SUNNY CORNER WIND FARM

Scoping Report

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1 INTRODUCTION

This Section provides a simple introduction to the Project. It includes the Applicant's details and a description of the Project; including objectives, site information and a relevant map. Background on the Project including its relevant history and key strategies to avoid, minimise or offset known impacts are also included. Related development is also described, along with this Scoping Report's structure.

1.1 Preamble

MRP Someva ProjectCo Pty Ltd as trustee for the MRP Someva Project Trust 1 (Joint venture between Someva Renewables and Mainstream Renewable Power Australia) (Applicant) seeks to construct, operate, maintain, and decommission the 500 Megawatt (MW) Sunny Corner Wind Farm (Project).

The Project is located approximately 35 km from Bathurst and 55 km from Lithgow within the Sunny Corner State Forest within areas of the existing softwood plantation managed by the Forestry Corporation of NSW (FCNSW). In 2021, the NSW Parliament amended the *Forestry Act 2012* (Forestry Act) to enable renewable energy infrastructure to be established in forestry areas with trees of exotic coniferous species within State Forests. FCNSW sought market proposals for the operation of renewable energy projects within specified locations, including the Project Area. On 23 May 2024 a "Renewable Energy Investigations Permit" was awarded to MRP Someva ProjectCo Pty Ltd by FCNSW.

The Project Area is shown on **Figure 1-1** and is located within both the Lithgow City Local Government Area (LGA) and Bathurst Regional LGA and comprises 10,434 ha of land. **Figure 1-1** also shows the non-project area which is defined as areas that are not part of the Project Area application. These areas are not owned by FCNSW and include private receivers. Preliminary Lot and DP details for the Project Area are presented in **Section 2.3.2.**

The Project has a preliminary Capital Investment Value (CIV) of approximately $1.4 billion and will provide Full Time Equivalent (FTE) employment for approximately 475 personnel during construction.

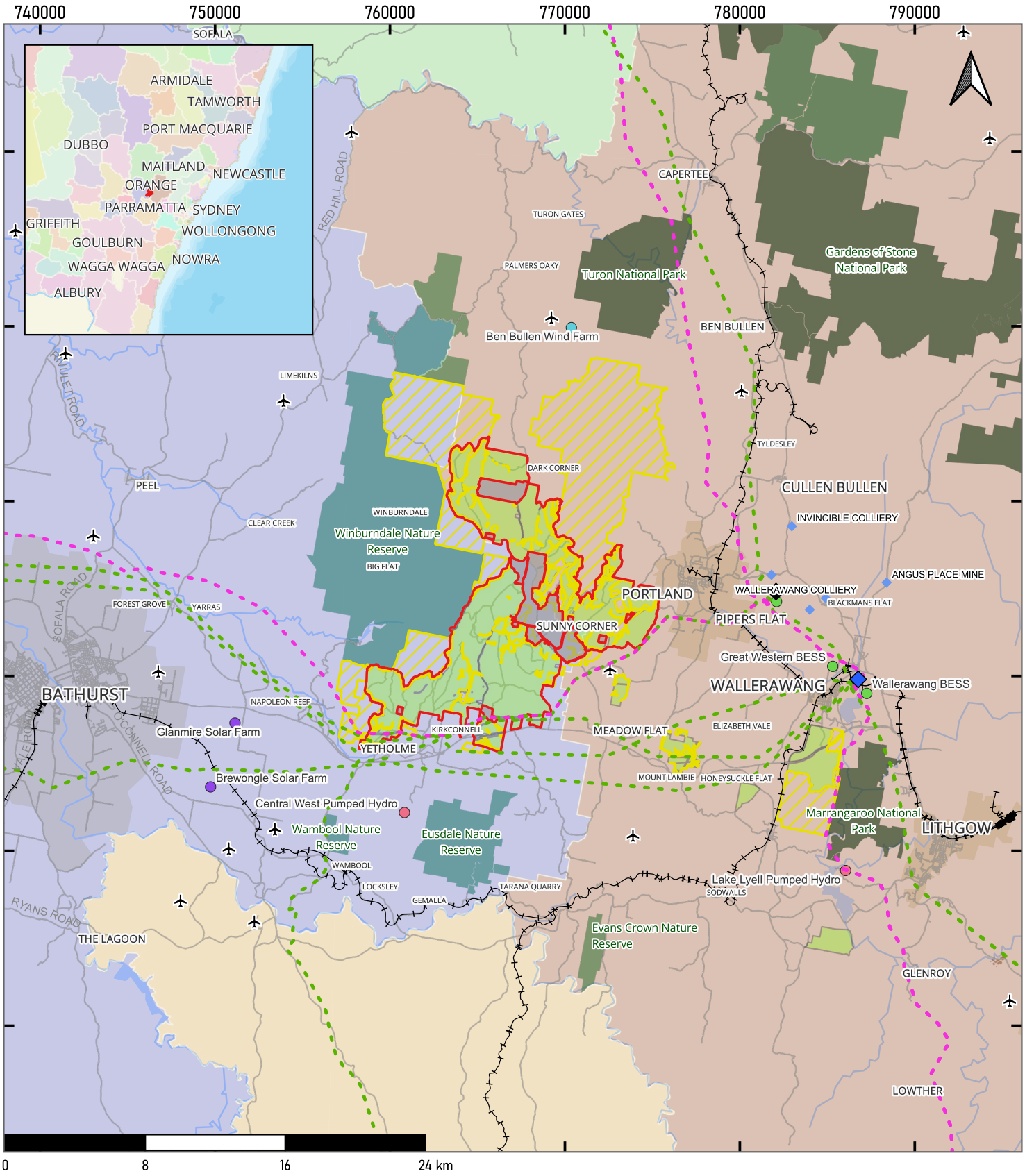
The Project is State Significant Development (SSD) as defined under *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP) and will require a Development Consent under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

RPS Group AAP Consulting Pty Ltd (RPS) has been engaged by the Applicant to prepare this Scoping Report to support the State Significant Development (SSD) development application process.

This Scoping Report supports an application to the Secretary of the NSW Department of Planning, Housing and Infrastructure (DPHI) for Secretary's Environmental Assessment Requirements (SEARs). The SEARs will guide the preparation of the Project Environmental Impact Statement (EIS) which shall support the Development Application (DA) under Part 4 Division 4.7 of the EP&A Act.

The DA and supporting EIS will be prepared generally in accordance with the Guidelines in **Section 2.3.2**. and the SEARs, be accompanied by the consent of the owners/s of the land as required in Section 23(1) of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regs) and include a Declaration from a Registered Environmental Assessment Practitioner (REAP).

This Scoping Report also supports a Referral application under Part 9 of the Commonwealth (Cwlth) *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).



Sunny Corner Wind Farm

Figure 1-1 Regional Locality Plan

Date:	19/02/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:300000
Basemap:	ESRI (2024)
Data Sources:	NSW Spatial Portal (2024)

Prepared By: LB Reviewed By: TS
Version: 3.3
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Legend

- Project Area
- Non-Project Area
- NationalPark
- StateConservationArea
- NatureReserve
- HistoricSite
- Hardwood Forest
- Forestry Management ZOnes
- Aircraft Landing Area
- Railway
- Roads

Power Infrastructure

- 132kV Transmission Line
- 330kV Transmission Line
- Mt Piper Power Station
- Wallerawang C Power Station
- Mines and Associated Infrastructure

Surrounding Renewable Energy Projects

- BESS
- Pumped Hydro (PH)
- Solar Farm (SF)
- Wind Farm (WF)

Local Government Areas

- Bathurst Regional Council
- Lithgow City Council
- Mid-Western Regional Council
- Oberon Council

1.2 The Applicant

The Applicant is comprised of a joint venture between Someva Renewables and Mainstream Renewable Power Australia. Each is introduced below.

The relevant contact address is Level 8, 16 Spring St Sydney NSW 2000 and ABN is 31 891 458 527.

1.2.1 Mainstream Renewable Power

Mainstream is an international pure-play renewable energy company that entered the Australian market in 2019. Mainstream provides renewable energy solutions for countries, communities and corporations and delivers energy solutions that accelerate the global energy transition.

Mainstream has delivered 6.6 GW of assets to financial close-ready and has global project portfolio of over 25 GW.

1.2.2 Someva Renewables

Someva is an Australian renewable energy developer and advisor.

Someva develops renewable energy projects with a focus on creating new income opportunities for landowners, supporting communities and First Nations organisations grow into new industries, and providing lower cost electricity for the needs of future Australian generations. Someva's experience across project planning, design, construction and operations is aimed at creating the future clean energy infrastructure to support a transition to a low carbon economy.

Someva's team members have been involved in the full end to end life cycle of renewables projects since 2008, working across development, construction and operation of 2.3 GW of assets in Australia and Asia. Someva currently has an early-stage development portfolio of 2 GW.

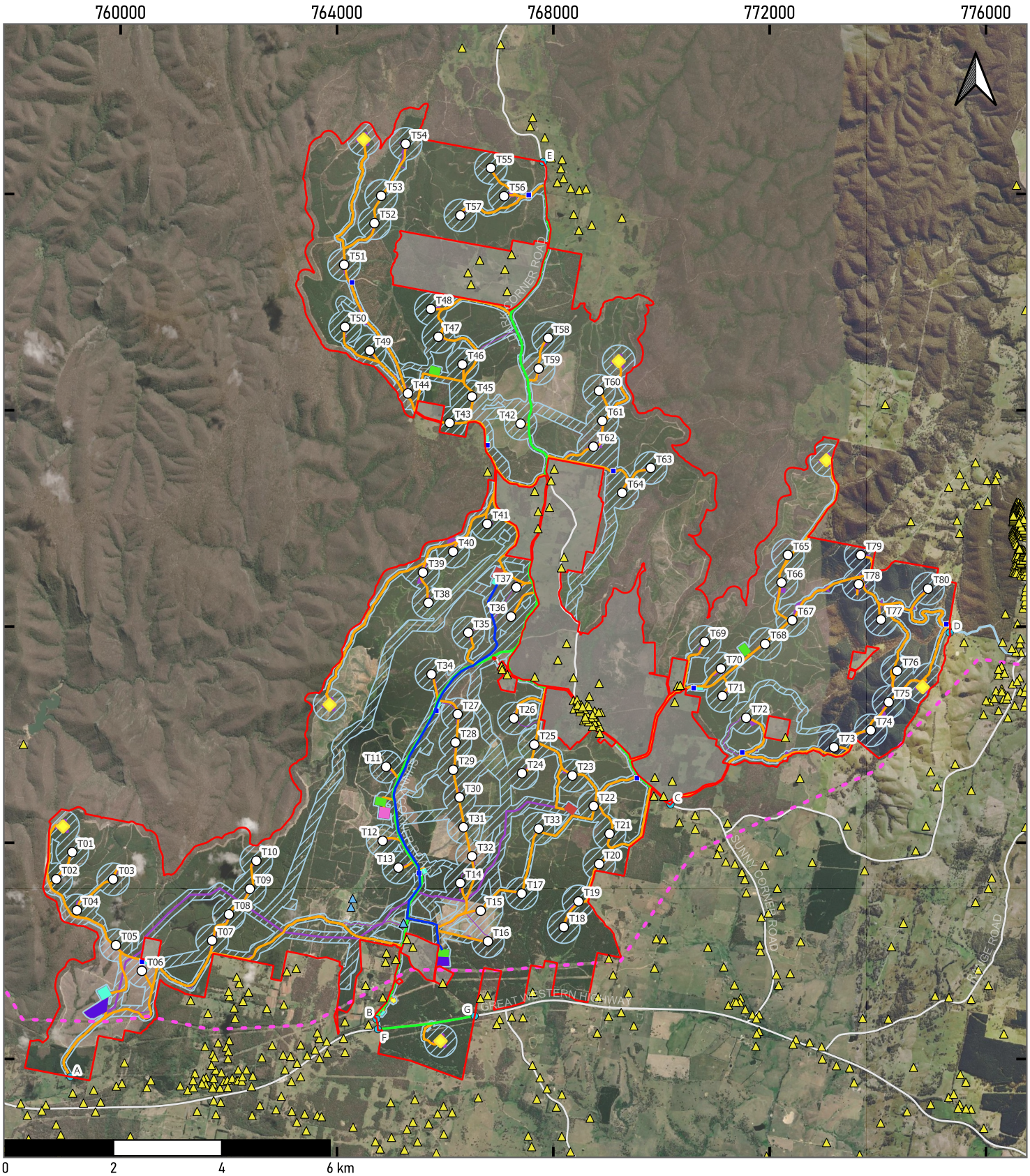
1.3 Project Overview

The Project will involve the construction, operation and decommissioning of a 500 MW wind farm, Battery Energy Storage System (BESS), electrical infrastructure, other infrastructure and ancillary activities conceptually shown in **Figure 1-2**.

The Project includes the following components:

- Up to 80 Wind Turbine Generators (WTGs) each with a rating of approximately 8 MW, a tip height of up to 285 m and hub height of up to 185 m;
- Electrical reticulation network:
  - Switching station;
  - Up to four substations and additional switch room and reactive plant;
  - On-site connection to existing 330 kV transmission line to the south of the Project Area (or other option to be confirmed in the EIS);
  - Internal electrical reticulation (both underground and overhead);
  - Approximately 500 MW / 2000 MWh (4 hours) Battery Energy Storage (BESS);

- Other temporary and permanent infrastructure including:
  - Operations and Maintenance (O&M) facility and infrastructure including site office, storage facilities, car parking and fencing;
  - Concrete batching plant and laydown areas for construction of the Project;
  - Transmission infrastructure;
  - Water tank(s);
  - Internal access tracks;
  - Up to seven meteorological masts;
  - Construction and operational compounds;
  - Hardstands for WTGs and other infrastructure;
  - Internal access tracks and road turning head connecting Project infrastructure.
- Access road use and Project-required upgrades associated with:
  - Project Area access: approximately six access points;
  - Wind farm components access: Port of Newcastle (or other option to be confirmed in the EIS);
- Operational workforce of up to 35 Full Time Equivalent (FTE) and construction up to 475 FTE;
- Construction generally within standard hours and operations 24 hours per day 7 days per week; and
- Preliminary Project Area of up to 10,434 ha and a Preliminary Disturbance Footprint of up to 496 ha.



Sunny Corner Wind Farm

Figure 1-2 Preliminary Conceptual Layout

Date:	07/02/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:97500
Basemap:	ESRI Satellite (2024)
Data Sources:	NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS
Version: 4.1
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Legend

Project Infrastructure
- Project Area
- Non-Project Area
- Preliminary Development Footprint
- Preliminary Development Corridor
- Wind Turbine Locations
- Site Entrance
- Access Tracks
- Project Transmission

- Ancillary Infrastructure
- Construction Area
- Construction Office
- Site Office & Operations and Maintenance
- Substation
- Switching Station & Substation
- Water Tank Locations
- Permanent Meteorological Mast

Existing Infrastructure
- Existing Site Roads
- Roads
- Existing 330kV Transmission Line

Receivers
- Non-Associated Receivers
- Commercial Non-Associated Receiver

1.4 Objectives

The Applicant's Project objectives are to:

- Develop a profitable renewable energy generation project which achieves a high level of environment, community and safety standards;
- Sustainably investigate approval and development of an onshore wind farm at Sunny Corner to meet the objectives of FCNSW;
- Engage with First Nations Australians to enhance social, environmental and economic outcomes;
- Operate in harmony with traditional forestry operations;
- Engage with forest users and recreational tourism operators within the State Forest and ensure ongoing use;
- Support communities to grow into new industries within this existing energy-rich region;
- Provide a significant source of renewable energy to assist in reducing Australia's greenhouse gas (GHG) emissions;
- Provide lower cost electricity for the needs of future Australian generations;
- Contribute to renewable energy requirements and consequently NSW and Commonwealth targets for renewable energy;
- Engage with communities to allow residents, businesses and local industry to be incorporated into Project design and long term commitments that set up lasting and meaningful contributions locally;
- Provide financial benefits to its neighbours and the community through Voluntary Planning Agreement (VPA) and neighbour benefit agreements;
- Provide employment and education opportunities during all Project phases and support local jobs; and
- Ensure project information is available and accessible to community members during all Project phases.

1.5 Background

1.5.1 History

In 2021, the NSW Parliament amended the Forestry Act to enable renewable energy infrastructure to be established in forestry areas with trees of exotic coniferous species within State Forests. FCNSW sought market proposals for the operation of renewable energy projects within specified locations, including the Project Area.

In May 2024 a "Renewable Energy Investigations Permit" was awarded to MRP Someva ProjectCo Pty Ltd by FCNSW.

The primary use of the Sunny Corner State Forest is for industrial softwood production by the state-owned FCNSW. Other uses include recreational activities including mountain biking, four-wheel driving, horse riding, hiking, hunting and collecting, and camping. Recreational access for State Forest users will still be possible during development, construction and operation of the Project.

Pine plantations are feasible hosts for wind farms as they provide large areas in windy locations with access to powerlines and an existing road network.

Sunny Corner State Forest is located in an area with a rich history of supplying energy to NSW.

Sunny Corner was a silver mining town in the period 1850 – 1890 and the State Forest contains mine relics and abandoned mine shafts. Further detail on the land within the Project Area is provided in **Section 2.4**

The Project is expected to have a strong wind resource and detailed wind monitoring is to commence in Q1 2025. The Project Area is proximate to retiring and retired coal fired power stations making it well placed to maintain energy supply in NSW. The region hosts strong electrical infrastructure and a workforce with skills required for the construction and operation of a wind farm. The ability of the area to transition from historic to renewable energy sources is evidenced by the emergence of new and existing renewable energy technologies in the area, such as Lake Lyell and Central West Pumped Hydro, multiple Solar Farms and standalone BESS such as Wallerawang and Mount Lambie as discussed in **Section 2.6** and **Figure 1-1**.

The strong wind resource expected at Sunny Corner further justifies the development of the Project in this area. Further justification on site selection is included at **Section 2.7.2**.

The development of the Project will be informed by the Applicant's national onshore wind experience and local knowledge as well as Mainstream's experience of similar wind farms abroad and will continue to be informed through consultation with the local community, First Nations people, forestry users and local interest groups.

The Project is expected to raise awareness about renewable energy and environmental sustainability within the community and drive economic growth and diversification in the region.

1.5.2 Strategies to Avoid, Minimise or Offset Known Impacts

Key strategies that have been adopted to avoid, minimise or offset the impacts of the Project (to the extent known at Scoping Report phase) include:

- Avoid: the Project Area is an existing industrial pine plantation, and with minimal native vegetation, this fundamental characteristic is expected to avoid potentially larger biodiversity impacts. Through the preliminary design process, specific attention was pointed to utilising existing access tracks and infrastructure where possible, especially through the FCNSW mandated native vegetation pockets. Through this design process, impacts to areas were limited to existing tracks and avoidance of native vegetation; and
- Minimise:
    - Minimise native vegetation clearing with a focus on Project Disturbance within pine plantation areas and utilisation of existing FCNSW disturbed areas and infrastructure including (but not limited to) access roads;
    - Avoidance of FCNSW "exclusion areas" (see **Section 2**);
    - 40 m offset to any defined "waterfront";
    - Consideration of unfavourable topography when designing placement of project infrastructure; and
- Offset: any required offsets will be determined following detailed assessment conducted and mitigation proposed as part of the EIS.

The preliminary conceptual Project layout will be further refined in the EIS in response to detailed assessment and proposed stakeholder engagement (see **Section 5.6**).

1.6 Relevant Guidelines

This Scoping Report has been prepared generally in accordance with the following guidelines:

- 'State Significant Development Guidelines - Preparing a Scoping Report: Appendix A to the State Significant Development Guidelines' (DPIE, 2022a) (Scoping Report Guideline);
- 'NSW Wind Energy Guideline for State Significant Wind Energy Development' (DPHI, 2024a), including:
  - 'Wind Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment' (DPHI, 2024b); and
  - 'Wind Energy Guideline: Technical Supplement for Noise Assessment (DPHI, 2024c);
- 'Social Impact Assessment Guideline for State Significant Projects' (DPIE, 2023a) (Social Guidelines);
- 'Cumulative Impact Assessment Guidelines for State Significant Projects' (DPIE, 2022b);
- 'Undertaking Engagement Guidelines for State Significant Projects' (DPIE, 2022c) (Engagement Guidelines).

Other relevant guidelines and plans are listed in the 'Scoping Summary Table' in **Appendix A**. **Section 6** also describes guidelines relevant to specific areas of technical study.

Appendix B includes a summary of the 'Scoping Report Guidelines' requirements and indicates where each is addressed in this Scoping Report.

1.7 Related Development

The Project will not rely on any existing or approved development, nor any existing use or continuing use rights' provisions.

The Project may utilise FCNSW existing and approved facilities associated within and in proximity to the Sunny Corner State Forest. This detail will be provided in the EIS.

The Project will require access to the NSW electrical transmission network and roads network.

1.8 Structure

This Scoping Report has the following structure:

- **Section 1** describes the preliminary Project and the Applicant, an overview of the Project for which approval is sought, and the purpose of this Scoping Report. It also notes any related development, relevant guidelines, the Project objectives and structure;
- **Section 2** outlines the strategic context for the Project, including alignment with International, Commonwealth land local policy and strategic goals, the land use planning of the Project Area, the site setting and features, and provides a preliminary project justification;
- **Section 3** describes the Project including the Project Area, interaction with other projects, staging and alternatives considered including environmental benefits of the Project;
- **Section 4** outlines the statutory context for the Project including the power to grant approval, permissibility, other approvals and mandatory matters for consideration;
- **Section 5** describes the stakeholder engagement plan, identification, engagement conducted to date, preliminary community feedback and proposed future engagement;
- **Section 6** provides a ranking and preliminary assessment of each environmental and social aspect, as well as a summary of the proposed EIS assessment approach for each; and
- **Section 7** and **Section 8** provide the Terminology and References, respectively.

Appendix A to **Appendix G** support this Scoping Report.

2 STRATEGIC CONTEXT

This section identifies the key strategic issues that are relevant to the assessment of the Project. It also describes the key features of the Project Area and surrounds, existing land use and land ownership. Relevant future developments in the area that could affect or be affected by the Project have been summarised.

2.1 Policy and Strategic Goals Alignment

2.1.1 International

2.1.1.1 United Nations Sustainable Development Goals

The Sustainable Development Goals (SDGs) are a global call for action to "*promote prosperity while protecting the planet*" (UN, 2015). The SDGs address a range of socio-economic and environmental issues including education, health, social protection, job opportunities, climate change and environmental protection. The 17 SDGs of the 2030 Agenda for Sustainable Development came into force on 1 January 2016. Australia has been a United Nations (UN) member state since 1945 and adopted the SDGs in its national policymaking.

