturbance, trees within PCT 28 could be considered Rare and Endangered. However, the small onsite patch, consisting of only three isolated trees, is unlikely to meet the size criteria for EPBC Act listing as a TEC.

State and Federal Threatened Flora Species

A search conducted on the BioNet Atlas of NSW Wildlife showed no records of threatened plant species within a 5 km radius of the Impact Area. However, an EPBC Protected Matters Search revealed twelve (12) species that could potentially occur based on species or species habitat modelling. Following a likelihood of occurrence assessment, it was determined that no threatened flora species are expected to be present in the Project Area. Additionally, no threatened flora species were detected during the site assessment.

A complete list of the likelihood of threatened flora occurring within the Impact Area is presented in the PEA.

Future Phase Targeted Survey Requirements

The NSW listed candidate flora species are not at risk of SAIL and as such do not require targeted surveys under the small-area assessment module unless they are incidentally sighted during further field assessments.

If surveys are deemed to be required, optimal timing for the two species with potential to occur would be between October to December for the *Lepidium hyssopifolium* and September to April for the *Leucochrysum albicans* subsp. *tricolor*.

EPBC listed threatened flora will be surveyed and assessed as required during the EPBC Referral process.

7.1.2 Fauna

Fauna Species

During the PEA, 22 species of birds, four (4) species of mammals, two (2) species of reptiles and three (3) species of invertebrate were identified during the site assessment.

State and Federal Threatened Species

A search conducted on the BioNet Atlas of NSW Wildlife revealed a compilation of ten (10) threatened fauna species that have been previously documented within a 5 km radius of the Impact Area.

An EPBC Protected Matters Search identified 35 threatened fauna species known or predicted to inhabit (potential habitat) within the vicinity of the Impact Area. Following a likelihood of occurrence assessment outlined in the PEA, it was determined that two (2) fauna species have a moderate likelihood of occurrence within the Impact Area, based on the presence of broadly suitable habitat and recent sightings within 5 km of the Impact Area. These species are the Superb Parrot (*Polytelis swainsonii*) and the Grey-crowned Babbler (eastern subspecies, *Pomatostomus temporalis temporalis*).

Notably, no threatened fauna species were recorded during the site inspection conducted during the PEA.

Koala Habitat

The proposed development intends to avoid patches of vegetation within the project area, however for information purposes.

- Several species of Koala use trees of the Western Slopes and Plains Koala Management Area, as per the Biodiversity and Conservation SEPP 2021, were recorded onsite associated with PCT 16 and PCT 28 as well as scattered paddock trees.
- Although the project area contains a portion of the 7% of PCT 16 of Koala use trees there are no recent Koala records within 2.5 km of the site (closest record >10 km). The vegetation within the Project Area is therefore not considered as core Koala habitat.
- The patch is highly isolated from other Koala habitat.