There are several SDGs that renewable energy infrastructure aligns with, the core goal being Goal 7 – Affordable and Clean Energy. Target 7.A of Goal 7 aims to *"enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology by 2030"*.

Other SDGs that the Project indirectly aligns with include:

- SDG 8 – Decent Work and Economic Growth;
- SDG 9 – Industry, Innovation and Infrastructure;
- SDG 11 – Sustainable Cities and Communities;
- SDG 13 – Climate Action; and
- SDG 17 – Partnerships for the Goals.

The Project is a renewable energy project and will therefore contribute to addressing socio-economic and environmental issues through advancing cleaner fossil-fuel technology and energy efficiency.

2.1.1.2 United Nations COP29 (2024)

COP29 is the United Nations (UN) Framework Convention on Climate Change Conference of the Parties (COP) that took place in Baku, Azerbaijan from 11-22 November 2024.

The key priorities at COP29 included securing a new goal on climate finance, ensuring every country has the means to take much stronger climate action, slashing greenhouse gas emissions and building resilient communities (UN, 2024). COP29 agreed on a $460 billion annual funding deal to help nations adapt to climate change (UN, 2024). The deal aims to keep the clean energy boom growing and protect billions of lives and will help countries share in huge benefits of bold climate action, more jobs, stronger growth, and cheaper and cleaner energy. Countries also agreed on rules for a global market to buy and sell carbon credits that could mobilise new projects to help fight global warming (UN, 2024).

The Project will contribute to cheaper and cleaner energy and help reduce greenhouse gas emissions through renewable energy generation.

2.1.1.3 United Nations COP28 (2023)

The UN Framework Convention on Climate Change COP 28 held in Dubai from 30 November to 12 December 2023 "*marked the conclusion of the first 'global stocktake of the world's efforts to address climate change under the Paris Agreement*". An agreement to commence the "'*beginning of the end' for the fossil fuel era*" was established and includes aiming to "*triple renewable energy capacity and doubling energy efficiency improvements by 2030*".

The Project will contribute to the reduction of GHG emissions through renewable energy generation.

2.1.1.4 United Nations COP21 (2015)

The UN Framework Convention on Climate Change COP21 (The Paris Agreement) in December 2015, was an important stepping-stone for international relations on climate change as it brought all nations into a common cause to combat climate change. The core outcome of the Paris Agreement was to limit emissions globally, by holding the increase in the global average temperature to well-below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels (UNFCC, 2015).

The Project will contribute to meeting Australia's commitments under the Paris Agreement through reducing annual GHG emissions by 1 million tonnes CO^2 per annum (Mtpa) through renewable energy generation.

2.1.2 Commonwealth

2.1.2.1 Government's Large-scale Renewable Energy Target

The Renewable Energy Target (RET) is an Australian Government scheme designed to reduce emissions of GHG in the electricity sector and encourage the additional generation of electricity from sustainable and renewable sources.

The Large-scale Renewable Energy Target (LRET) incentivises the development of renewable energy power stations in Australia through a Renewable Energy Certificate Market for the creation and sale of certificates called large-scale generation certificates (LGCs). LRET-accredited power stations can create LGCs for electricity generated from that power station's renewable energy sources. LGCs can then be sold to:

Liable entities under the RET (mainly electricity retailers); and

Companies and individuals looking to support their claims about reducing emissions, using renewable electricity, or by surrendering offsets such as Australian Carbon Credit Units (ACCUs).

The current target under the LRET is for 33,000 GWh of additional renewable energy to be generated annually. The current targets, accreditation of power stations, and creation of LGCs will remain until the end of the scheme in 2030.

Once operational, the Project could generate up to 1,800,000 MWh of electricity annually. The Project will therefore contribute significantly to meeting the LRET target.

2.1.2.2 National Electricity Market

The National Electricity Market (NEM) is a wholesale market through which electricity is traded in Australia. The NEM incorporates 40,000 km of transmission lines and cables in Australia and spans the eastern and south-eastern coasts (including QLD, NSW, ACT, SA, VIC and TAS) (AEMO, 2024a). It delivers around 80% of all electricity consumption in Australia (Cwlth DCCEEW, 2024). The NEM facilitates the exchange of electricity between generators and retailers. Retailers resell the electricity to businesses and households. The Australian Energy Market Operator (AEMO) controls the NEM and is responsible for monitoring electricity consumption and for the security and reliability of the power system.

AEMO recognises the NEM needs to be modernised to accommodate and respond to changes in electricity generation (i.e. retirement of coal-fired power stations) and replacement with renewable energy generation, combined with transmission integration and storage technologies, such as batteries.

Replacement with renewable energy ensures there is sufficient capacity in the system to address peak demand events and to ensure price competition in electricity markets. There is also an increasing demand from consumers and financiers for greener energy production.

Coal-fired generators have continued to retire over the previous decade. “Owners of all but one power station in the remaining fleet have announced retirements between now and 2051, with about half announcing retirements by 2035.” (AEMO, 2024b).

With these retirements comes a significant reduction in the energy generation potential which will need to be replaced with alternative renewable energy electricity production.

The Project represents an investment in large scale renewable energy production which will provide essential input into the renewable energy sources needed in the transition from coal fired generation to renewable energy generation.

2.1.2.3 Integrated System Plan 2024

The ‘Integrated System Plan’ (ISP) (AEMO, 2024b) is an integrated roadmap for the efficient development of the NEM over the next 20 years, in line with government policies to reach a net zero economy by 2050. The primary objective is to optimise value to end consumers by designing the lowest cost, secure and reliable energy system capable of meeting any emissions trajectory determined by policy makers at an acceptable level of risk (AEMO, 2024b). The security of the power system is related to its ability to respond quickly and remain stable when unexpected events occur (i.e. transmission line failing) and the reliability is the ability of the system to deliver electricity to meet the demand of energy users.

The ISP is published every two years and serves to inform policymakers, investors and consumers with a clear plan for essential infrastructure to meet future energy needs. It draws on stakeholder engagement and industry expertise in order to maximise the value and benefits to electricity consumers. The ISP provides detail on the network projects within QLD, NSW, ACT, VIC, SA and TAS, and how each will connect as well as outlines the REZs in Australia.

The Project’s location is shown on **Figure 1-1** and will support the energy transition and provide new infrastructure to ensure a reliable and affordable electricity supply.

2.1.3 State

2.1.3.1 Climate Change (Net Zero Future) Act 2023

The *Climate Change Act (Net Zero Future) Act 2023* passed through Australian Parliament on 30 November 2023. The Act incorporates all government climate initiatives to achieve the goal of net zero by 2050. The Act legislates the following:

- Guiding principles for action to address climate change that consider the impacts, opportunities and need for action in NSW;
- Emissions reduction targets for NSW;
  - 50% reduction on 2005 levels by 2030;
  - 70% reduction on 2005 levels by 2035;
  - Net zero by 2050;
- An objective for NSW to be more resilient to a changing climate; and
- Establishing an independent, expert Net Zero Commission to monitor, review, report on and advise on progress towards these targets.

The Project would assist of increasing progress towards these targets by providing up to 500 MW of renewable energy capacity to the National Electricity Market (NEM).

2.1.3.2 Net Zero Plan Stage 1: 2020-2030

The 'Net Zero Plan Stage 1: 2020-2030' (DPIE, 2020) (Net Zero Plan) sets the framework for how the NSW Government will achieve net zero emissions by 2050. In September 2021, the NSW Government announced the reduction of emissions by 50% below 2005 levels by 2030.

The Project will contribute to the Net Zero Plan's goals through the reduction of GHG emissions.

2.1.3.3 Electricity Strategy

The 'NSW Electricity Strategy' (State of NSW and DPIE, 2019) (NSW Strategy) is the NSW Government's plan for a reliable, sustainable and affordable energy. The NSW Strategy aligns with the Net Zero Plan and will respond to current electricity demand challenges in an effort to combat electricity prices and reliability by:

- Delivering Australia's coordinated REZs;
- Saving energy, especially at times of peak demand via the Energy Security Safeguard;
- Supporting the development of new electricity generators;
- Setting a target to bolster the state's energy resilience; and
- Making it easier to do energy business in NSW.

The Project is consistent with the NSW Strategy as it provides renewable energy generation and storage capacity that will ultimately result in lower cost of power in comparison to wholesale prices.

2.1.3.4 Transmission Infrastructure Strategy

The 'NSW Transmission Infrastructure Strategy' (State of NSW and DPIE, 2018) (Transmission Strategy) builds upon the broader objective of making energy more affordable and securing energy supplies.

The Transmission Strategy includes the aims to:

- Boost NSW interconnections with VIC, SA and QLD;
- Increase NSW's energy capacity by prioritising energy; and
- Work with other states and regulators to streamline regulation and improve conditions for investment.

The Project will meet the objectives of the Transmission Strategy as it would increase NSW's energy capacity.

2.1.3.5 Electricity Infrastructure Roadmap

The 'NSW Electricity Roadmap' (NSW Government, 2023) (Roadmap) is a plan to make the state's electricity system into one that is cheap, clean and reliable.

The Roadmap aims to streamline investment into transmission, generation, storage and the firming of infrastructure as coal-fired generation plants retire and are phased out (e.g. Vales Point proposed in 2029, Mt Piper proposed in 2040, Bayswater in 2033, Eraring proposed in 2027. Liddell closed in April 2023 (AEMO, 2023)).

2.2 Land Use Planning

The Project Area is located within the Lithgow City Local Government Area (LGA) and Bathurst Regional LGA.

2.2.1 Central West and Orana Regional Plan 2041

The 'Central West and Orana Regional Plan 2041' (DPE, 2022) (Regional Plan) is a 20 year land use plan with a particular focus on the next five years. The Regional Plan is prepared under the EP&A Act and integrates Local Strategic Planning Statements (LSPS) required to be prepared by each council in the applicable LGA.

Part of Objective 2 of the Regional Plan is to *"support the State's transition to Net Zero by 2050"*. The Regional Plan recognises the need to support the renewable energy transition, including through replacement of coal powered electricity sources and the implementation of infrastructure to connect new energy sources.

2.2.2 Bathurst Regional Council

2.2.2.1 Bathurst Regional Local Environmental Plan 2014

Relevant aims of the Bathurst Regional Local Environmental Plan 2014 (Bathurst LEP) include:

"(a) to deliver growth and development in the city of Bathurst and rural localities,

(b) to promote development that is consistent with the principles of ecologically sustainable development and the management of climate change and water resources,

(c) to enhance and protect the region's unique Aboriginal and European cultural heritage as key social and economic assets,

(d) to identify, protect, enhance and manage areas of high biodiversity conservation value as a means to —

(i) preserve and improve the ecosystem services they provide, and

(ii) protect the region's significant vegetation and scenic quality, and

(iii) respond to and plan for climate change by identifying and protecting habitat corridors and links through the local government area, and

(e) to encourage the dynamic and innovative development and growth of the region's primary resources, and

(f) to protect and enhance the region's landscapes, views, vistas and open spaces."

The Project is generally consistent with the above objectives as it will provide renewable energy development which will deliver growth and development to Bathurst and surrounding communities and is consistent with the principles of Ecologically Sustainable Development (ESD).

2.2.2.2 Vision Bathurst 2040

'Vision Bathurst 2040: Bathurst Region Local Strategic Planning Statement' (Bathurst Regional Council, 2020) (Bathurst LSPS) details 19 key planning priorities to guide land use planning to achieve desired sustainable growth in the Bathurst over the next 20 years. The Bathurst LSPS is informed by the Central West and Orana Regional Plan and implements relevant sections at the local level, and the Bathurst 2040 Community Strategic Plan which acts as a supporting document (Bathurst Regional Council, 2020).

The Project directly addresses "*Planning Priority 14: Create a Sustainable Bathurst Region*", which includes supporting the NSW Government's net zero by 2050 target by "increasing the availability and use of renewable energy sources".

2.2.3 Lithgow City Council

2.2.3.1 Lithgow Local Environmental Plan 2014

Relevant aims of the 'Lithgow Local Environmental Plan 2014' (Lithgow LEP) include:

"(a) to encourage sustainable and planned development that complements the unique character and amenity of Lithgow and enhances its towns, villages and rural areas,

(b) to provide for a range of development opportunities that contribute to the social, economic and environmental resources of Lithgow in a way that allows the needs of present and future generations to be met by implementing the principles of ecologically sustainable development,

(c) to manage, facilitate and encourage sustainable growth and development that—

(ii) protects, enhances and conserves mineral and extractive resources lands, forests and agricultural lands and the contributions they make to the local, regional and State economy, and …

(vi) protects and enhances environmentally sensitive areas, ecological systems, areas of high scenic, recreational, landscape or conservation value and areas that have the potential to contribute to improved environmental outcomes, and

(vii) protects and enhances places and items of environmental, archaeological, cultural or heritage significance, including Aboriginal relics and places. …"

The Project will contribute to the above objectives as it provides renewable energy development and will contribute to the development and growth of Lithgow and surrounding communities. The Project is consistent with the principles of ESD which are outlined in the Lithgow LEP.

2.2.3.2 Lithgow 2040 Local Strategic Planning Statement

'Lithgow 2040 Local Strategic Planning Statement' (Lithgow City Council 2020) (Lithgow LSPS) provides strategic direction through the implementation of 12 key planning priorities. The Lithgow LSPS is supported by other documents including "Regional Plans, Local Environmental Plans, Development Control Plans and Community Strategic Plans" (Lithgow City Council, 2020). The Project directly addresses *"Planning Priority 8: Protect the Economic Values of Rural Areas Through Managing Land Use Conflict"* by diversification of Lithgow's economy whilst operating in unison with regular operations of the Sunny Corner State Forest. Renewable energy is recognised as one of Lithgow's emerging industries as part of its economic vision.

2.3 Site Setting and Features

2.3.1 Site Context

2.3.1.1 Regional Community

The Project Area is located at 64 Sunny Corner Road, Kirkconnell, NSW 2795, in the Sunny Corner State Forest, managed by FCNSW. The Project is located between Lithgow and Bathurst and is located within the Lithgow City and Bathurst Regional Local Government Areas (LGAs) as shown on **Figure 1-1.**

The regional community is detailed below (with further detail in **Appendix G**) and is shown on **Figure 1-1**.

Nearby Towns and Population Centres

The Project is located adjacent to the population centre of Sunny Corner, which has a population of 94 residents (ABS, 2021). There are 22 towns or townships within 35 km of the Project Area, along with the two regional centres of Lithgow and Bathurst. Nearby population centres located near the Project Area include:

- Lithgow (regional centre) – 34.7 km southeast;
- Bathurst (regional centre) – 36.3 km west;
- Portland (regional centre) – 15.5 km east;
- Yetholme (regional centre) – 1 km south; and
- Meadow Flat (regional centre) – 3 km east.

The regional community relies heavily on the provision of local services from Lithgow and Bathurst. The Great Western Highway connects Lithgow and Bathurst. Some small towns are located along this Highway between the two and have small populations and limited accommodation and service support options.

Portland

Portland is the biggest of the nearby towns to the Project Area, located 15.5 km east. The town includes a number of industries including coal mining, aged care residential services, supermarket and grocery stores, a correctional and detention service and local government administration. The economic focus of the town is the Mt Piper Power Station and related coal mines, with wool and forestry being other major local industries in the area. Small boutique farmers also grow and breed goats, alpacas, horses, olives, chestnuts and there are a small number of vineyards.

Lithgow

Lithgow LGA is located on the western ramparts of the Blue Mountains, 140 km from Sydney. In addition to the major urban centre of Lithgow, the LGA has 12 villages/hamlets with mining or farming backgrounds, including Dark Corner, Meadow Flat and Portland. Lithgow was previously perceived to be an inland mining and industrial centre, however, recent developments have seen it recognised as an important tourism destination, heritage centre and a desirable residential area. The area includes World Heritage listed National Parks and State Forests, making Lithgow an important leisure destination for Sydney residents.

Bathurst

Bathurst is Australia's oldest European inland settlement located just over 200 km west of Sydney on the Macquarie River. Bathurst LGA includes the city of Bathurst and rural nine villages: Georges Plains, Hill End, Peel, Rockley, Sofala, Sunny Corner, Trunkey Creek, Wattle Flat, Kirkconnell and Yetholme. Bathurst's social infrastructure includes four museums, public car parks, sporting facilities, playgrounds and parks, approximately 138 km of cycleway and footpath, childcare centres, two special support schools, primary schools, five high schools, a TAFE and Charles Sturt University.

Bathurst Hospital services include allied health, ambulatory care, coronary care, emergency medicine, intensive care, general medicine, maternity, mental health drug and alcohol, obstetrics and gynaecology, oncology, paediatrics, pathology, radiology, rehabilitation and surgery services.

Bathurst Fire Station is on Suttor Street, and NSW State Emergency Services has unit on Lloyds Road. Bathurst Airport is the nearest airport west of Sydney, located 10-minutes' drive from the Bathurst CBD.

Nearby Renewable Energy and Related Projects

There are a number of existing and/or proposed renewable energy developments located within 20 km of the Project Area which have potential for cumulative impacts as shown on **Figure 1-1**. Of the nine developments, one is a wind farm and three are solar farms. Other developments relate to transmission lines, pumped hydro or stand-alone BESS.

Section 2.6 describes each in relation to its proximity to the Project and includes a description and states the status of each nearby development, as well as the number of WTGs and/or photovoltaic (PV) panels proposed where applicable.

2.3.1.2 Local Community

The Project Area is located in the Sunny Corner State Forest, which is characterised by undulating topographic landscape. The primary land use is a pinewood plantation, while also being utilised for recreational purposes. Sunny Corner is a small village of under 100 people. Community capital and infrastructure includes a community hall, rural fire service brigade, war memorial, recreation ground, children's playground and tennis court, picnic spaces, and a waste management facility. "Sunny Corner Sundays" is a local food and flea community market.

Most businesses and communities around the Project Area rely on the regional centres of Lithgow and Bathurst for essential and community support services.

2.3.1.3 Natural Features

Topography and Geology

The Project is located within the Central Tablelands region of NSW. The Project Area is within the:

- Southeastern Highlands Interim Biogeographic Regionalisation for Australia (IBRA) region and Hill End IBRA subregion; and
- Bathurst Granites and Mount Horrible Plateau Mitchell landscapes.

The Central Tablelands is a geographic area between Sydney and the Central Western Slopes and Plains and lies largely within the Lachlan Fold Belt tectonic zone. The central basin area of the Bathurst area is mainly granite soils, while the north comprises sandstone, conglomerates, greywacke, siltstones, limestones and minor volcanos predominate. Underlying Bathurst is the dominant feature of Bathurst granite and at Mount Panaroma and Mount Stewart, basalt occurs.

Topography surrounding the Project Area ranges from slightly undulating to rough and very steep country.

Climate

Climate is described in terms of long-term weather statistics for a particular location comprising averages, variations and extremes.

The nearest air quality monitoring station is located in Bathurst (Air Quality NSW) and measures particulate matter (PM_{10} and $PM_{2.5}$), wind speed, wind direction, ambient temperature; and relative humidity. This station provides hourly pollutant concentrations data, as well as 24-hour summaries and air quality category (AQC) ratings. As at 27 November 2024, air quality levels are classified as "good".

The nearest weather station is Bathurst Airport AWS (Station No. 063291), located at Bathurst Airport which lies at an elevation of 745 m Australian Height Datum (AHD). A review of the Australian Bureau of Meteorology (BOM) climatic records from 1990 – 2024 indicate a mean summer maximum temperature of 28.9°C in January, and a mean winter minimum temperature of 0.9°C in July.

Rainfall records from 1994 -2024 indicate a mean annual rainfall of 619.4 mm, with the highest monthly maximum occurring in November of 71.5 mm and the lowest monthly maximum occurring in May of 32.9 mm (BOM, 2024).

Wind records from 2003 – 2024 indicate that the mean daily wind run (estimated cumulative amount of wind over a 24-hour period) is highest in January at 280 km, and is the lowest in May at 203 km.

Vegetation

The Project Area is located in approximately 10,000 ha of softwood pine plantation in the Sunny Corner State Forest. Winburndale Nature Reserve borders the Project to the west.

In addition to extensive areas of *Pinus radiata* (pine plantations), a number of Plant Community Types (PCTs) are present within the Project Area, ranging from freshwater and forested wetlands to forests and grassy woodlands. Vegetation condition ranges from high condition in areas less subject to historical pressures such as nearby clearing or plantation activities, to thinner tracts of native vegetation, usually associated with waterways or fence lines, and forestry environmental exclusion areas, where edge effects such as non-native plant invasion exist. Vegetation is further described in **Section 6.4**.

Watercourses

There are several water courses within the Project Area (NSW ePlanning Spatial Portal, 2024) and include:

- Coolamigal Creek;
- Archers Gully;
- Clear Creek;
- Dark Corner Creek;
- Lagoon Creek;
- Daylight Creek;
- Turpins Creek;
- Stonestreets Creek;
- Mitchells Creek;
- Bobs Creek;
- Diamond Swamp Creek; and
- Kirkconnel Creek.

The Project Area lies within the Central West Slopes and Plains Sub Region, an area of 94,215 km^2 which incorporates land in both the Lachlan and Macquarie River valleys, including Parkes, Forbes, Weddin, Lachlan, Dubbo, Warrumbungle, Gilgandra, Coonamble, Narromine, Warren and Bogan (NSW Government, 2024).

The Central Tablelands sub-region covers an area of approximately 31,365 km^2 and is broadly located in the Upper Lachlan, Lachlan Slopes, Upper Macquarie and Mid Macquarie sub catchments. It covers the western fall of the Great Dividing Range and includes the towns of Lithgow in the east to Cowra in the west. The Lachlan and Macquarie Rivers are the major drainage systems in the region (Local Land Services, 2024).

Within the Bathurst Regional Council LGA, there are two physical components comprising the Bathurst Basin and the tablelands area, all drained by the Fish, Cambells, Macquarie and Turon Rivers to the north, and the Isabella and Abercrombie Rivers to the south.

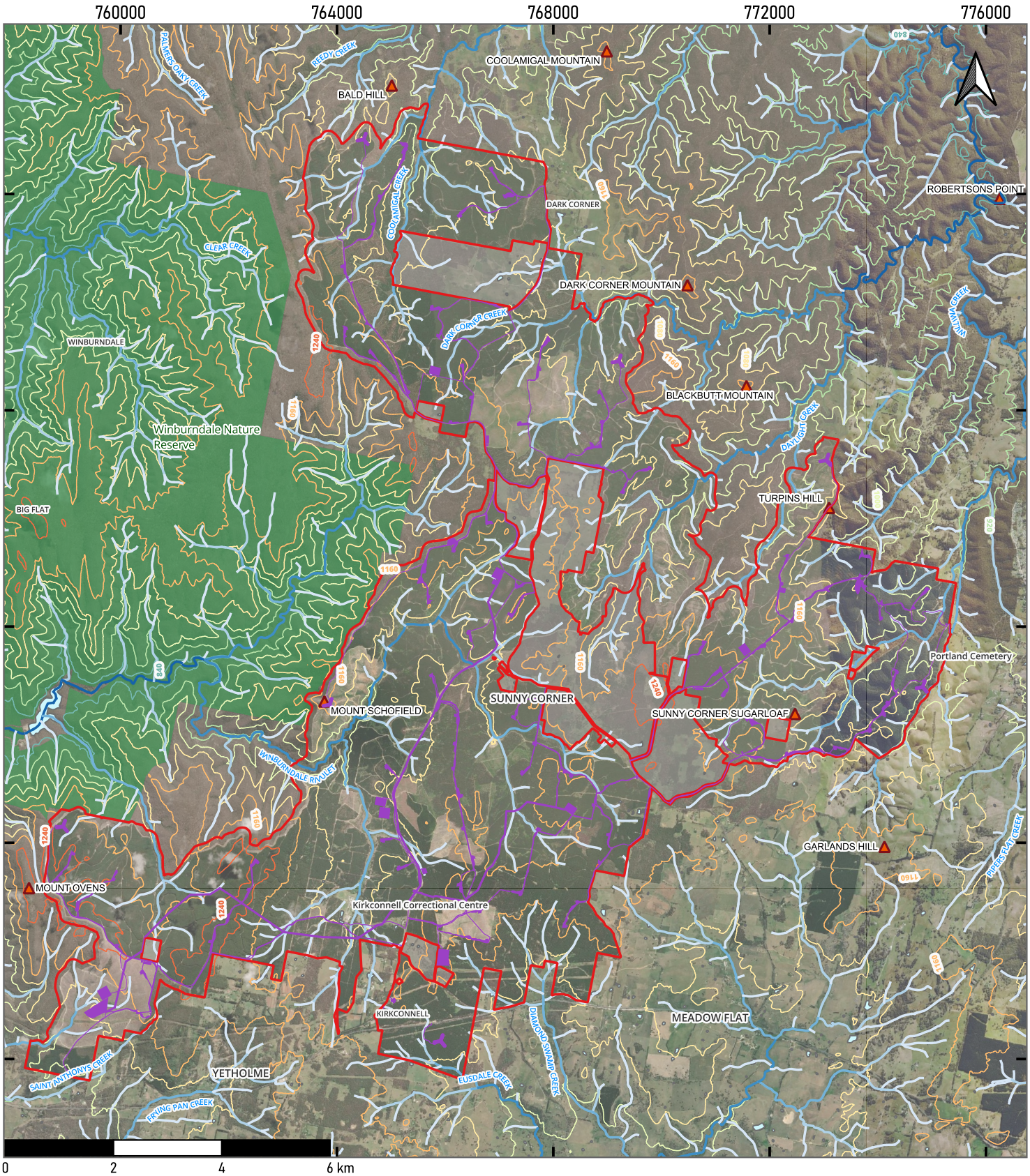
National Parks and Conservation Areas

The nearest National Parks to the Project Area include the Turon National Park, located 10 km north of the Project Area, and the Marrangaroo National Park, located 18 km southeast of the Project Area as shown on **Figure 2-1.**

National parks and state conservation areas proximate to the project are listed in **Table 2-1.**

Table 2-1 Nearby National Parks and State Conservation Areas

Park / Area	Nearest WTG	LEP	Zoning
Winburndale Nature Reserve	1 km west	Bathurst LEP 2014	C1 – National Parks and Nature Reserves
Wambool Nature Reserve	5 km southeast	Bathurst LEP 2014	C1 – National Parks and Nature Reserves
Eusdale Nature Reserve	2 km south	Bathurst LEP 2014	C1 – National Parks and Nature Reserves
Evans Crown Nature Reserve	11 km south	Lithgow LEP 2014	C1 – National Parks and Nature Reserves



Sunny Corner Wind Farm

Figure 2-1 Natural Environment

Date: 07/02/2025
CRS: GDA2020 / MGA zone 55
Scale: 1:97500
Basemap: ESRI Satellite (2024)
Data Sources: NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS
Version: 3.1
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Legend

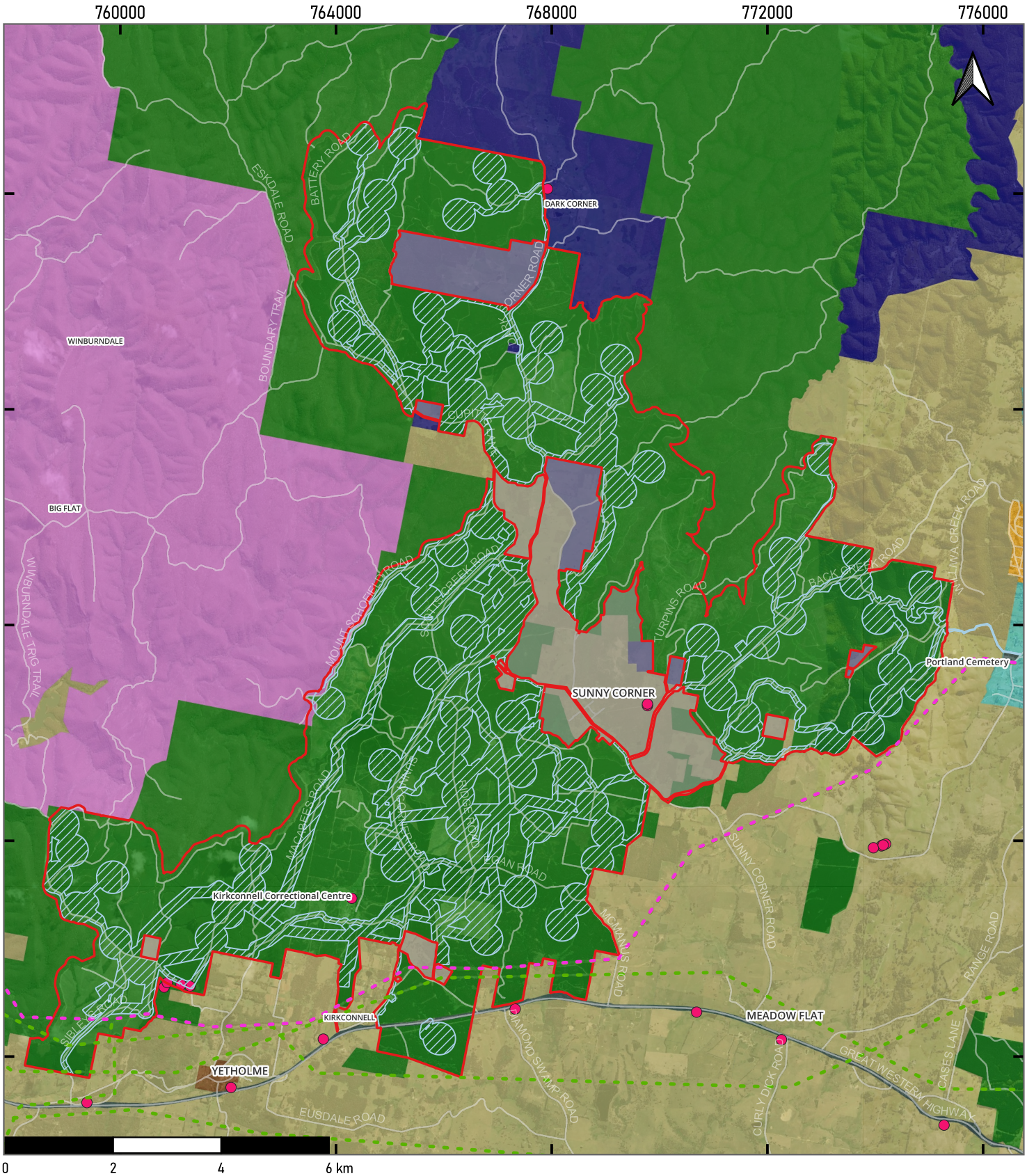
Project Infrastructure
- Project Area
- Non-Project Area
- Preliminary Development Footprint

Natural Environment
- Nature Reserve
- Mountain Like Feature

- Hydro Area

Strahler Stream Order
- 2
- 3
- 4
- 5
- 6

Contour Lines
- 840m
- 920m
- 1000m
- 1080m
- 1160m
- 1240m



Sunny Corner Wind Farm

Figure 2-2 Built Environment

Date: 10/02/2025
CRS: GDA2020 / MGA zone 55
Scale: 1:97500
Basemap: ESRI Satellite (2024)
Data Sources: NSW Spatial Portal (2024)
Prepared By: EL Reviewed By: TS
Version: 3.0
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Legend

Project Infrastructure
- Project Area
- Non-Project Area
- Preliminary Development Corridor

Existing Infrastrucutre
- Roads
- 132kV Transmission Line
- 330kV Transmission Line
- ACMA Sites

Land Zoning
- C1 - National Parks and Nature Reserves
- C3 - Environmental Management
- R2 - Low Density Residential
- R5 - Large Lot Residential
- RE1 - Public Recreation
- RU1 - Primary Production
- RU2 - Rural Landscape
- RU3 - Forestry
- RU5 - Village
- SP2 - Infrastructure

2.3.2 Land Ownership

2.3.2.1 Project Area

Landownership within the Project Area is predominantly NSW owned with some Crown Land throughout the northern and southern sections (refer to **Figure 2-3** and **Figure 2-7**). **Figure 2-3** illustrates land ownership and provides an overview of receivers. **Figure 2-4** to **Figure 2-6** provide a zoomed in view of receivers around Portland, Sunny Corner, and Yetholme respectively.

Appendix C contains a list of lot and DPs within the Project Area to which this Application applies. Some additional areas outside the current Project area will be required for the Project and will be identified and listed in the EIS.

2.3.2.2 Associated and Non-Associated Receivers

There are no associated receivers for the Project at the present time. There are 161 non-Associated receivers within 1.8 km of the Project Area.

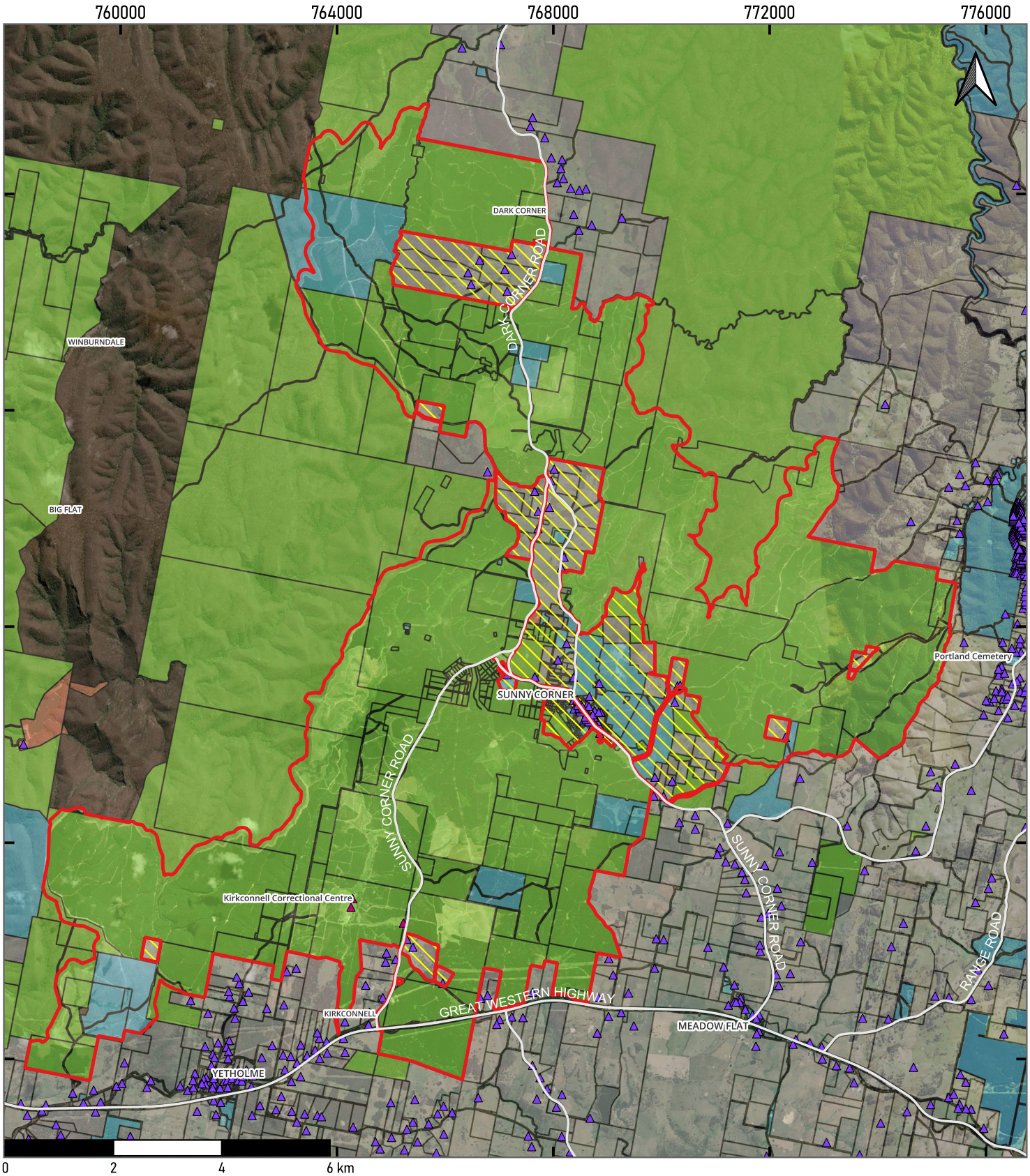
Appendix D and **Appendix E** lists properties and non-associated receivers in proximity to the Project. These were subject to preliminary assessments and are shown on **Figure 2-3 to Figure 2-6**.

2.3.2.3 Agreements with Other Parties

The Applicant has an agreement with FCNSW to investigate a renewable energy project such as the one described in this Scoping Report. Pending the results of these investigations, the Applicant has the ability to construct the Project.

Where receiver owners are hosting Project infrastructure or have entered into an Agreement, they are referred to as ‘Associated’ receivers, all other receivers are referred to as ‘non-Associated’ receivers. Landholders within and surrounding the Project Area are shown in **Figure 2-3 to Figure 2-6.**

There are no additional receivers associated with the Project at this time.



Sunny Corner Wind Farm

Figure 2-3 Land Ownership and Receiver Overview

Date: 15/01/2025
CRS: GDA2020 / MGA zone 55
Scale: 1:97500
Basemap: ESRI Satellite (2024)
Data Sources: NSW Spatial Portal (2024)

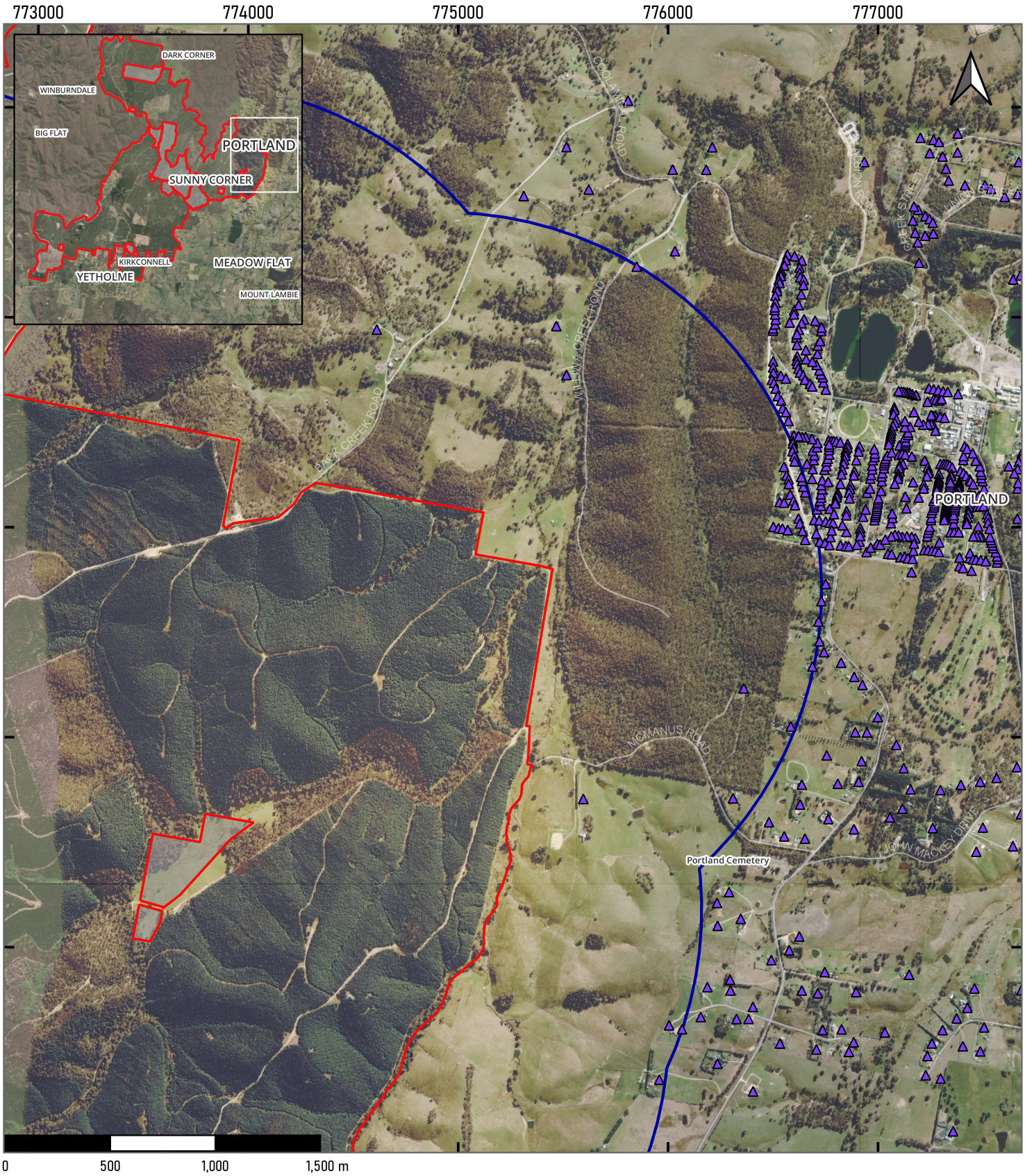
Prepared By: EL Reviewed By: TS
Version: 3.0
This figure may contain third party information.
This figure is provided for information purposes only and may not be to scale.

Legend

- Project Area
- Non-Project Area
- Roads
- Non-Associated Receiver
- Commercial Non-Associated Receiver

Land Owners

- Bathurst Regional Council
- Crown Land
- The State of NSW
- Lithgow City Council
- Private Land Owner



Sunny Corner Wind Farm

Figure 2-4 Portland Receivers

Date: 10/02/2025
CRS: GDA2020 / MGA zone 55
Scale: 1:25000
Basemap: ESRI Satellite (2024)
Data Sources: NSW Spatial Portal (2024)
Prepared By: EL Reviewed By: TS
Version: 2.0
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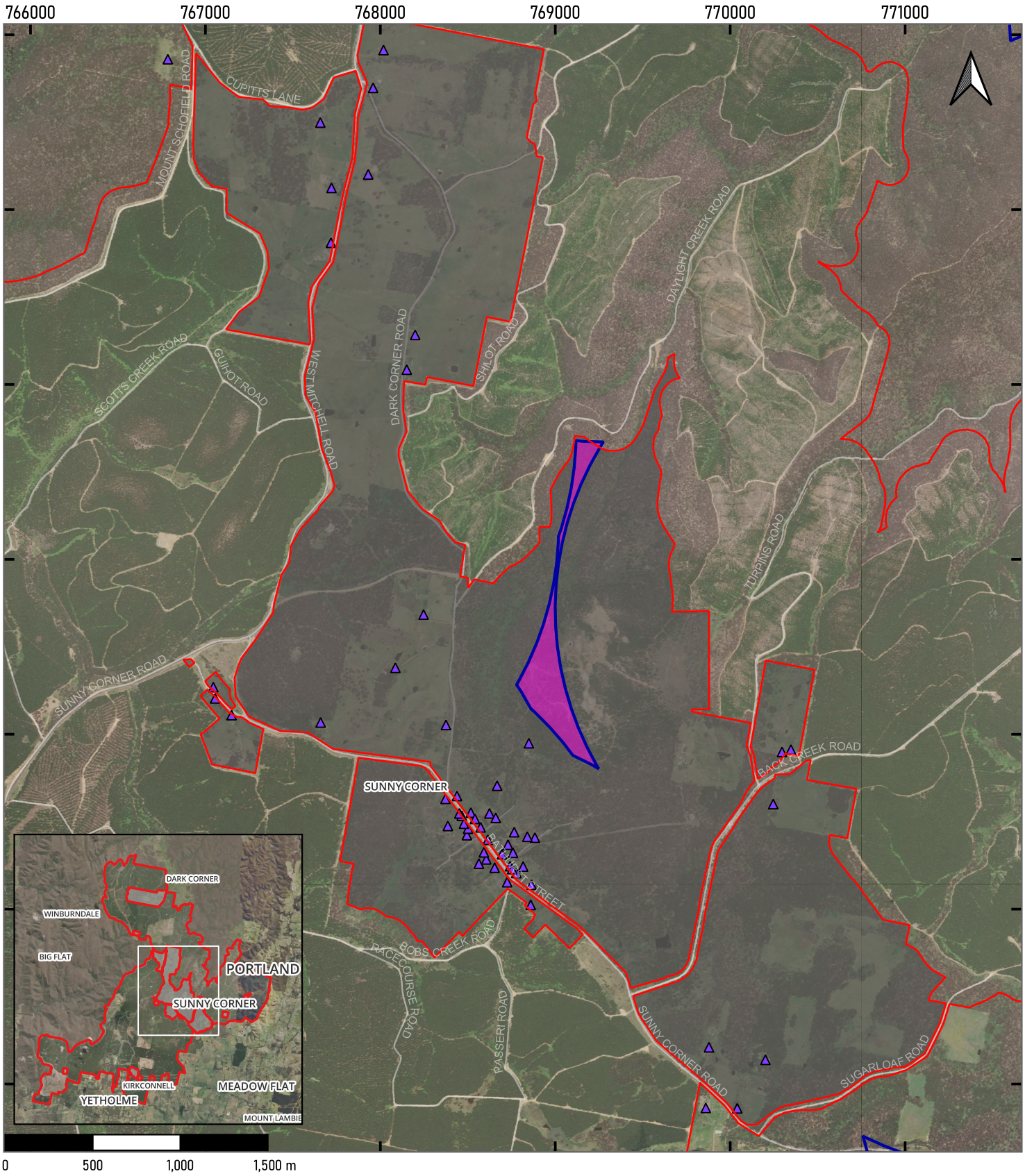
Legend