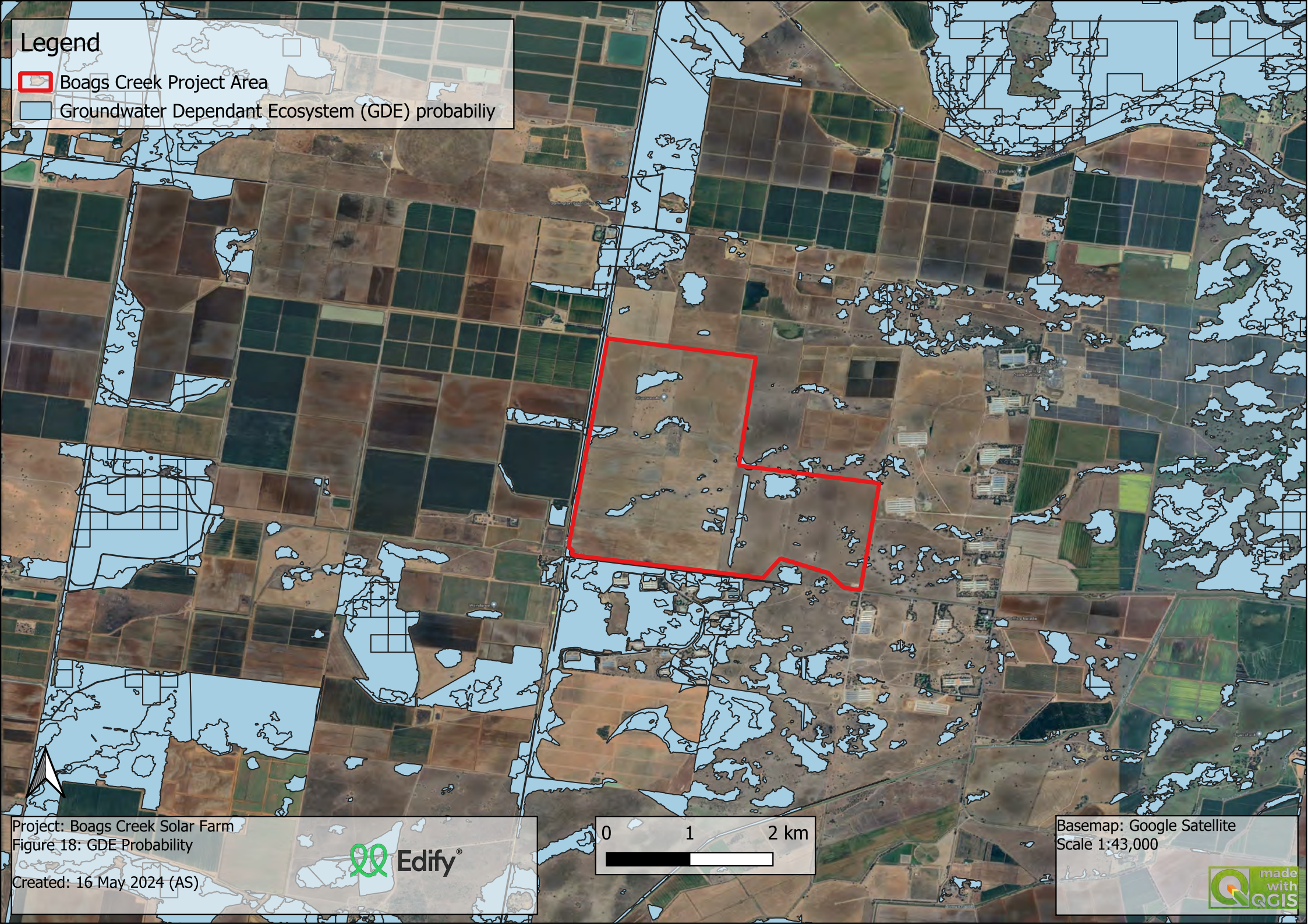
7.1.3 Groundwater Dependent Ecosystems

The Bureau of Meteorology Atlas of Groundwater Dependent Ecosystems (GDEs) identifies low potential GDEs on the subject land. Within the Impact area, low potential terrestrial GDEs are mapped with no aquatic GDEs predicted within the Impact area.

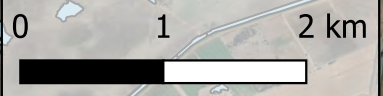
The low-potential terrestrial GDEs mapped to occur on site are primarily situated within areas of vegetation on the site. While some interaction with groundwater may occur due to trenching operations, the mapped GDEs are all modelled as having low potential, suggesting that any impact is unlikely to be significant. However, to mitigate potential adverse effects on groundwater, measures to reduce erosion and runoff during construction and operation should be implemented.

Legend

-  Boags Creek Project Area
-  Groundwater Dependant Ecosystem (GDE) probability



Project: Boags Creek Solar Farm
Figure 18: GDE Probability
Created: 16 May 2024 (AS)



Basemap: Google Satellite
Scale 1:43,000



7.2 Soil and Agricultural Assessment

The Soils and Agricultural Assessment undertaken confirmed the Project Area consists of Class 3 soils. The intention for this Project site will be to retain the current 'agricultural' land use through a re-introduction of sheep grazing to the facility following a rest period after construction is completed. This intended co-location of agri-solar, has been introduced by Edify to the operational Gannawarra Solar Farm in Kerang¹⁹, Victoria with an initial success of 500 head within approximately 125 hectares. In addition, since December 2023 Edify introduced 255 Dorper Ewes to graze within the Darlington Point Solar Farm, which is located approximately 4km east of the Project site. Edify intends to progressively increase the quantity of sheep within Darlington Point Solar Farm based on the successful management of this initial grazing stock.