- Project Area
- Non-Project Area
- Roads
- Non-Associated Receiver
- Visual Assessment Setback - 1800m



Sunny Corner Wind Farm

Figure 2-5 Sunny Corner Receivers

Date: 10/02/2025

CRS: GDA2020 / MGA zone 55

Scale: 1:30000

Basemap: ESRI Satellite (2024)

Data Sources: NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS

Version: 2.0

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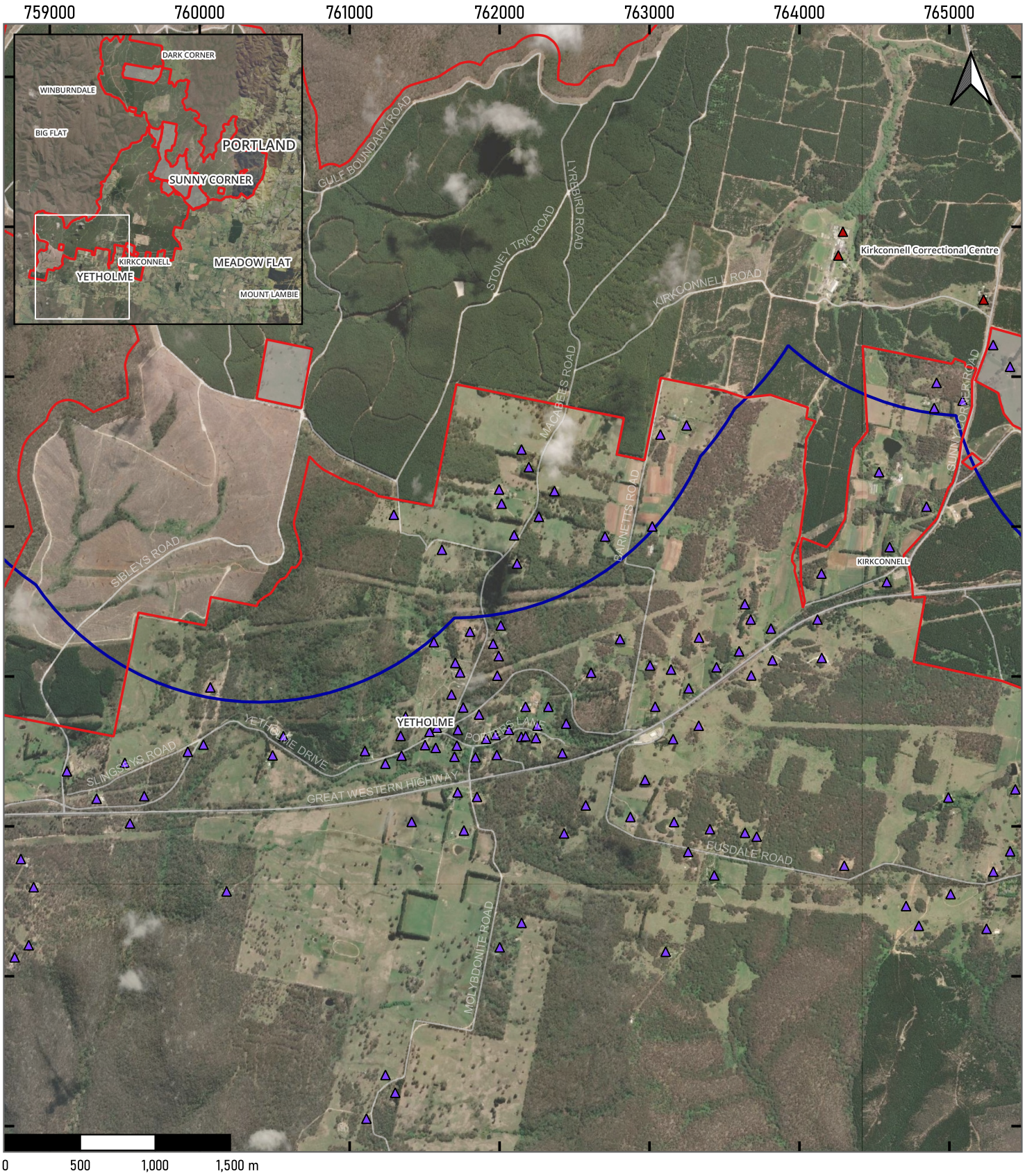
Legend

- Project Area
- Non-Project Area
- Roads
- Non-Associated Receiver
- Visual Assessment Setback - 1800m
- Non-Setback Area



Sunny Corner Wind Farm

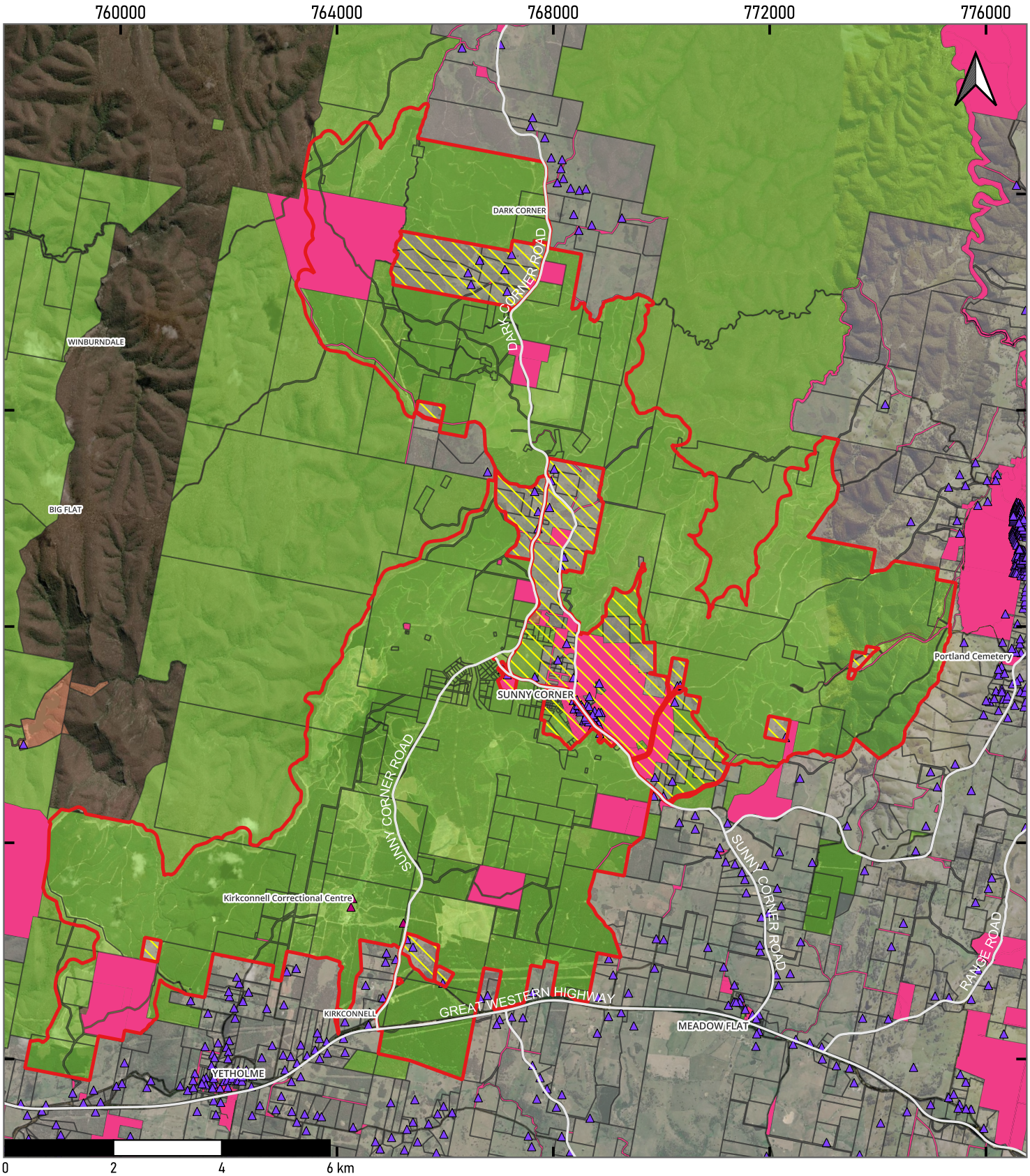
Figure 2-6 Yetholme Receivers

Date: 10/02/2025
CRS: GDA2020 / MGA zone 55
Scale: 1:35000
Basemap: ESRI Satellite (2024)
Data Sources: NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS
Version: 2.0

Legend

- Project Area
- Non-Project Area
- Roads
- Non-Associated Receiver
- Commercial Non-Associated Receiver
- Visual Assessment Setback - 1800m



Sunny Corner Wind Farm

Figure 2-7 Land Ownership (Crown Land)

Date: 15/01/2025
CRS: GDA2020 / MGA zone 55
Scale: 1:97500
Basemap: ESRI Satellite (2024)
Data Sources: NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS
Version: 2.1
This figure may contain third party information.
This figure is provided for information purposes only and may not be to scale.

Legend

- Project Area
- Non-Project Area
- Roads
- Non-Associated Receiver
- Commercial Non-Associated Receiver
- Crown Land

Land Owners

- Bathurst Regional Council
- The State of NSW
- Lithgow City Council
- Private Land Owner

2.4 Land Use

The Project Area has an array of uses from industrial, farming, mining, power generation, residential, recreational and commercial services and National Parks and Nature Reserves as discussed below.

2.4.1 Forestry

The Project Area is primarily zoned RU3 – Forestry and RU1 – Primary Production under the Lithgow City Council and Bathurst Regional Council LEPs, as shown on **Figure 2-2.** The Project Area covers an area of approximately 10,434 ha and 215 land parcels (i.e. individual lot / DPs).

The Project is located within the Sunny Corner State Forest, which is managed by FCNSW. FCNSW is a State-Owned Corporation providing sustainable and environmentally responsible timber, supporting the forest and wood production industries. Operating in NSW, FCNSW manages approximately two million ha of forest and contributes millions annually to the state economy.

FCNSW softwood timber plantations comprise mainly radiata pine, which are grown for approximately 30 years before the entire plantation is harvested and replanted. **Figure 2-8** describes the plantation and harvesting schedules that are currently operational at Sunny Corner State Forest.

2.4.1.1 Plantation Establishment

The cycle for the forestry plantation begins with cultivating the soil over summer prior to planting seedlings in the winter. The cultivating process starts with the removal of old stumps from at least 600 mm below the surface and the clearing of harvesting debris. The land is then tilled to allow seedlings roots to penetrate deep into the soil and establish strong root networks (Someva, 2024).

Tree planting is undertaken manually by shovel, where seedlings are planted 2.5 – 3.0 m apart in cultivated soil rows. Growth rates of the new trees vary but by final clear fall age (i.e. 32 years), trees are around 30 m tall. Most NSW plantations are on their second rotation, or even third. Sunny Corner is currently on their third rotation (Someva, 2024).

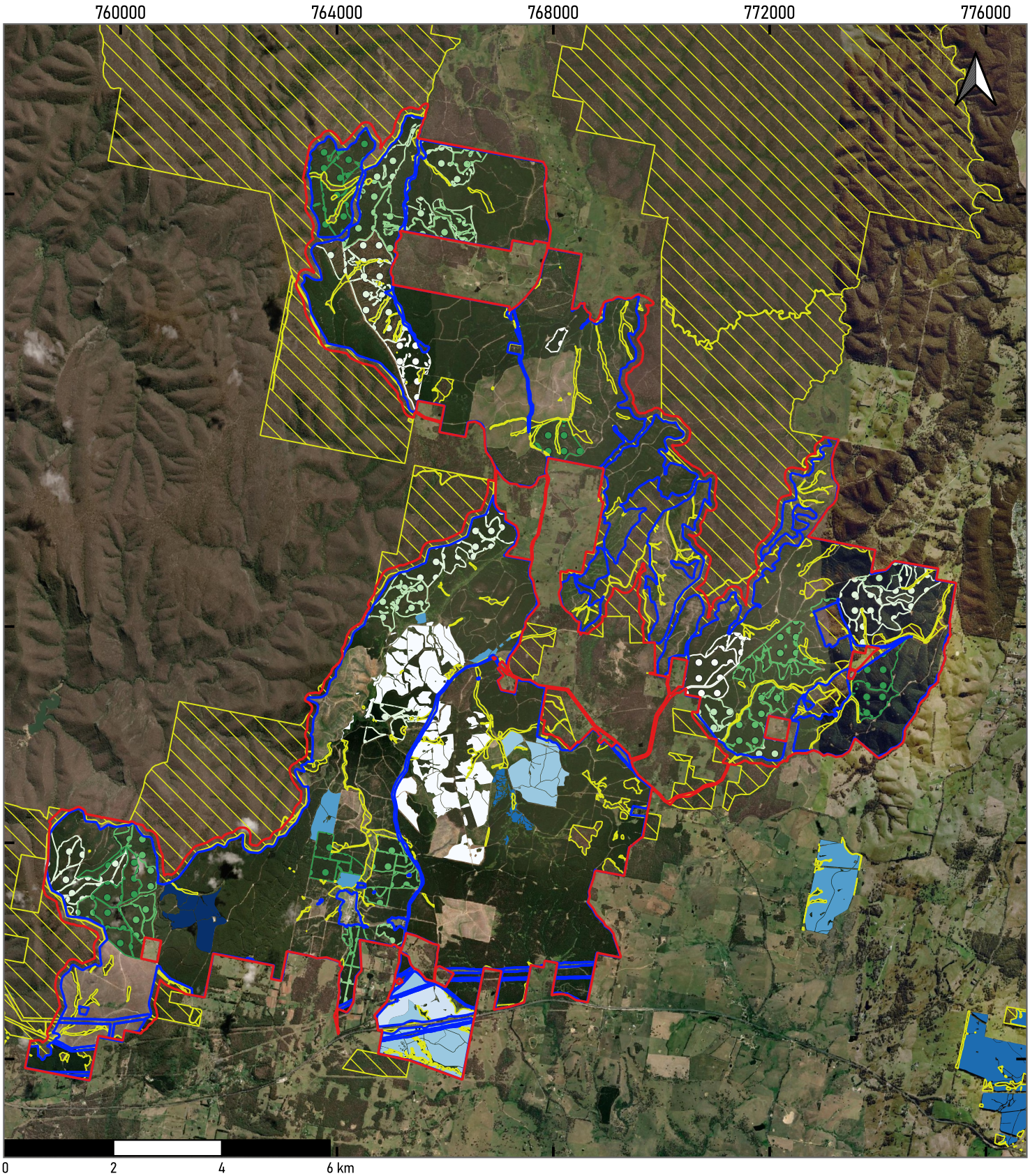
2.4.1.2 Harvesting

FCNSW's harvesting operation occurs on a 28 – 32 year rotation (five-year plan), where three mechanical operations will occur including the first rotation, second rotation and harvest. The first rotation or 'thinning' will occur when the trees are approximately 15 years old. At the thinning stages, FCNSW will assess the trees, identifying trees that are not growing as well as they should and arranging removal to provide space for other trees to grow vigorously and to further operations in the area. After the first rotation, a second rotation may occur prior to the harvest.

The final rotation in the operation involves harvesting the trees completely, where the logs are transported to harvest loading areas. Approximately 7,000 ha of land are cleared annually in clusters around the Sunny Corner plantation. Contractors are hired to harvest and haul the logs away from the area. The following year after harvest, trees are replanted, and the rotation starts again.

Harvest schedules are conducted on semi flexible five-year forward looking rolling plans, with greater certainty of operations one year prior to harvesting. Flexibility in operations aids FCNSW in maintaining contracted timber supply year-round. FCNSW has the capacity to store logs roadside to maintain supply, especially during the winter months when conditions can limit harvesting. The plantation sections support heavy machinery through wet conditions which includes roads that are not too steep and are gravel roads.

The Forestry Harvest Schedule illustrated in **Figure 2-8** indicates that over the next five years sections of the pine plantation within parts of the Project Area will be felled and thinned. Areas of thinning of the pine plantation will happen mainly in the northern, eastern, and southern corners of the Project Area between 2023 and 2028. In 2023, clear fell occurred in the central section of the Project Area. Other areas towards the south of the Project Area are set to be felled between 2024-2028.



Sunny Corner Wind Farm

Figure 2-8 Forestry Harvest Schedule

Legend

- Project Area
- FCNSW Management Zone
- FCNSW Exclusion Zone

Clearing Schedule	Thinning Schedule
2023	2023
2024	2024
2025	2025
2026	2026
2027	2027
2028	2028

Date:	15/01/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:97500
Basemap:	ESRI Satellite (2024)
Data Sources:	NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS
Version: 2.2
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2.4.1.3 Bushfires

FCNSW currently implements proactive strategies to ensure fire safety, given pine trees are vulnerable to fire. Initiatives currently undertaken by FCNSW within the Project Area include:

- Fire towers strategically placed around the plantation and in operation during the summer period to detect fires early;
- Staff on the plantation are trained to help fight bushfires and often have coordinated responses to bushfire with the Rural Fire Service (RFS) and National Parks and Wildlife Service (NPWS); Most FCNSW vehicles are fitted with water pumps and hoses so staff can respond to the fire immediately;
- Weather patterns are monitored closely, and when there are days of higher bushfire risk the appropriate measures are put into place to be extra diligent during operations; and
- FCNSW staff maintain their machinery and vehicles ensuring they are clean and not a potential fire hazard.

2.4.2 Recreational Use

Within Sunny Corner State Forest, there are many other recreational activities and infrastructure provided for the public. This includes picnic areas, camping grounds and bushwalks. Specifically at Sunny Corner, this includes Mary's Park (currently closed for restoration), the Arboretum, and Sunny Corner Recreation Reserve. Short term licences or permits are issued for firewood collection, grazing, apiary, public events, and drone use and each comes with various conditions of use. For most long-term activities within the Forest, users must obtain a permit or licence.

Recreational use of firearms in State Forests for hunting is sometimes allowed but is strictly managed through the Department of Primary Industries and Regional Development (DPIRD). DPIRD provides hunters with daily permits and maps of where they can and cannot go to ensure the safety of people working and operating on the estate.

2.4.3 Power Generation

Sunny Corner is situated in the central west of NSW which has a long history of energy generation and supplying the people of NSW. To date, this generation has come from coal power stations including those near Wallerawang and Mt Piper.

The Mt Piper Power Station is located 15 km east of the Project Area. The main electrical substation in the vicinity of the Project is the Transgrid Mt Piper Power Station switchyard and associated network assets which represent an electrically strong part of the network with multiple 330 kV and 500 kV assets in the vicinity of the Project Area.

Other power stations are at least 85 km from the Project Area.

2.4.4 Coal and Mineral Mining

A review of MinView (MinView, 2024) indicates there are four mineral exploration licences within the Project Area. The current licences present include the following: EL9133, EL5964, ML1878 and EL9054 (refer **Figure 3-5**).

Consultation will be undertaken with these licence holders during the EIS process.

The Project Area is close to retiring and retired coal and mineral mines, including the historic Sunny Corner Mine, which was mined for silver in the years 1881-1893 as well as other prospects including the historic Nevada Mine which was mined for silver, lead and copper (Golden Cross Resources, 2022).

A large segment of the Sunny Corner community is currently employed or reliant on the local fossil fuel electricity generation and coal mining industries. The nearest operating coal mine to the Project Area is the Springvale coal mine, located near Lithgow approximately 21 km east of Sunny Corner.

Springvale is an underground coal mine with a workforce of approximately 400 people, which uses longwall mining methods to produce coal for the Mt Piper Power Station and is approved to operate until 2028.

Other coal mines in the area include at least the following:

- Cullen Valley Open Cut Mine operated by Castlereagh Coal (a wholly owned subsidiary of Shoalhaven Coal Pty Ltd), located 15 km northeast of Sunny Corner. Mining recommenced in May 2022 to retrieve remnant coal, remnant mining was completed in December 2022. The is in “care and maintenance” (Castlereagh Coal, 2024);
- Airly is operated by Centennial Coal and is an underground coal mine located near Capertee, around 40 km northwest of Lithgow. Airly has been operational since 2009, employs 130 people and produces up to 1.8 million tonnes of coal annually, predominantly for the domestic market (Centennial Coal, 2023). Airly has been approved to operate until January 2037;
- Angus Place Colliery is located approximately 18 km east of Sunny Corner in Lidsdale. After almost 70 years of mining, Angus Place has been on “care and maintenance” since early 2015;
- Clarence Underground Coal Mine is located 31 km east of Sunny Corner. Clarence has a workforce of 300 people, extracts up to 3 million tonnes of coal annually and is approved to operate until 2026; and
- The Sunshine Reclamation open cut mineral mine (ML1878) is located 9 km southwest of Portland, near Sunny Corner (MinView, 2024) and directly adjacent to the Project Area. The mine was granted operations in May 2024 for a term of 21 years, with the term ending in May 2045. Minerals mined include copper, gold, iron, lead, silver and zine (MinView, 2024 (Mining Lease Application 593)).

2.5 Risks and Hazards

Wind farm developments by their nature require areas of land to accommodate WTGs and ancillary infrastructure. Due to this, these developments are often located in rural areas, which typically result in changes to landscape character and may generate impacts from the Project construction and/or operation. Those that require more detailed assessment, due to an increased risk of significant impacts include biodiversity, noise and vibration, landscape and visual, and social factors. As the Project is located within a pine plantation, unique risks will apply and will need to be assessed accordingly.

Key potential risks of the Project on environmental and social aspects are investigated in **Section 6**.

2.6 Cumulative Impacts

The Project will be assessed in accordance with the requirements of the ‘Cumulative Impact Assessment Guidelines for State Significant Projects’ (DPIE, 2022b). The EIS and its associated technical studies will consider relevant construction, industrial and employment generating projects within the locality, and assess potential cumulative impacts.

Developments in proximity to the Project as shown on **Figure 1-1** with each at varying approval stages as described in **Table 2-2.**

Table 2-2 Developments in proximity to the Project

Project ID	Project Name	Distance	Status
Renewables	**Bathurst Regional LGA**		
SSD-64834490	Brewongle Solar Farm	9 km	Prepare EIS
SSD-50587460	Panorama Battery Energy Storage System	25 km	Response to Submissions
SSD-32286107	Central West Pumped Hydro	5 km	Prepare EIS
SSD-21208499	Glanmire Solar Farm	8 km	Determined (30/01/2024)
SSD-6697	Crudine Ridge Wind Farm	41 km	Determined (10/05/2016)
Renewables	**Lithgow City LGA**		
SSI-70279722	Mt Piper to Wallerawang Transmission	6 km	Prepare EIS
SSD-50903958	Mt Piper Battery Energy Storage System	6 km	Assessment

Project ID	Project Name	Distance	Status
SSD-60598738	Lake Lyell Pumped Hydro	18 km	Prepare EIS
SSI-77018220	Lake Lyell Pumped Hydro Energy Storage	18 km	SEARs
SSD-14540514	Wallerawang Battery Energy Storage System	17 km	Determined (4/08/2022)
SSD-12346552	Great Western Energy Storage System	11 km	Determined (02/11/2023)
Other	**Bathurst Regional LGA**		
SSD-9505	McPhillamys Gold Project	43 km	Determined (30/03/2023)
SSD-30394840	Bathurst Integrated Medical Centre	19 km	Prepare EIS
SSD-64733959	Bathurst Hospital Redevelopment	19 km	Prepare EIS
MP10_0235	Macquarie River – Orange Water Pipeline	61 km	Determined (18/06/2013)
Other	**Lithgow City LGA**		
SSD-26254212	Angus Place West	13 km	Prepare EIS
MP06_0021	Angus Place Coal Mine	13 km	Determined (13/09/2006)
SSI-22004371	Great Western Highway Blackheath to Little Hartley	39 km	Response to Submissions
MP07_0127	Invincible Coal Mine – Expansion	14 km	Determined (4/12/2008)
MP09_0186	Mt Piper Power Station – Ash Placement	5 km	Determined (16/02/2012)
SSD-7592	Springvale Water Treatment Facility	7 km	Determined (19/06/2017)
SSD-5579	Western Coal Services	8 km	Determined (21/10/2022)
MP08_0223	Lisdale Coal Loader	11 km	Determined (03/05/2013)
SSD-5581	Airly Coal Mine Expansion	21 km	Determined (15/12/2016)
MP06_0310	Emirates One & Only Resort, Wolgan Valley	29 km	Determined (13/04/2007)
MP07_0005	Wallerawang Power Station – Ash Dam	14 km	Determined (26/11/2018)
SSD-5594	Springvale Coal Mine Extension	8 km	Determined (21/09/2015)
MP09_0178	Baal Bone Extension	15 km	Determined (14/01/2011)
SSD-6084	Austen Quarry	28 km	Determined (15/07/2015)
MP05_0103	Ivanhoe North Coal Rehabilitation	7 km	Determined (11/04/2007)
MP09_0119	Mt Piper Power Station Expansion - Concept	7 km	Determined (12/01/2010)

2.7 Project Justification

This section provides a summary on why the Project has been selected and what the expected benefits and outcomes are. These benefits include long-term strategic benefits to NSW as well as to Australia's renewable energy generation prospects.

2.7.1 Project Benefits

2.7.1.1 Wind Farm Benefits

Wind farms provide a significant contribution to Australia's transition to greener energy. The Australian Wind Alliance (AWA) prepared the report, 'Building Stronger Communities: Wind's growing role in regional Australia' (AWA, 2019), which outlines the ways in which wind farms deliver financial and social benefits to the surrounding community. Key points from the report are summarised as:

- Wind farm construction has delivered an economic boost of almost $5.1 billion to regional Australia, and new construction projects to provide a further $4.8 billion in economic activity into the regional economy;
- Across the 25-year life span of Australia's existing wind farms and wind farms under construction, an estimated $18.3 billion could be delivered to host communities.

The report also notes that wind farms deliver significant local investment and financial contributions to local Councils, which directly support local community projects and services.

2.7.1.2 Project-Specific Benefits

The Project would provide renewable, low-cost energy to the NEM, and will contribute to the Commonwealth and NSW Government's emission reduction targets (refer to **Section 2.1.3**). This will be achieved by supporting the transition from large fossil fuel generation, towards renewable energy production and assist in GHG emission reduction.

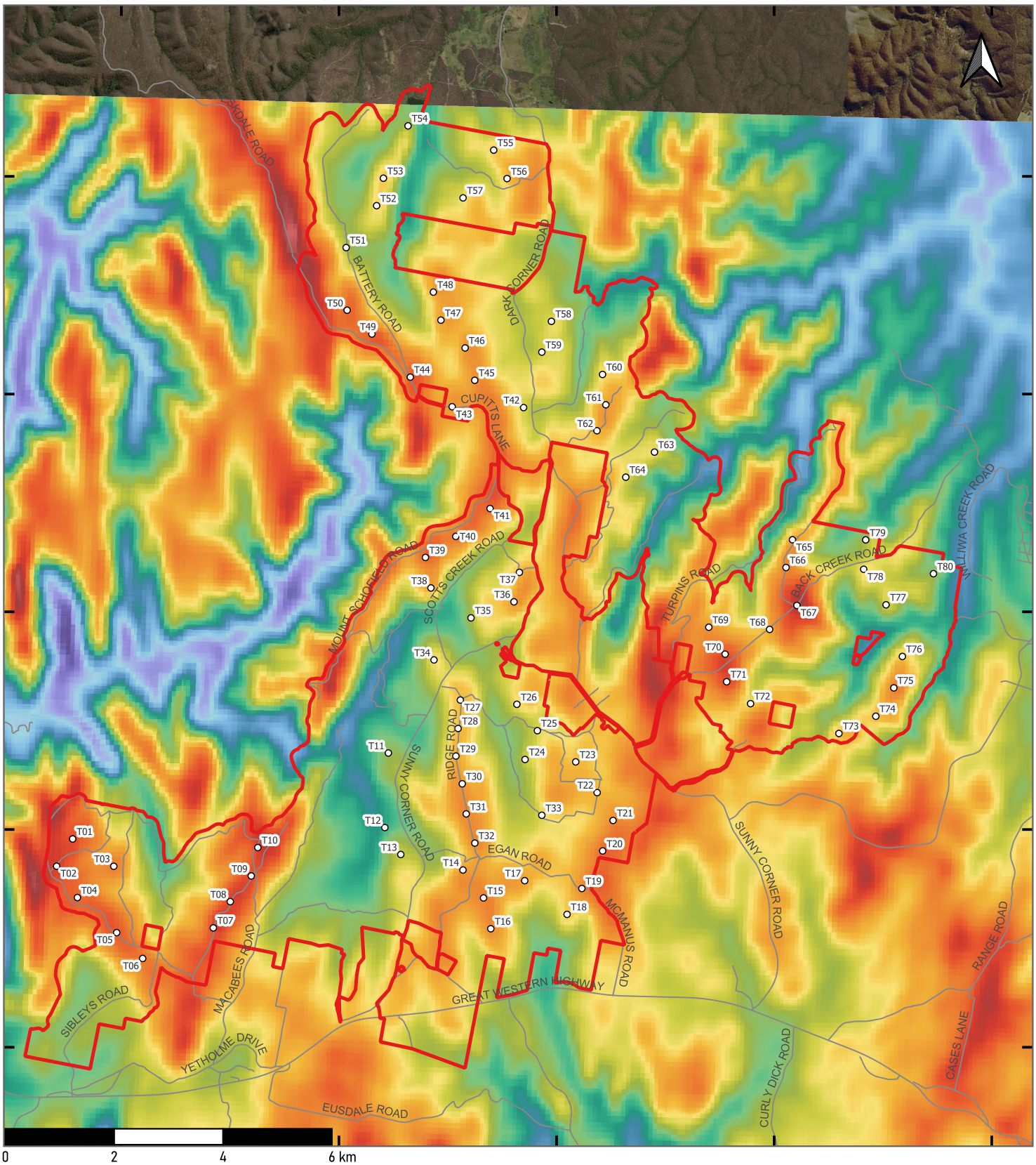
The expected benefits of the Project across NSW and Australia include:

- Energy bill savings from reduced wholesale electricity costs;
- Emissions reduction from a cleaner energy sector;
- Reliable energy from significant amounts of new energy supply; and
- Host community benefits through strategic planning and best practice engagement and formalised benefit sharing arrangements.
- In addition, the Project will provide benefits to the region and local communities including:
- Contributing to support approximately 475 FTE construction jobs at its peak;
- Direct investment in the Bathurst and Lithgow regions;
- Maintain and work cooperatively with existing forestry operations;
- Opportunities for local contractors and businesses;
- Diversified income stream for FCNSW;
- Renewable low-cost energy to the national grid; and
- Enhance bushfire monitoring and response through increased resourcing; and
- Development of new skilled labour in the region within the growing renewable energy industry.

2.7.2 Site Suitability

The Project Area is considered suitable for development as it is:

- Located within a superior wind resource area consistent with Global Wind Resource (2023) as shown in **Figure 2-9**;
- Proximate to a number of other existing and proposed renewable energy projects located within the region and in close proximity to the Project Area;
- Proximate to a number of existing high voltage transmission connection options;
- Easily accessible via the Great Western Highway;
- Consistent with the "*RU1 – Primary Production"* zoning and will meet the following objective of the zone: to encourage sustainable primary industry production; and
- Consistent with the 2021 legislative changes to the Forestry Act to allow renewable energy production within FCNSW owned land.



Sunny Corner Wind Farm

Figure 2-9 Wind Resource Mapping at 160m

Legend

Project Infrastructure

- Project Area
- Wind Turbine Locations
- Roads

MEAN WIND SPEED (m/s)

>10
10.00
9.83
9.66
9.48
9.31
9.14
8.97
8.80
8.62
8.45
8.28
8.11
7.94
7.76
7.59
7.42
7.25
7.08
6.90
6.73
6.56
6.39
6.22
6.04
5.87
<5.7

Date:	15/01/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:97500
Basemap:	ESRI Satellite (2024)
Data Sources:	NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS
Version: 2.3
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3 THE PROJECT

This section provides a simple and accurate overview of the preliminary Project description and includes a conceptual layout of the development for which approval is sought. It details the likely staging of Project, preliminary disturbance footprint, feasible alternative options considered and notes preliminary benefits of the preferred Project.

3.1 Overview

The Project includes the construction, operation and decommissioning of a wind farm and associated infrastructure with a targeted electricity generation capacity of 500 MW. Typical wind energy development components are shown in **Figure 3-1.**

The Project will supply electricity to the national electricity grid via the existing electricity transmission network to power approximately 300,000 homes with affordable, clean and reliable energy.

Table 3-1 provides a summary of the preliminary Project design components and specifications as shown conceptually in **Figure 3-2**. These are indicative and may be amended in the EIS.

Elements not shown but which are described in this Section will be located generally within the Project Area and will be confirmed during the EIS phase.

Additional disturbance areas (including but not limited to accommodation facilities, “cut and fill” and Asset Protection Zones (APZ)) will be considered during this process and defined in the EIS.

Table 3-1 Preliminary Project Summary

Element	Feature	Specification
Key Parameters		
Applicant		MRP Someva ProjectCo Pty Ltd
Project Area		10,434 ha
Development Corridor		4,005 ha
Disturbance Footprint		496 ha
Project Elements		
Energy Generation	Wind turbine generators (WTGs)	• Up to 80 WTGs • Tip height up to 285 m • Hub height up to 185 m • Indicative WTG nameplate capacity: up to approximately 8.0 MW
Electrical Reticulation Network	Substations	• Consisting of up to four main substations • Reactive Plant
	Transmission line easement	• Subject to on-site connection to existing 330 kV or 132 kV transmission line located to the south of the Project Area • Option for a dedicated transmission line to Mt Piper substation
	Internal electrical reticulation network	• Internal 33 kV, 66 kV, 132 kV, or 330 kV electrical reticulation network
	Switching station	• Switch and associated power equipment to connect to onsite transmission connection at main substation.
Other Infrastructure	Operations and Maintenance (O&M) facility and infrastructure	• Permanent site office and maintenance and storage facilities
	Battery Energy Storage System (BESS)	• Approximately 500 MW / 2,000 MWh
	Temporary construction and operational infrastructure	• Construction compounds • Concrete batching plants • Wind monitoring masts

Element	Feature	Specification
		• Onsite borrow pits • Blade Laydown and storage areas
Ancillary Activities	Onsite	• Ancillary onsite facilities • Water-tanks and firefighting equipment
	Offsite	• Ancillary offsite facilities
Access	Internal access	• Six access points from public roads • Use and upgrade of existing forestry access roads • Extension of internal access road network with construction and use of unsealed gravel access roads
	Port and Other NSW locations	• From Port of Newcastle (to be confirmed in the EIS) • Road upgrades required on the transport route
Personnel	Construction Operations	• 475 FTE (generally within standard construction hours) • Up to 35 FTE (24 hours a day / 7 days a week)

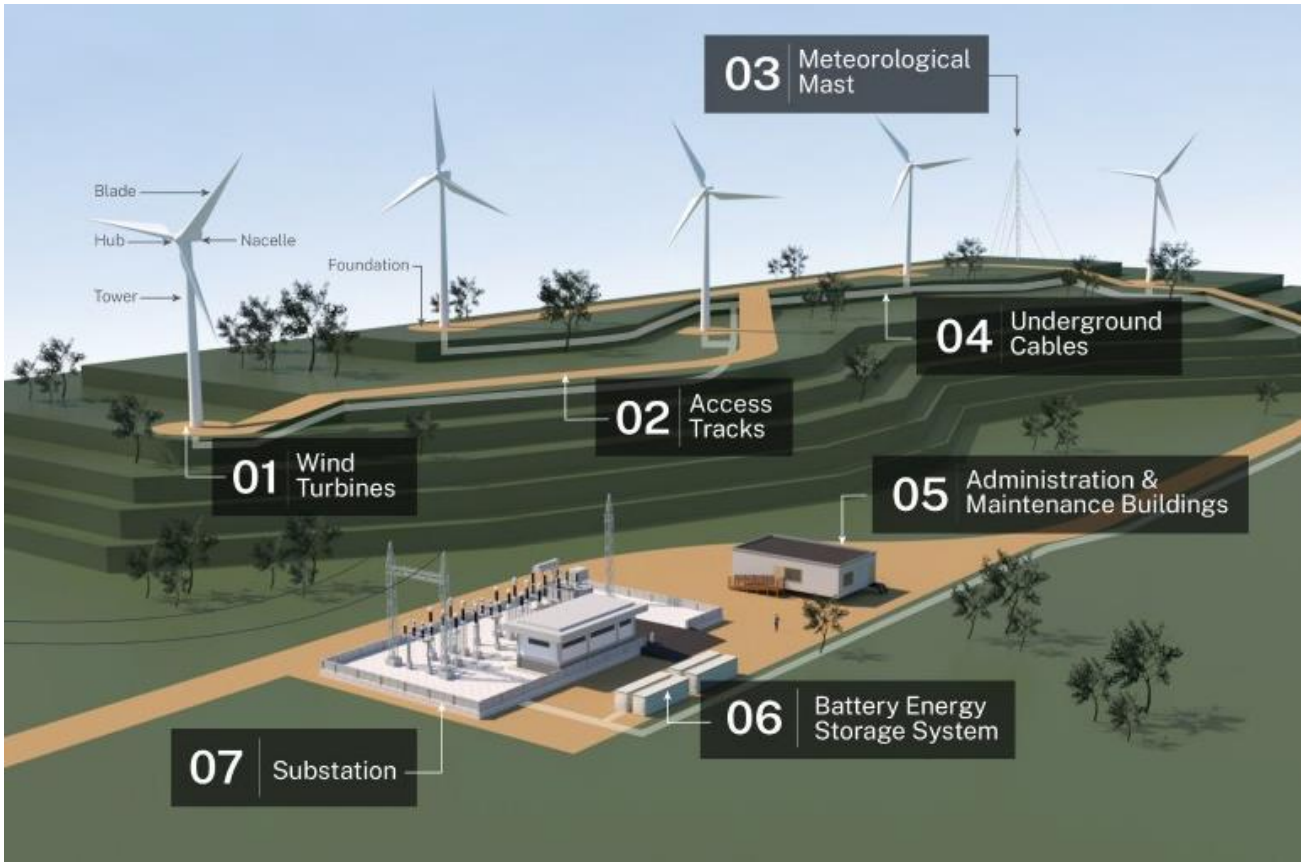
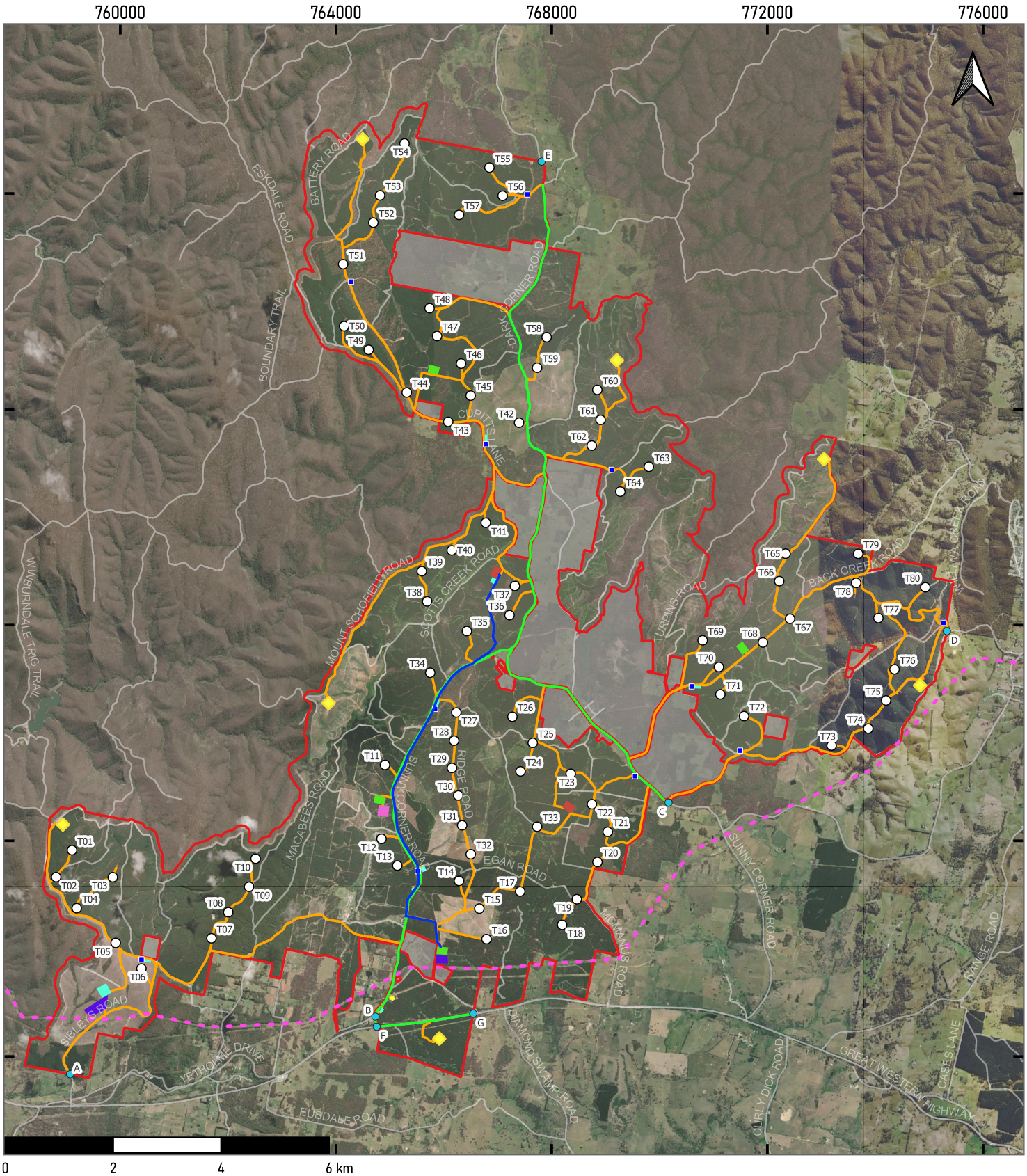


Figure 3-1 Typical Wind Energy Development Components (DPHI, 2024)



Sunny Corner Wind Farm

Figure 3-2 Preliminary Conceptual Project Layout

Date:	10/02/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:97500
Basemap:	ESRI Satellite (2024)
Data Sources:	NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS
Version: 4.0
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Legend

Project Infrastructure
- Project Area
- Non-Project Area
- Wind Turbine Locations
- Site Entrance
- Access Tracks
- Project Transmission

- Ancillary Infrastructure
- Construction Area
- Construction Office
- Site Office, Operations and Maintenance
- Substation
- Switching Station & Substation
- Water Tank Locations
- Permanent Meteorological Mast

Existing Infrastructure
- Existing Site Roads
- Roads
- Existing 330kV Transmission Line

3.2 Project Area

The preliminary Project Area is that which the Scoping Report has been prepared upon and is shown as the red boundary on **Figure 1-1**. The Project Area includes 10,434 ha within the Bathurst Regional Council and Lithgow City Council Local Government Areas (LGAs) and is zoned RU3 Forestry and RU1 Primary Production (refer **Figure 2-2**). Land is predominantly owned by FCNSW.

The Development Corridor describes that which is subject to detailed and consistent field survey and impact assessment and includes buffers around Project components to facilitate “micro-siting”. This includes vast majority of the area to be directly impacted by the Project and will be defined in the EIS.

The Project is located approximately 35 km from Bathurst and 55 km from Lithgow, north of the Great Western Highway. The Project is located within the Sunny Corner State Forest which both historically and currently operates as a softwood timber pine plantation on FCNSW land, which also supports a range of recreational uses. It is within a highly industrialised area in proximity to Mt Piper Power Station and coal mining activities.

In accordance with the ‘NSW Draft Wind Energy Guidelines’ (NSW DPE, 2023):

- There may be a need to relocate individual WTGs on site during detailed design, to respond to unforeseen geotechnical or access issues, or to avoid matters of biodiversity, historic or Aboriginal cultural heritage importance;
- Micro-siting will not materially increase environmental impacts; and
- If this results in a revised layout of WTGs or ancillary infrastructure, this must be consistent with the conditions of the development consent, or a modification will be required.

3.3 Project Components

This section details the preliminary Project upon which this SR is based and as conceptually shown on **Figure 1-2.** All values are approximate and will be refined in the EIS.