Additional information can be found via Edify's website, with further elaboration provided by the Clean Energy Council²⁰. As such, the quantity of sheep carrying capacity at Boags Creek will be investigated further throughout the EIS.

Site Verified Project Land and Soils

A Soil and Agricultural Impact Assessment (Appendix H) was undertaken for the site to ground truth the LSC mapping for the Impact Area, which is displayed in Figure 12

The 36 soil test sites within the Project Area have been subject to the site verification assessment of LSC, in accordance with the LSC Guideline. Based on the results of the LSC verification assessment, it is concluded that the Project Area contains one LSC class: LSC class 3: high capability land – covering 845 ha.

Verification of the soils on site will allow early design, construction and decommissioning considerations when managing the soils and rehabilitating them to the current condition state. Influences on design, construction and decommissioning of the Project can include but is not limited to:

- Solar arrays are typically pole mounted, with the poles being supported on a driven or screw pile, so that there is no excavation required other than for electrical cabling.
- Minimising earthworks in higher capability soils
- Leaving excavated soils in-situ where possible
- Erosion, sediment, and drainage controls to ensure soils remain on site and are adequately stabilised.
- Assisted natural revegetation of the groundcover to stabilise the soils.

Biophysical Strategic Agricultural Land Assessment Requirements

The BSAL layer is mapped under the NSW Environmental Planning Policy (Resources and Energy) 2021. The layer triggers consideration for mining and coal seam gas activity proposals, to assess their effects on strategic agricultural land and its associated water resources.

As per Appendix A of the Large-scale Solar Energy Guideline, Project's mapped to have BSAL occurring within or adjacent to the Project Area are triggered for an Agricultural Impact Assessment. Under the guideline, the Office of Environment and Heritage's Land and Soil Capability Assessment Scheme is the sole site verification methodology recommended which is complemented by site soil testing results.




The Project's intended use is for a renewable energy facility, with no mining or coal seam gas activity proposed. Site verification for LSC has been completed utilising laboratory analysis of the site soil samples and the Land and Soil Capability Assessment Scheme.

¹⁹ [See Edify's Gannawarra Solar Farm and 'Agri-solar' practices, with 500 merino sheep](#)

²⁰ [See Clean Energy Council's 'Australian Guide to Agrisolar for Large-scale Solar Farms'](#)

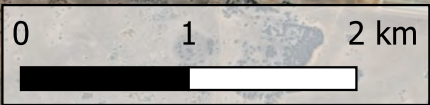
There is no BSAL or CICs mapped within the Project Area or the Project locality. The nearest BSAL is located approximately 120 km east of the site, therefore no further testing or assessment, in line with the Large-scale Solar Energy Guideline, is required.

Legend

-  Boags Creek Project Area
-  Soil Survey Locations
-  LSC Class 3



Project: Boags Creek Solar Farm
Figure 6: LSC Verified Mapping
Created: 25/07/2024 (AS)



Basemap: Google Satellite
Scale 1: 25,000



8 CONCLUSION

The Preliminary Environmental Assessment and Agricultural Impact Assessment and Edify's desktop assessments has established the environmental and planning context of the Project, which will be assessed under the State Environmental Planning Policy (Planning Systems) 2021.

The assessment considered:

- 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 known 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.

This report assists in developing the SEARs for the Project, guiding the preparation of the EIS. Key environmental issues identified based on preliminary investigations include.

Level of Assessment	Aspect
Detailed	Amenity – Landscape and Visual Biodiversity Heritage - Aboriginal Access - Traffic and Transport
Standard	Amenity – Noise and Vibration Social Heritage – Historic Hazards and Risks - Hazards, Bushfire Air Quality Land Resources (agriculture and soils) Water Resources (flooding and hydrology) Waste Management

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