Changes within the preliminary boundaries and areas may be made during the EIS phase and detailed design phase in response to commercial, stakeholder engagement and technical decisions during EIS.

3.3.1 Wind Turbine Generators

The Project comprises up to 80 WTGs with a hub height of up to 185 m and a maximum tip height of up to 285 m. Each WTG will have a generating capacity of up to approximately 8 MW and the Project will have a combined maximum installed capacity of approximately 500 MW.

Selection of the final WTG model to be installed will be subject to detailed design refinement and technology availability post-approval, and subject to any conditions of consent.

Each WTG will be situated over gravel hardstands with concrete footings, mounted onto tubular steel or concrete towers. The rotor blades, nacelle and supporting tower of the WTGs will be painted white or grey.

The expected lifespan of a WTG is up to 30 years at which time decommissioning or replacement may occur.

3.3.2 Electrical Infrastructure

3.3.2.1 Battery Energy Storage System

A Battery Energy Storage System (BESS) with a capacity of up to 500 MW with 2,000 MWh energy storage will be constructed. On-site storage allows for on-demand electricity delivery to the transmission network, assisting to limit price fluctuations.

The BESS has a target life of up to 35 years with BESS components expected to be replaced or upgraded as required, and life may be extended if feasible at the time.

The BESS model and components will be further detailed during the EIS phase of the Project. The BESS will be designed in accordance with relevant standards and codes including but not limited to AS/NZS 5139, IEC 63381, IEC 62485-1, IEC 62485-2, etc.

The BESS could be strategically positioned within the Project Area adjacent to the main substation and switching station, optimising its connectivity to the grid and allowing for efficient energy transmission and distribution.

3.3.2.2 Reticulation and Grid Connection

The Project will supply energy to the NEM by connecting on-site to the existing 330 kV or 132 kV transmission lines located to the south of the Project Area.

The Project may also consider as a secondary option, constructing a dedicated 330 kV transmission from the south of the Project Area to Mt Piper substation. This alignment has not yet been defined or confirmed and would be indicated and assessed in the EIS, where applicable.

Up to four substations (inclusive of associated transformers) may be required, each within its own compound which will include system strength equipment, lightning protection, communications equipment, security fencing, switchgear, storage facilities, a control room and required earthworks.

A primary and alternate switching station are shown in **Figure 1-2** which will be refined in the EIS.

The onsite electrical reticulation network will contain both underground and overhead cabling to the substation(s) and will be placed with existing site roads and proposed access tracks to reduce disturbance, where practical to do so.

3.3.3 Site Access and Transport Route

3.3.3.1 External Transport Route

The WTG components and other specialist equipment will be imported from overseas and transported to the Project via Oversize Overmass (OSOM) vehicles. The transport route from Port of Newcastle or other areas in NSW or Australia to the Project Area, as well as any required road upgrades, will be identified in the EIS. Other required equipment and consumables will be sourced locally within the Bathurst and Lithgow LGAs, where practicable.

Heavy vehicles will transport materials and equipment associated with Project construction to the Project Area. Access to the site during construction and operation will utilise the existing road network. Primary access will be via the Great Western Highway.

3.3.3.2 Site Access

There will be up to six site entrances utilised to access the Project Area, largely via Sunny Corner Road from the Great Western Highway.

The existing external road networks are utilised for the existing pine plantation activities (see **Section 2.4.1.1**) by FCNSW and will be used during construction of the Project to transport staff, equipment, and materials.

In the event of an emergency, any existing FCNSW accesses may be utilised by the Project. This will be detailed in the EIS.

3.3.3.3 Internal Access Tracks

The existing internal road network currently used for the existing pine plantation activities by FCNSW will be utilised by the Project during construction to transport staff, equipment, and materials.

New internal access tracks will be required for the movement of construction equipment and materials throughout the Project Area. These access tracks will facilitate the construction of the Project, as well as maintenance works required during operation and decommissioning. Existing site roads will be used and upgraded if required where practical.

3.3.4 Other Associated Infrastructure

The Project will comprise various supporting infrastructure including (but not limited to):

- Site office / O&M facility (including associated septic and water tanks);
- Workshops;
- Up to seven meteorological masts;
- Construction pads and laydown areas;
- Concrete batching plant(s);
- Rock crushing facilities (required for suitable aggregates for mobile concrete batching, hardstand construction and/or for access tracks);
- Borrow pits (and associated access). A main borrow pit may be defined and assessed in the EIS; and
- Construction and operational compounds (including at least office/s, maintenance and storage facilities, car parking, and security fencing).

Temporary workers' accommodation within the Project Area for construction activities are not proposed. This will be confirmed during the preparation of the EIS.

3.3.5 Ancillary Activities

Ancillary onsite activities will be required to support the Project and may include:

- Communication cables and connection to public communications;
- Relocation of existing utilities;
- Bushfire fighting storage tanks and associated firefighting equipment;
- Environmental monitoring equipment;
- Hardstands;
- Road works and access tracks;
- Geotechnical works;
- Forestry infrastructure (including by not limited to: materials and/or processes, replace/upgrade existing Sunny Corner Depot and office facilities; and
- Landscaping and fencing.
- External ancillary activities may include:
- Sourcing of gravel, sand, rock, concrete, aggregate and other materials for construction;
- General waste disposal;
- Sourcing of water for construction; and
- Subdivision and boundary adjustments (e.g. substations and switchyard).

3.4 Preliminary Disturbance Footprint

For the purposes of the Scoping Report, it assumed that the Project will disturb a footprint of up to 496 ha, comprised of both temporary and permanent disturbance.

As described in detail in **Section 2.4.1**, a significant proportion of the Project Area is to be disturbed by FCNSW activities up to 2028 and beyond (but has not yet been finalised). These activities will occur prior to the Project's disturbance and during construction and operation as generally indicated in **Section 3.5**. The subsequent altered approach to various impact assessment and mitigation approaches in consideration of FCNSW's approved activities are described as relevant in **Section 6**.

This will be further discussed in detail and defined in the EIS.

3.5 Staging

Table 3-2 provides a summary of indicative staging for the Project with key stages discussed further below. It also lists FCNSW's proposed thinning and clear fell harvesting within the Project Area as shown on **Figure 2-8**.

Table 3-2 Indicative Project Staging and NSW Forestry Harvesting Schedule

Stage	Estimated Completion Date	NSW Forestry Harvesting
Site selection and prefeasibility	2023	Clear Fell completed over 315 ha within Project Area. Thinning also occurred.
Planning and approvals process	2024 – 2029	Clear Fell to be completed over 432 ha within Project Area. Thinning will also occur.
Construction	2030	Clear Fell to be completed over 417 ha within Project Area. Thinning will also occur.
Operations	2032	Not yet available, but proposed
Decommissioning	After 30 years from operational commencement (or as stipulated in the EIS)	Not yet available, but proposed

3.5.1 Construction

Construction activities are anticipated to commence in 2030 after the final design and procurement stage has been completed. Construction of the WTGs, electrical reticulation network and ancillary infrastructure is estimated to take approximately 36 months including commissioning of the Project.

The Project will employ approximately 475 FTE employees throughout the construction stage.

3.5.2 Operations

The Project will operate for approximately 30 years when individual WTGs will require maintenance, replacement and/or repowering. During operation, approximately 35 FTE permanent staff will be employed for the Project.

Wind farms are generally designed to operate autonomously; however, maintenance works will be required during operation of the Project and as such additional contractors may be required occasionally. The employed operational staff will complete preventative maintenance and/or breakdown / damages works to ensure service intervals are met.

3.5.3 Decommissioning

Potential options for the decommissioning of the Project will be outlined in the EIS. WTGs and infrastructure will continue to be maintained, upgraded and replaced within the assessed parameters of the EIS and decommissioned at the appropriate time.

At decommissioning, rehabilitation will occur, and all above-ground infrastructure related to the Project will be removed, subject to consultation with associated landowners.

3.6 Alternatives Considered

This section provides a description of the various alternative locations and sizes, doing nothing or a larger project that were considered and discounted prior to the SR Phase; resulting in the considered Project Description above upon which the Application has been prepared.

3.6.1 No Project or "Do Nothing"

The Project Area is within NSW State Forest, currently owned by FCNSW and used as a timber production and soft wood pine plantation estate. The 'Do Nothing' scenario would allow for broad scale timber production and plantation estate to continue, however, would forgo up to 475 FTE jobs during construction and associated direct and indirect economic inputs to the local and regional economy.

The Project's capital investment and associated flow on effects through the community and NSW would also not be realised.

Proposed community benefits including community co-designed Benefit Funds, Neighbour Benefits (e.g. screening and vegetation options and annual payments to near neighbours) and supporting local jobs would also not be realised.

The 'Do Nothing' approach does not meet the objectives to develop renewable energy projects in NSW and does not support the project objectives.

The Project aims to generate renewable energy and limit the production of greenhouse gas emissions. Not progressing the Project would result in not saving approximately 1 million tonnes CO_2 per annum (Mtpa) of GHG emissions and powering approximately 300,000 homes annually. This would be a missed opportunity to contribute to the reduction of Australia's emission and use of fossil fuels for energy production.

3.6.2 Alternative Sourcing of Energy

The Project lies within the Bathurst and Lithgow LGAs. The expected benefits of the Project are to provide more reliable energy from renewable energy supply, reduce energy bills for local and regional communities, reduce GHG emissions, and create community benefits and opportunities.

The existing forestry land uses are incompatible with other forms of renewable energy generation, namely solar power, as solar requires a much larger footprint.

3.6.3 Alternative Site Location

FCNSW opened up areas of its estate for renewable energy (wind farm) proposals. This was a competitive industry-wide process, after examining opportunities in other areas of the estate (some of which now are being developed by other wind farm developers). Someva and Mainstream elected to proceed with the proposal to progress the opportunity at Sunny Corner State Forest (at the expense of pursuing other alternative forests that were considered) for the advantages which are outlined below.

Sunny Corner State Forest was selected for the following reasons:

- Proximity to Sydney-ring transmission lines and load centre. Offering existing connection to a strong part of the electrical network without the need for new public transmission infrastructure;
- Proximity to the Mt Piper Substation;
- Proximity to major transport highways;
- Proximity to potential construction and operations workforce. Existing FCNSW plantation operations, mines and coal fired power station. Reskilling local power station workforce is an opportunity;
- Existing plantation and operations within State Forest, established haulage routes and site access tracks; and
- Surrounding area and community is already heavily industrialised with powerlines and power stations, which will be closing down and ultimately replaced by the Project.
- Other suitable plantation sites operated by the FCNSW are being investigated for wind and battery projects by other Applicants. A wind farm at Sunny Corner State Forest was investigated due to the reasons provided above.

3.6.4 Maximum Impact Layout

The Project aims to identify a layout which maximises energy output and economic benefits to NSW and the local community.

The Project Area is an existing industrial pine plantation, with minimal native vegetation. Through the preliminary design process, specific attention was pointed to utilising existing access tracks and infrastructure where possible, especially through the FCNSW mandated native vegetation pockets. Through this design process, impacts were limited to existing access tracks and areas of existing pine plantation, with avoidance of native vegetation a key design consideration.

The maximum site layout considered in the pre-feasibility studies for the Project consisted of an 87-WTG layout. This site layout is shown in **Figure 3-3** and identifies the locations of the 87 WTGs within the existing Project Area. A multifactor Constraints Analysis considered the following:

- Cumulative sound and visual effects;
- Total project footprint;
- Prevailing wind conditions; ok
- Telecommunications links;
- Proximity to nature reserves and native vegetation pockets; and
- Terrain gradients.

Based on the above, seven WTG's were removed from the site layout and the remaining 80 WTGs were re-positioned into locations as shown on **Figure 3-2.**

Preliminary noise modelling predicted a level of exceedances at a number of non-associated receivers and therefore the preliminary assessment has considered the effect of using sound optimised operational modes at key WTG locations. Further detail is provided in **Section 6.3**.

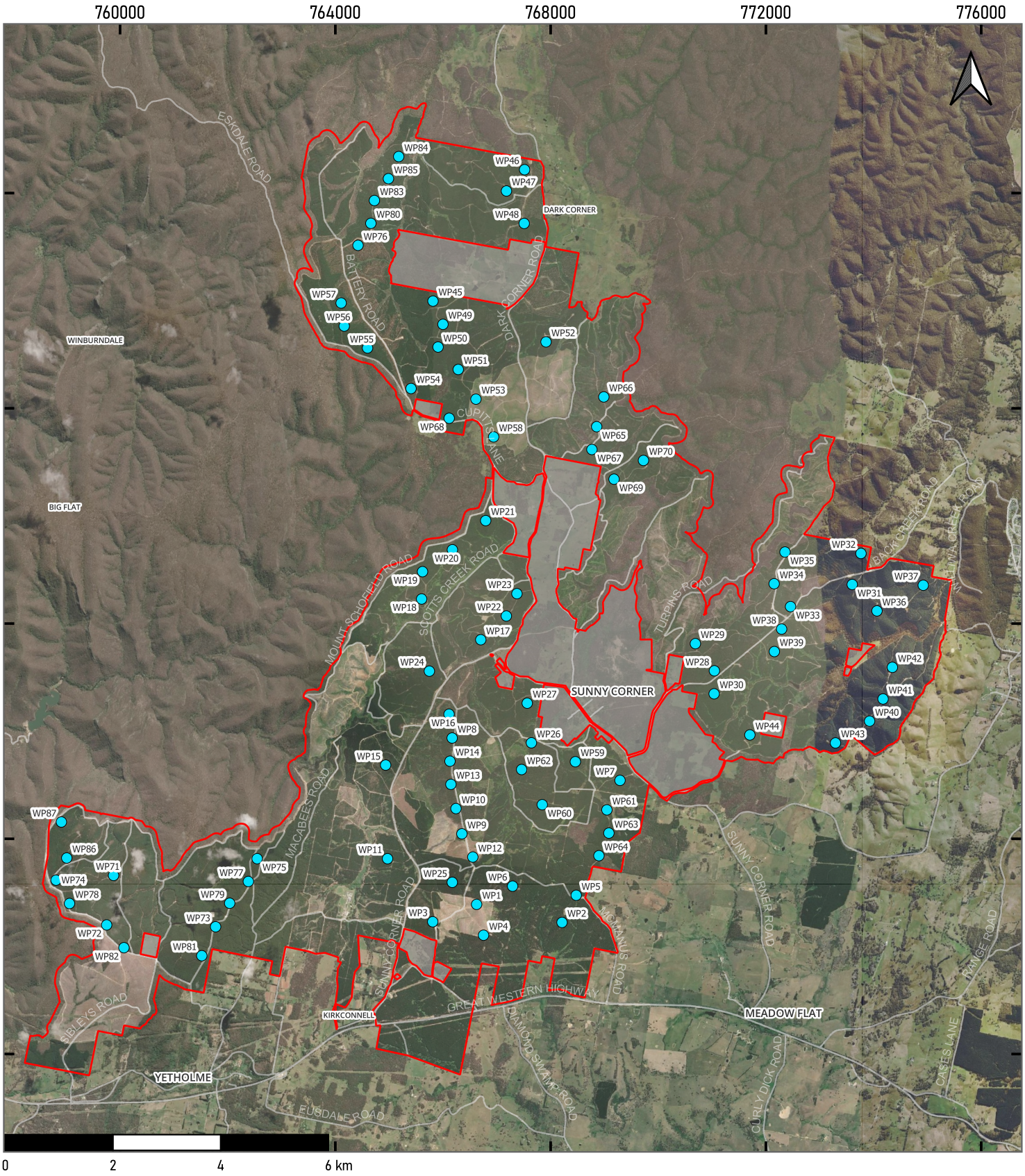
The Project will be further refined to minimise noise impacts with (at least) the following options considered to further reduce impacts:

- Modifications to the WTG layout or WTG selection;
- Agreements with neighbouring landowners (and/or commitments to relevant mitigation);
- Background noise monitoring; and
- Directional noise modelling.

Preliminary visual assessment revealed that due to the undulating topographic character of the region, views range from filtered to open and as identified on the viewshed mapping results (**Appendix D**), views of the project are likely possible within the Project Area.

Preliminary internal visual analysis further refined the layout, with assessments removing WTG in key areas to minimise potential impacts to the surrounding receivers.

Preliminary natural and built environmental constraints for the Project are provided in **Figure 3-4** and **Figure 3-5**.



Sunny Corner Wind Farm

Figure 3-3 Maximum Site Layout

Date: 10/02/2025

CRS: GDA2020 / MGA zone 55

Scale: 1:97500

Basemap: ESRI Satellite (2024)

Data Sources: NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: LV

Version: 2.0

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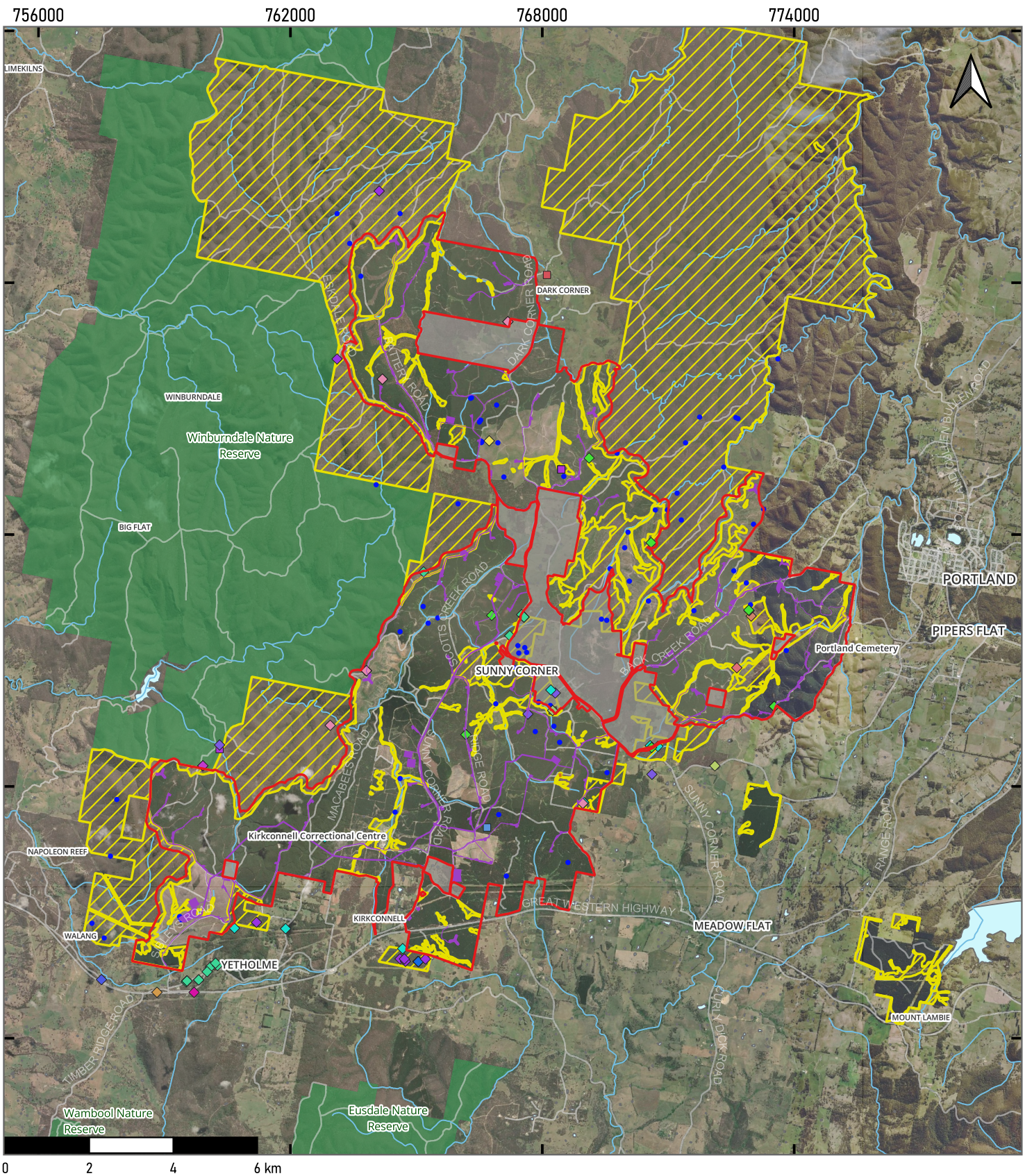
Legend

Project Infrastructure

- Project Area
- Non-Project Area
- Maximum Site Turbine Layout
- Roads



Sunny Corner Wind Farm

Figure 3-4 Preliminary Natural Environmental Constraints

Date:	10/02/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:125000
Basemap:	ESRI Satellite (2024)
Data Sources:	NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS
Version: 1.1
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Legend

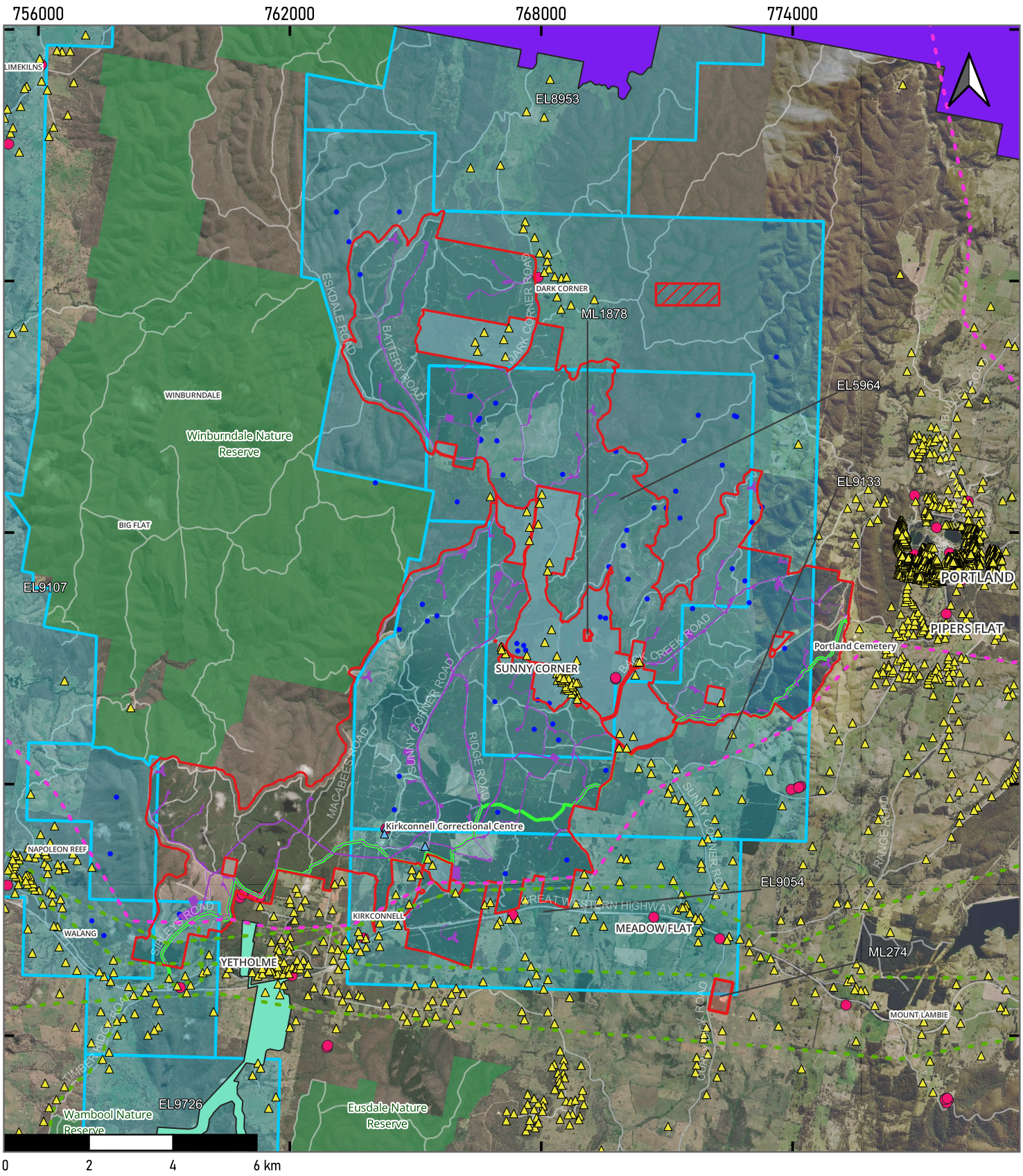
Project Infrastructure
- Project Area
- Non-Project Area
- Preliminary Development Footprint

Existing Infrastructure
- Roads
- HydroArea
- Watercourse
- Nature Reserve

Threatened Flora Sightings
- Black Gum
- Capertee Stringybark
- Clandulla Geebung
- Robertson's Peppermint

Threatened Fauna Sightings
- Brown Treecreeper (eastern subspecies)
- Dusky Woodswallow
- Eastern False Pipistrelle
- Flame Robin
- Gang-gang Cockatoo
- Glossy Black-Cockatoo
- Greater Broad-nosed Bat
- Key's Matchstick Grasshopper
- Koala
- Large Bent-winged Bat
- Little Eagle
- Powerful Owl
- Purple Copper Butterfly, Bathurst Copper Butterfly
- Scarlet Robin
- Southern Greater Glider
- Spotted-tailed Quoll
- Varied Sittella

Threatened Ecological Community
- 3932 - Central and Southern Tableland Swamp Meadow Complex
- Hardwood Plantation Area
- Mine Shaft Locations



Sunny Corner Wind Farm

Figure 3-5 Preliminary Built Environmental Constraints

Date:	10/02/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:125000
Basemap:	ESRI Satellite (2024)
Data Sources:	NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS
Version: 1.1
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Legend

Project Infrastructure
- Project Area
- Non-Project Area
- Preliminary Development Footprint

Existing Infrastructure
- 132kV Transmission Line
- 330kV Transmission Line
- Roads
- ACMA Sites

Receivers
- Non-Associated Receiver
- Commercial Non-Associated Receiver

Nature Reserve

RFS Aerial Drop Zone

Neighbouring Projects
- Central West Pumped Hydro
- Ben Bullen Wind Farm
- Regis Pipeline
- Mine Shaft Locations

Mining Licences and Leases
- Exploration Licences
- Mining Leases

4 STATUTORY CONTEXT

This section identifies the relevant statutory requirements for both NSW and Commonwealth legislation in relation to the Project. It identifies all relevant statutory requirements that must be considered before the Application is determined. A discussion on how each is relevant to the justification and evaluation of the Project is included. It includes a grouped and tabulated summary of requirements.

4.1 Power to Grant Approval

Development consent for the Project will be sought under Part 4, Division 4.7 of the EP&A Act, which outlines the planning assessment pathway in NSW for development that is SSD.

Section 4.36(2) of the EP&A Act states:

> *"(2) A State environmental planning policy may declare any development, or any class or description of development, to be State significant development."*

Relevant SEPPs include the *Planning Systems SEPP and the State Environmental Planning Policy (Transport and Infrastructure) 2021* (T&I SEPP).

Under section 2.6(1) of the Planning Systems SEPP, a development is classified as SSD if:

> *"(a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and (b) the development is specified in Schedule 1 or 2…"*

Schedule 1, section 20 in Chapter 2 of the Planning Systems SEPP determines "electricity generating works" to be SSD if it meets the following applicable criteria:

> *"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: (a) has an estimated development cost of more than $30 million…"*

The definition of "estimated development cost" in the Planning Systems SEPP has the same meaning as given to it under the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation). Section 6 of the EP&A Regulation defines "estimated development cost" to mean:

> *"(1) … the estimated cost of carrying out the development, including the following –*
>
> *(a) the design and erection of a building and associated infrastructure,*
>
> *(b) the carrying out of a work,*
>
> *(c) the demolition of a building or work,*
>
> *(d) fixed or mobile plant and equipment.*
>
> *(2) The estimated development cost does not include –*
>
> *(a) amounts payable, or the cost of land dedicated or other benefit provided, under a condition imposed under the Act, Division 7.1 or 8.2 or a planning agreement,*
>
> *(b) costs relating to a part of the development that is the subject of a separate development consent or approval,*
>
> *(c) land costs, including costs of marketing and selling land,*
>
> *(d) costs of the ongoing maintenance or use of the development, (e) GST."*

The term “electricity generating works” is not specifically defined in the Planning Systems SEPP. However, Clause 2.2(3) of the Planning System SEPP provides that language used in Chapter 2 of the Planning Systems SEPP has the same meaning as per the standard local environmental planning instrument prescribed by the *Standard Instrument (Local Environmental Plans) Order 2006*, which defines “electricity generating works” as follows:

> *“electricity generating works means a building or place used for the purpose of—*
>
> *(a) making or generating electricity, or*
>
> *(b) electricity storage.”*

As the Project involves development for the purpose of “electricity generating works” using wind power and will have an estimated development cost of more than $30 million, the Project is SSD and subject to the planning assessment pathway under Part 4 of the EP&A Act.

Accordingly, under section 4.5 of the EP&A Act and section 27 of the Planning Systems SEPP, the consent authority for the SSD development application is the Minister for Planning and Public Spaces or, if any of the circumstances under clause 2.7(1) of the Planning Systems SEPP apply, the Independent Planning Commission (IPCN).

4.2 Permissibility

4.2.1 Transport and Infrastructure SEPP 2021

The permissibility of wind farm developments in NSW is determined by the Transport and Infrastructure SEPP (T&I SEPP).

The Project Area is zoned RU3 Forestry and RU1 Primary Production within the Bathurst Regional Council LEP 2014 and Lithgow City Council LEP 2014. Development for the purpose of “electricity generating works” is prohibited within zone RU1 under the Lithgow LEP, and within zone RU3 under both LEP’s. However, clause 2.36(1)(b) of the T&I SEPP states that development for the purpose of “electricity generating works” may be carried out by any person with consent on any land in a “prescribed non-residential zone”. Clause 2.35 of the T&I SEPP defines “prescribed non-residential zone” to include zone RU1 Primary Production and RU3 Forestry.

Under clause 2.7(1) of the T&I SEPP, the provisions of the T&I SEPP prevail where there are inconsistencies with any other Environmental Planning Instruments (EPIs), including LEPs. Therefore, the Project is permissible with development consent.

4.2.2 Electricity Infrastructure Investment Act 2020

The *Electricity Infrastructure Investment Act 2020* aims to improve the affordability, reliability, security and sustainability of electricity supply in NSW. The Act aims to coordinate investment in new generation, storage, network and related infrastructure. It also aims to support economic development, create employment, invest in education and training, promote local industry, manufacturing and jobs, and promote export opportunities for generation, storage and network opportunities.

The Project is in line with the aims and objectives of the Act, as it will create affordable, reliable, secure and sustainable electricity through wind power generation. The Project will create employment opportunities throughout its lifecycle from construction to decommissioning.

4.2.1 Forestry Act 2012

The Forestry Act provides for both forestry and non-forestry activities within State forests, timber reserves or flora reserves. The Act provides for the dedication, management and use of State forests and other crown-timber land for forestry and other purposes.

FCNSW is a statutory State-owned corporation constituted under the Forestry Act.

In November 2021, the NSW Parliament passed amendments to the Forestry Act as part of the *Energy Legislation Amendment Bill 2021* to facilitate the opportunity to establish renewable energy infrastructure in State Forest pine plantations. This allows FCNSW to issue a permit to a third-party to conduct feasibility studies on developing renewable energy infrastructure on the plantations, which may lead to the construction of a facility and generation of electricity.

Under section 60(1) of the Forestry Act, the land manager of a forestry area may issue a forest permit authorising the holder of the permit to use the area for –

(a) "The purposes specified in the permit, including recreational, sporting or commercial activities, and

(b) If the area is used for forestry operations with trees of exotic coniferous species – the construction and operation of renewable energy infrastructure."

The Applicant has been awarded a permit by FCNSW to investigate a wind farm within the Sunny Corner State Forest.

4.3 Other Approvals

Table 4-1 identifies other approvals and pre-conditions required for exercising the power to grant approval for the Project and justifies each in relation to sections 4.42 of the EP&A Act and other NSW approvals. Commonwealth legislation is also considered. Further detail will be provided in the EIS.

Table 4-2 describes approvals that do not apply to SSD in accordance with section 4.41 of the EP&A Act.

Mandatory considerations that must be satisfied before the relevant consent authority may determine the Project are preliminarily described in **Table 4-3**.

Pre-conditions to exercising the power to grant development consent (including mandatory conditions) will be further addressed in the EIS.

Table 4-1 Other Required Approvals

Category	Legislation	Requirement
New South Wales		
Approvals that cannot be refused and must be applied substantially consistent with the SSD development consent (Section 4.42 of the EP&A Act)	*Roads Act 1993* (Roads Act)	Consent from the appropriate roads' authority under section 138 of the Roads Act is required for any works undertaken on or under public roads. **An approval for works will be required for the Project as public road network upgrades will be required as a direct result of the Project**.
	Crown Land Management Act 2016 (CLM Act)	The CLM Act provides for the administration and management of Crown land in NSW. Crown land may not be occupied, used, sold, leased, licensed, dedicated, reserved, or otherwise dealt with unless authorised by the CL Act. **Crown land exists in some parts of the Project Area (refer Figure 2-7). As such relevant licences and/or access rights will be sought under the CLM Act.** **Further information on Crown land will be provided in the EIS.**
	Protection of the Environment Operations Act 1997 (POEO Act)	Under the provisions of Schedule 1, clause 17 of the POEO Act, "electricity works (wind farms)" and associated activities require an Environment Protection Licence (EPL). **An EPL will be required for the Project for both operation and construction.**
	Mining Act 1992	The *Mining Act 1992* aims to encourage and facilitate the discovery and development of mineral resources in NSW. A review of MinView (MinView, 2024) indicates there are at least one exploration licence or lease within the Project Area. **As the Project Area is located on or adjacent to lands where an exploration licence exists as described in Section 2.4.4. Further detail and relevant engagement in this regard will be included in the EIS.**

Category	Legislation	Requirement
Other NSW Approvals	*Aboriginal Land Rights Act 1983* (AL Act)	The AL Act establishes Aboriginal Land Councils at State and Local levels. These Land Councils have a statutory obligation under the Act to take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law, and promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area. Under the Act, Aboriginal Land Councils can claim Crown land which is not lawfully used or occupied and that are not needed, nor likely to be needed, for an essential public purpose. The Project Area is located within the Bathurst Local Aboriginal Land Council (LALC) boundaries. No current claims under the AL Act exist within the Project Area. **Any AL Act matters will be considered further by the Applicant during the preparation of the EIS.**
	Water Management Act 2000 (WM Act)	Any person or organisation, including a local water utility, taking water from a water source must be authorised to take water by a water access licence and a water supply work approval under section 60A of the WM Act unless an exemption applies. **The methodology of the water assessment is discussed at Section 6.10 which will determine if any approval under section 60A is required for the Project.**
	Conveyancing Act 1919 (Conveyancing Act)	The Project Area will require lease of premises under the Conveyancing Act. Subdivision consent is generally not required under section 23G of the Conveyancing Act, may apply if subdivision for the purpose of construction, operation and maintenance of a substation is required. **The need for any lease from the owners of the land and or subdivision will be determined as part of the EIS.**
	Biodiversity Conservation Act 2016 (BC Act)	Part 7, Division 2 of the BC Act specifies the requirements for a biodiversity assessment depending on the planning pathway under the EP&A Act. If an activity is likely to have a significant impact or will be carried out in a declared area of outstanding biodiversity value, the proponent must apply the Biodiversity Assessment Method (BAM) and prepare a Biodiversity Development Assessment Report (BDAR). **A BDAR will be prepared in accordance with the BAM for the Project as discussed at Section 6.4.**
	Local Land Services Act 2013 (LLS Act)	Division 5 clause 60S, clearing of native vegetation in a regulated rural area is authorised without any approval or other authority under this Part if it is clearing carried out by or on behalf of the landholder in accordance with a land management (native vegetation) code under this Division. **Biodiversity is further discussed in Section 6.4.**
	Forestry Act 2012	Forestry operations in NSW are regulated under the Forestry Act and the *Forestry Regulation 2012*. The FCNSW is responsible for forestry in State Forests and on land that is owned by the Corporation. **A permit has been granted under section 60 of the Forestry Act and as such the Applicant may investigate construction and operation of renewable energy infrastructure.**
	'Amending Agreement – No.1 - New South Wales Assessment Bilateral Agreement' (Bilateral Agreement)	Where a NSW SSD Project is deemed a "Controlled Action" under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) it can be assessed in accordance with the "Bilateral Agreement" (Commonwealth of Australia & NSW, 2020). Under the Bilateral Agreement, the NSW determining authority's Assessment Report will be provided to the Commonwealth Department of Climate Change, Energy the Environment and Water (DCCEEW) inclusive of a recommendation as to whether the Project should be approved and conditions that may be applied to any Commonwealth approval. **Biodiversity is further discussed in Section 6.4.** **An application under Part 9 of the EPBC Act will be submitted.**

Category	Legislation	Requirement
Commonwealth		
Native Title (Cwlth)	*Native Title Act 1993* (NT Act)	For any Crown land within the Project Area where Native Title has not been extinguished under the NT Act a strategy should be developed. There is one claim under the NT Act that exists within the Project Area (National Native Title Tribunal, 2024). However, no determination of native title has been made for this application. **Crown land will be further discussed in the EIS. Any NT Act matters will be considered further by the Applicant.**
EPBC Act Approval (Cwlth)	*Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)	Approval from the Australian Minister for the Environment and Water is required for any action that will or is likely to have a significant impact on one or more Matters of National Environmental Significance (MNES) under the EPBC Act. The Project will be assessed in the manner specified in Schedule 1 to that Agreement including addressing the matters outlined in Schedule 4 of the Environment Protection and Biodiversity Conservation Regulation 2000. **Biodiversity is further discussed in Section 6.4. An application under Part 9 of the EPBC Act will be prepared and submitted.**
Civil Aviation (Cwlth)	*Civil Aviation Regulations 1988 (CA Regs)*	Reporting of tall structures to the Royal Australian Air Force (RAAF) is required under the *CA Regs*. The CA Regs require any potential aviation obstacles and hazards be assessed under the 'National Airports Safeguarding Framework Guideline D: Managing Wind Turbine Risk to Aircraft' (NASAG, 2012). **The methodology of the aviation assessment is discussed at Section 6.8 which will require reporting and assessment under the CA Act.**

Table 4-2 Other Approvals not Required

Category	Legislation	Requirement
Approvals that cannot be refused and must be applied substantially consistent with the SSD development consent (Section 4.42 of the EP&A Act)	*Coal Mine Subsidence Compensation Act 2017* (CMS Act)	Part 3 clause 22 of the CMS Act specifies that an application for approval to alter or erect improvements, or to subdivide land, within a mine subsidence district is to be made. **As the Project Area is not located on or adjacent to mine subsidence land, no engagement or approvals in this regard are required.**
	Petroleum (Onshore) Act 1991	The *Petroleum (Onshore) Act 1991* aims to encourage and facilitate the discovery and development of petroleum resources in NSW. A review of MinView (MinView, 2024) indicates there are no existing petroleum production leases within the Project Area. **As the Project Area is not located on or adjacent to any lands where a petroleum production lease exists, no engagement approvals in this regard are required.**
	Pipelines Act 1967	The *Pipelines Act 1967* controls pipeline construction, operation, and licensing in NSW. Part 3 section 11 of the *Pipelines Act 1967* requires a person to be a registered holder of a licence before any construction of a pipeline commences. **The Project may involve the construction and operation of water pipelines. This will be confirmed and addressed in the EIS.**
Approvals not required under Section 4.41 of the EP&A Act	*Fisheries Management Act 1994* (FM Act)	Section 201, 205 and 219 require a permit for the purpose of dredging works, any harm to marine vegetation, or for any activities that block the passage of fish, respectively. **An approval under section 201, 205 or 219 will not be required subject to section 4.41 of the EP&A Act.** **The methodology of the BDAR is discussed at Section 6.4.**
	Heritage Act 1977 (Heritage Act)	Approval is required to carry out an act, matter or thing referred to in Section 57(1), or an excavation permit under section 139. **The Project will not require an approval under section 57 or 139 subject to section 4.41 of the EP&A Act.**

Category	Legislation	Requirement
		The methodology of the Heritage assessment is discussed at Section 6.6.
	National Parks and Wildlife Act 1974 (NPW Act)	Sections 86, 87 and 90 require approval for any works which may impact an item of Aboriginal heritage. **The Project will not require approvals under 86, 87 or 90 subject to section 4.41 of the EP&A Act.** **The methodology of the Heritage assessment is discussed at Section 6.5.**
	Rural Fires Act 1997 (RF Act)	Where a project requires subdivision for residential or rural residential development, a bush fire safety authority under Section 100B is required. **An approval under section 100B will not be required subject to section 4.41 of the EP&A Act.** **The methodology of the Bushfire assessment is discussed at Section 6.16.**
	Water Management Act 2000 (WM Act)	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 WM Act is required where impacts are predicted. **An approval under section 89-91 will not be required subject to section 4.41 of the EP&A Act.** **The methodology of the water assessment is discussed at Section 6.10 which will determine if a water use approval under the WM Act is required for the Project.**

Table 4-3 Mandatory Planning Considerations

Statutory Reference	Mandatory Consideration
EP&A Act and Regulation	
Section 1.3 - Objects of the Act	The Objects of the Act are: a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources, b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment, c) to promote the orderly and economic use and development of land, d) to promote the delivery and maintenance of affordable housing, e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats, f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage), g) to promote good design and amenity of the built environment, h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants, i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State, j) to provide increased opportunity for community participation in environmental planning and assessment. **The EIS will address each relevant Object of the Act and provide a justification on how the Project meets each.**
Section 4.15 – Evaluation	The consent authority is required to take the following matters into consideration in determining a development application: Relevant environmental planning instruments including – T&I SEPP

Statutory Reference	Mandatory Consideration
	– *State Environmental Planning Policy (Resilience and Hazards) 2021* (Hazards SEPP) – SEPP (Biodiversity and Conservation) 2021 – Bathurst Regional Council LEP – Lithgow City Council LEP The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality The suitability of the site for the development Any submissions made in accordance with this Act or the regulations The public interest **The EIS will address each evaluation matter and provide relevant detail in relation to how the Project is consistent with each.**
Relevant EPIs	
T&I SEPP	See **Section 4.2.1**
Resilience and Hazards SEPP – Chapter 3	Chapter 3 of the Hazards SEPP assesses the potential hazards associated with a Project by providing definitions and guidelines for hazardous industry, offensive industry, hazardous storage establishments, and offensive storage establishments. In accordance with Section 3.7 of Hazards SEPP, consideration will be given to current circulars or guidelines published by DPHI relating to hazardous or offensive development, including: Hazardous Industry Planning Advisory Paper No 3 – Risk Assessment Hazardous Industry Planning Advisory Paper No 12 – Hazards **A preliminary risk screening assessment will be undertaken for the Project as described in Section 6.15.**
Resilience and Hazards SEPP – Chapter 4	Chapter 4 of the Hazards SEPP provides a state-wide planning approach to the remediation of contaminated land. Under Section 4.6(1) of the Resilience and Hazards SEPP, a consent authority is required to consider whether a proposed development site is contaminated before granting consent. **An assessment will be prepared to determine the potential contamination risk associated with the Project as described in Section 6.11.2.2.** **Noting the industrial (Forestry) land use of the Project Area, the assessment will take into consideration the historical land use that may have resulted in contamination.**
Lithgow City Council LEP 2014	Relevant components of the Lithgow City Council LEP include: Section 1.2 – Aims of Plan Land Use Table – Objectives and permissible uses of the RU1 – Primary Production zone and RU3 – Forestry zone **The EIS will address relevant sections of the Lithgow City Council LEP.**
Bathurst Regional Council LEP 2014	Relevant components of the Bathurst Regional Council LEP include: Section 1.2 – Aims of Plan Land Use Table – Objectives and permissible uses of the RU1 – Primary Production zone and RU3 – Forestry zone **The EIS will address relevant sections of the Bathurst Regional Council LEP.**
Development Control Plans (DCP)	Under Section 2.10 of the Planning Systems SEPP, DCPs do not apply to SSD projects as: *"Exclusion of application of the development control plans* *Development control plans (whether made before or after the commencement of this policy) do not apply to-* *a) State significant development, or* *b) development for which a relevant council is the consent authority under section 4.37 of the Act."* **DCPs do not apply to the Project Area.**

4.4 NSW SSD Approvals Process

Figure 4-1 conceptually illustrates the NSW SSD process and how it interacts with the Commonwealth EPBC Approval (should the Project be deemed "controlled" and is to be assessed under the Bilateral" Agreement) and the proposed stakeholder engagement (see **Section 5.6** for further detail).

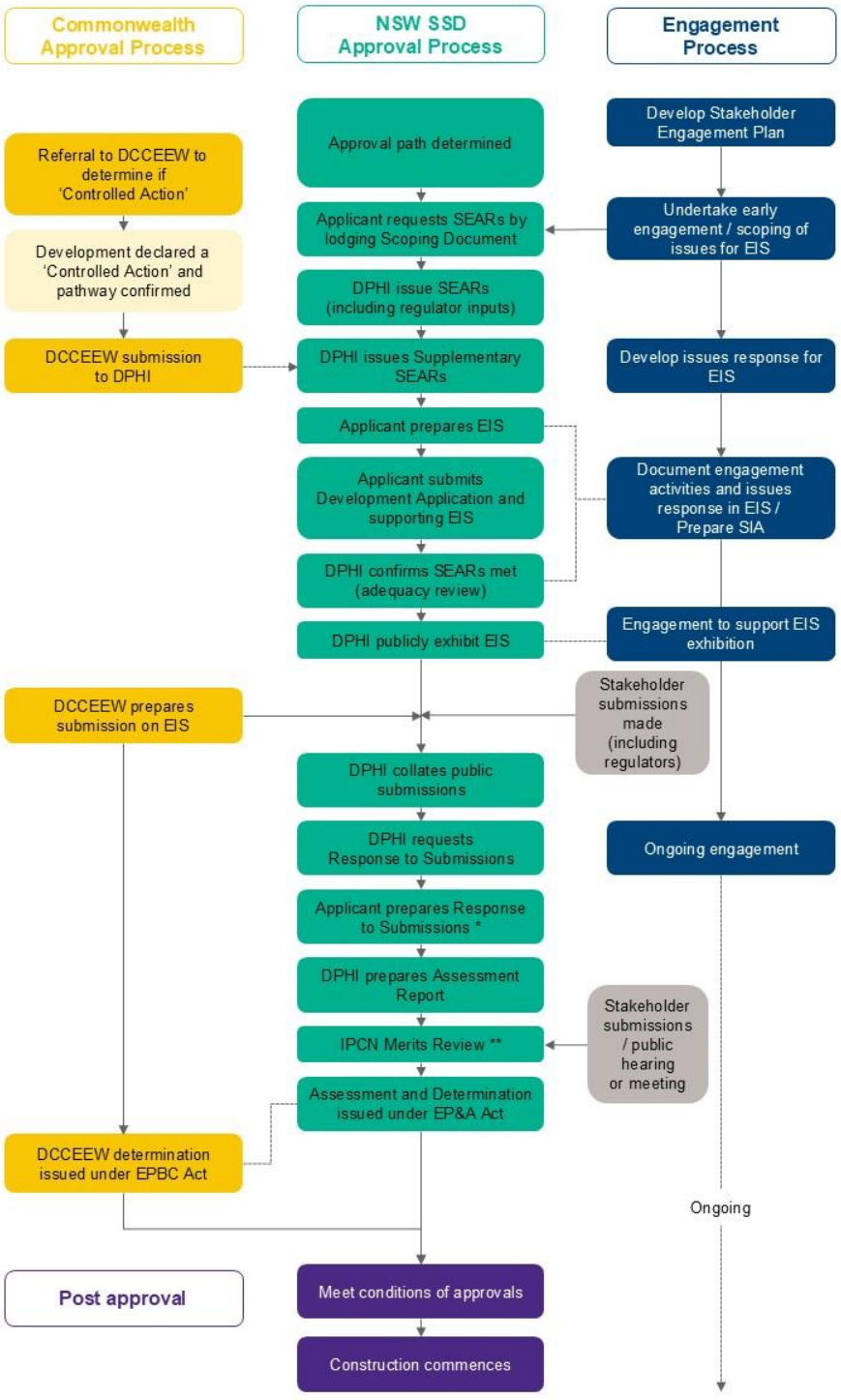


Figure 4-1 Indicative NSW SSD Process

5 STAKEHOLDER ENGAGEMENT

5.1 Introduction

The stakeholder engagement planning for the Project identified key stakeholders and suitable engagement strategies specific to each stakeholder group and stage of the Project. Early engagement with the host landowner (FCNSW), nearby neighbours (within 8 km of Project Area), Local Aboriginal Land Councils (LALCs) and other First Nations groups, and local Councils noted their preference for the engagement methods described in this section.

5.2 Stakeholder Engagement Plan

Consultation methods will continue to be modified in response to feedback, as additional stakeholders are identified and as monitoring data is captured, providing a more comprehensive understanding of the impact of each engagement tool.

Table 5-1 identifies the preferred engagement methods for the Project.

Table 5-1 Project Preferred Engagement Methods

Indicative Preference Level	Engagement Tool
High	Individual meetings (face-to-face / one-on-one)
	Email communications (for significant Project updates and general notification of when we are in-region for follow up meetings / engagements)
	Limited group size Project briefings / meetings (both virtual and in-person), among key stakeholder groups (mainly nearby neighbours indicate this preference) Groups sizes have typically included 2-3 family members and / or individuals at one time
Medium	Individual meetings (phone and video conference calls)
	Community / stakeholder surveys, including options for follow up face-to-face engagements / survey administering
	Project website (Sunny Corner Wind Farm) with frequent updates and direct notification of updates to key stakeholders by the Applicant
	Letters and newsletters (via email and mailbox drops)
	Newspaper advertisement updates (to surrounding communities, and Lithgow and Bathurst LGAs)
	Flexible community information drop-in sessions (e.g. pop-up shopfronts)
Low	'Town-hall' style meetings and large public gatherings

5.3 Stakeholder Identification

Table 5-2 identifies a diverse range of community stakeholder groups to be potentially engaged throughout the Project. The table will be modified in response to stakeholder feedback and as additional stakeholders are identified via "snowball sampling". A detailed stakeholder register is maintained in the Applicant's secure community engagement software program to ensure privacy and confidentiality is maintained.

Table 5-2 Initial Stakeholder Identification

Stakeholder Group	Definition	Details / Key Areas of Interest / Risk Responses
Host landholder	Landowners hosting Project infrastructure	• At the Scoping Stage, FCNSW is the landowner hosting project infrastructure, with potential opportunities for nearby landowners to become associated with the Project • Host landowners are major financial beneficiaries. They would be directly impacted by construction, operational and decommissioning activities, including traffic management, land management, electrical infrastructure, and road maintenance
Project neighbours (non-associated)	• Landowners within approximately 8 km of the Project • Direct adjoining landowners and residents adjacent to the Project Area	• There are approximately 1,840 receivers with around 4,000 neighbours within around 8 km of the Project Area • Project neighbours would be directly impacted by construction, operational and decommissioning activities. Visual impacts from the turbines and other infrastructure are likely • Project neighbours receive potential offset / community benefit sharing program access opportunities, pending co-design process outcomes during EIS development stage onwards
Community members and special interest groups	Community members who live or groups which operate within 35 km of Project infrastructure. This includes schools and education institutions	• All towns and villages within 35 km of Project Area (see **Section 2.3** for further detail) • Local schools, focusing on four schools in catchment area: Meadow Flat Public School (primary school); Denison College (Bathurst based high school); Portland Central School (Years K-12); St Joseph's School Portland (primary school) • Charles Sturt University (Bathurst campus) • Local community and special interest groups
First Nations groups and / or Traditional Owners	Aboriginal groups, including Local Aboriginal Land Councils	• Initial groups contacted: Bathurst LALC; Barrinang Aboriginal Corporation; Mingaan Aboriginal Corporation; Warrabinga Native Title Claimants Aboriginal Corporation; Wiradjuri Traditional Owners Central West Aboriginal Corporation; One Mob Aboriginal Corporation; Wiradjuri Cultural Care Indigenous Corporation • Aboriginal cultural heritage flagged as key areas of interest for further engagement, including input and support for future site survey work in accordance with 'Cultural Heritage Guidelines, (DCCEW, 2010)
Local councils and elected representatives	• Local Government Councillors and Council staff • Elected representatives at the State or Commonwealth level	• Bathurst Regional Council • Lithgow City Council • State elected representative: Member for Bathurst (Paul Toole, National Party of Australia) • Commonwealth elected representative: Member for Calare (Andrew Gee, Independent) • Commonwealth Environment Minister: Hon Tanya Plibersek MP • Key areas of interest: detailed assessment of potential impacts and proposed mitigation strategies
State and Commonwealth Government	Regulatory agencies	• State departments: - Office of Environment and Heritage, Environment Protection Authority, NSW Resources, Department of Primary Industries, Transport for NSW, Transgrid, Department of Finance, Services and Innovation – Telco Authority, Local Land Services, NSW Rural Fire Service, Civil Aviation Safety Authority, Airservices Australia and others as required. • Commonwealth departments:

Stakeholder Group	Definition	Details / Key Areas of Interest / Risk Responses
		- Department of Climate Change, Energy, the Environment and Water (DCCEEW) (Cth), Department of Defence, Department of Agriculture, Fisheries and Forestry, and others as required. • Key area of interest: detailed assessment of potential impacts and proposed mitigation strategies
Local industry	Groups or organisations representing local business sectors, such as business chambers and sector-based associations	• Surrounding largescale renewable energy project developers (see **Section 2.6**) • Forestry customers, contractors and suppliers • Industry capability networks • Business Chambers: Lithgow District Chamber of Commerce; Bathurst Business Chamber
Local business	Businesses operating within 35 km of the Project Area. Includes emergency services and local airports	• Broad engagement and communications strategy in place. Numerous local businesses have expressed interest in supplying the Project with goods and services. Local labour availability flagged as key area of concern / interest • Emergency services; local airports (see **Section 6.8.2**)
Local media	Media outlets and communication channels that operate at the community, city, or regional level	• Radio stations; newspapers; community newsletters; community Facebook groups. This includes the Village Voice (Portland)
Forest users	Individuals or organisations using the forest for either recreational or commercial purposes. Includes permittees and authorised users. Includes FCNSW customers, plantation companies, harvesting and hauling contractors, infrastructure, silviculture and stewardship companies	• Broad engagement and communications strategy implemented in partnership with FCNSW since project launch (May 2024) • Tailored communications and engagement for FCNSW customers and contractors, hunting permit groups, and Sunny Corner State Forest visitors • Key areas of interest noted to date: forest access (for commercial purposes, and/or under specific permits such as hunting); soft-wood timber supply; and bushfire risks
Electricity / utility service providers	Respective providers or gas, water and electricity. Includes surrounding energy generation projects	• The three electricity distributors in NSW: Essential Energy; Endeavour Energy; Ausgrid • Telecommunications impacts: Telstra; Optus; NBNCo • Transgrid • Surrounding energy generation projects (both operational and proposed): • EnergyAustralia: Mt Piper Power Station (operational), and Lake Lyell Pumped Hydro (proposed) - ATCO: Central West Pumped Hydro (proposed) • Tag Renewables / Stromlo Energy: The Pines Wind Farm (proposed)

5.4 Engagement Conducted

The Project Team (the Applicant with the support of Lecroma Pty Ltd) has undertaken 10 in-region visits since March 2024 to engage with key stakeholders and launch the Project. The Project Team is prioritising face-to-face meetings where possible to ensure key stakeholders are actively engaged with the Project. This includes frequent meetings with the host landowner (FCNSW), neighbours, First Nations groups, local councils and other community and business representatives.

On 23 May 2024, the Project was announced, and the website was launched at https://www.somevarenewables.com.au/project/sunnycorner/. The website includes access to the online community survey, a project overview and fact sheets, an estimated project timeline, a map of the investigation area, information about benefits and answers to other frequently asked questions, and key points of contact to discuss the Project.

Approximately 400+ individuals across 100+ organisations have engaged with the Project team to date with more than 1,500+ unique interactions since Project launch in May.

Outcomes from engagement activities undertaken to date are shown in **Table 5-3**. Land ownership and receivers are shown in **Figure 2-3**.

Table 5-3 Outcomes from Stakeholder Engagement

Stakeholder Group	Date/s	Consultation Activity and Key Outcomes
Host landholder	Continuous since project inception	• Regular and ongoing informal communication between the Project Team and FCNSW representatives via face-to-face and online meetings, emails, phone calls. Formal reporting and planning meetings, with follow up written reports provided fortnightly • FCNSW reliably informed about stakeholder engagement activities and feedback, ecological, visual, noise and other survey work occurring • Project team reliably informed about key stakeholders, issues, and business of host landholder relevant to project development. Any potential project risks are raised and resolved early
Project neighbours	Continuous since project announcement on 23 May 2024	• Regular and ongoing communications between the Project Team and project neighbours via the following activities: - Portland drop-in centre (Tuesdays and Wednesdays from 4 June to 11 July 2024) - Sunny Corner Progress Association meeting (12 June 2024) - Doorknocking (31 July 2024, 28-20 August 2024, 1 October 2024, 4-5 November 2024) - Letterbox drop (6 August 2024), and follow up information distribution during every door-knock event - Community survey (200+ respondents between August-October 2024) - Emails (600+) - Phone calls (100+) - Community Benefits survey December 2024 – February 2025. • The Project Team has generated a high-level of awareness of the Project with this stakeholder group. Neighbours continue to be given a direct line of communication to the Project Team and have been generally showing willingness to engage and share their views (both positive and negative) through the various communication channels available
Community members and special interest groups	Continuous engagement since project announcement	• Active engagement since Project launch with ~100+ community members and ~15+ local community interest groups • Public meeting held in first month of Project launch in Sunny Corner to introduce the Project and seek broad feedback • Community survey launched in August 2024 to seek broad input and view of the community. Several key issues and concerns identified for detailed assessment

Stakeholder Group	Date/s	Consultation Activity and Key Outcomes
First Nations groups and / or Traditional Owners	Continuous engagement since project announcement	• Active engagement with 52+ individuals across 5+ local First Nations groups since Project launch • Initial project introduction provided, including direct lines of engagement with Project Team • Initial feedback received, including focused range of key areas of interest for future engagement on the Project • 30-31 July 2024: Face-to-face meetings with several local groups including Bathurst LALC, Mingaan Aboriginal Corporation and Barrinang Aboriginal Corporation. Positive reception. Key areas of interest for ongoing engagement identified • 29 August 2024: Face-to-face meeting with Warrabinga Native Title Claimant Aboriginal Corporation (NTCAC) board and directors to update on project. Positive reception. Key areas of interest for ongoing engagement identified
Local councils and elected representatives	Continuous engagement since Project launch. 5-6 June 2024; 26-27 November 2024	• Initial meetings with representatives from Bathurst Regional and Lithgow City Councils 5-6 June to provide Project overview and indicative project timeline. Face to face engagement activities subsequently placed on hold on advice from both Councils due to elections in September 2024. Email and phone communications continued. • Neutral to supportive response from both Councils, with productive relationships established for ongoing engagement noting several councillors and staff have since moved on post-September 2024 local government elections • Meetings with local councils (Bathurst and Lithgow Council staff), elected representatives and LALC from 25-28 November
	Since project launch (May 2024)	• Ongoing email-based project updates and phone calls to provide project updates and coordinate future meetings and introduce the Project team to Member for Bathurst and Member for Calare
Local business	Continuous engagement since project announcement	• Local businesses continue to reach out and seek direct engagement with the Project. Initial range of key concerns and areas of interest have been provided to Project Team for further detailed assessment • Positive reception received by Project Team
Local media	Continuous engagement since Project announcement	• Detailed Project briefing provided directly following Project launch and key points of contact established between local media outlets and Project Team. Positive reception received • Project Team continues to respond to media enquiries and requests for information as required, with proactive information sharing provided to local media teams as Project milestones are achieved
Forest users	Continuous engagement since Project announcement	• General communications and public awareness campaign continues to be implemented across various engagement pathways, including in partnership with FCNSW • Forest users have provided responses to the community survey, identifying key concerns and interests for detailed assessment
Electricity / utility service providers	Continuous engagement since project announcement	• Key points of contact established with nearby electricity energy generation projects (both operational and proposed) • Project introduction and briefing provided; positive reception received. Key areas of interest identified
Other proposed wind farm proponents	Continuous engagement since project announcement	• Understanding key milestone timeframes across the four developing wind farms on Forestry land. Sharing of community learnings to foster better community engagement. Future establishment of a Community of Practice planned.

5.5 Community Feedback to Date

Stakeholder engagement and responses to the online community survey to date has elicited a broad suite of interests and concerns regarding several aspects of the Project as detailed in **Table 5-4**. These concerns include potential environmental and social impacts, and opportunities for economic and other social benefits.

Table 5-4 Feedback from Initial Stakeholder Consultation

Concern or Issue	Feedback Source	Detail of Concern or Issue Raised
Landscape character and visual amenity	• Project neighbours • Community members and special interest groups	Potential long-term visual impact of the WTGs is the issue most raised by Project neighbours
Biodiversity (including birds and bats)	• Project neighbours • Community members and special interest groups • First Nations groups and / or Traditional Owners	• Several stakeholders have expressed concern about the potential for bird and bat strike by the WTGs • Broader potential impacts on native flora and fauna, and nearby native hardwood forests • Monocultural softwood pine plantation site is already heavily altered and industrialised due to existing operations
Waste management (including Project infrastructure recycling and/or decommissioning)	• Project neighbours • Community members and special interest groups • First Nations groups and / or Traditional Owners	• Concern about potential waste generation at the end of the Project lifecycle. Limited number of stakeholders (neighbours) cited concerns about the extent to which WTGs could be recycled in the future and/or replaced (reenergised) • Neighbours seek assurance that they will continue to deliver value or be replaced/removed in the future • They also wish to understand what happens if the Project is on-sold to another operator and have sought assurances the WTGs assets would not be abandoned
Bush, forest and grassland fire management	• Project neighbours • Community members and special interest groups • First Nations groups and / or Traditional Owners	Concern that the WTGs will increase the risk of fire due to electrical faults, and that the WTGs will obstruct aerial water bombers in the event of a forest fire
Land value depreciation	Project neighbours	Some project neighbours have reported an increased number of nearby houses being advertised for sale after the announcement of the Project and voiced concerns the Project will negatively impact land values, particularly during the construction stage
Access rights to public land for commercial or recreational use (forest access)	• Project neighbours • Community members and special interest groups • Forest users • Local Business	Concerns about temporary or permanent changes to the way they currently access and use the Sunny Corner State Forest
Road and traffic (transportation)	• Project neighbours • Community members and special interest groups • Local Business	• Project neighbours and other community members welcome the potential for road upgrades to facilitate construction • Others have raised safety concerns about increased traffic on local roads • Others have raised concerns of negative impacts during construction like noise, dust, oversized loads and short-term limited road closures or diversions
Aboriginal cultural heritage	• First Nations groups and / or Traditional Owners • Host landowner (FCNSW)	• Minimum initial concerns raised at this early stage following initial discussions about potential scope and future impacts of the Project • Groups have noted the value of early engagement, including through site visit/s to ensure familiarity and early identification of potential sensitive locations for further investigation during EIS • Some concerns about alteration to the landscape and potential impact on tangible and intangible Aboriginal heritage
Water quality (and hydrology)	• Project neighbours • Community members and special interest groups	Concerns about microplastics in the water
Noise	Project neighbours	Concerns about noise impacts on their way of life and wellbeing (as well as their pets and livestock), during both construction and operation
Community benefits	• Community members and special interest groups • Local councils and elected representatives	Several stakeholders have said they are pleased with the economic and social benefits that will flow from the Project and have begun making suggestions about activities and initiatives that could be supported

Concern or Issue	Feedback Source	Detail of Concern or Issue Raised
Neighbour benefits	Project neighbours	Several project neighbours have reported they will be happy to receive economic and other benefits from the Project secured through neighbour benefits agreements and the community benefits program
Diversification of income streams and flow on economic benefits	• Project neighbours • Local business	Many Project neighbours are pleased with the direct financial benefit they will derive from the Project to diversify existing income streams. Supporters also welcome the employment and contracting opportunities that will arise during the construction and operation stages
Access to affordable energy	Community members and special interest groups	Some community members have suggested the Project should result in better access to affordable energy
Social cohesion between community members	• Project neighbours • Community members and special interest groups	Some Project neighbours and other community members have raised concerns that local tensions will increase between those who support and object to the Project and be exacerbated by those who financially benefit from host agreements, neighbour agreements or the community benefits program
Insurance (premium increases)	Project neighbours	Some Project neighbours have raised concerns that the Project will lead to an increase in their insurance premiums due to a perceived increase in bushfire risks to Sunny Corner State Forest
Industry development and diversification	• Local councils and elected representatives • Local industry • Local business	• Representatives from both local Councils have noted the potential significant positive impact this Project may have in contributing to developing the local renewable energy generation industry in this region, and offsetting current fossil fuel-based energy generation activities forecasted to cease • Both Councils seek high quality community engagement and communications, as well as a more detailed understanding of potential environmental impacts and proposed mitigation
Climate resilience	• Community members and special interest groups • First Nations groups and / or Traditional Owners	• Environment groups and several community members have highlighted the role that wind energy plays in mitigating climate change by directly reducing greenhouse gas emissions • Some Project objectors have suggested nuclear energy should be the default replacement for coal and gas instead
Accommodation and housing	• Councils • Forest users	Councils and forestry industry representatives have raised concerns about the pressure the construction stage will place on already limited local housing and short-term accommodation but welcome any long-term increases in housing stock because of the Project
Supply and demand for local goods and services	• Local industry • Local business	• Local business owners have generally welcomed the potential benefit that will flow from the increased demand for local goods and services during the life of the Project, particularly during construction • Smaller businesses have expressed concern about access to contracts when competing with bigger companies. This Project is forecasted to significantly increase demand for local goods and services, and result in the emergence of a renewable energy service economy. Several stakeholders have noted the value of exploring local content targets for the Project (i.e. prioritising supply from local goods/services first, where appropriate), including for First Nations people
Disruption to softwood plantation activities	• Forest users • Local business	Softwood plantation industry representatives have voiced concerns that forestry operations and haulage may be impacted during the construction stage by clashing with road use requirements and by the poaching of skilled forestry operators
Mental health	• Project neighbours • Community members and special interest groups	• Some stakeholders have predicted negative impacts on their mental health through perceived impacts on their livelihoods, way of life, and community connections • Supporters typically report positive impacts on their mental health through increase employment opportunities or other benefits, for example from the community benefits program

Concern or Issue	Feedback Source	Detail of Concern or Issue Raised
Project information availability and transparency for community members	• Community members and special interest groups	A small number of community members have voiced concerns that there is not enough information or transparency about the Project, including its scope, timing and the approval process

5.6 Proposed Future Engagement

Details of the proposed future engagement are provided in **Table 5-5.**

Table 5-5 Proposed Future Engagement

Stakeholder Group	Engagement Activities
Host landowner (FCNSW)	• Face-to-face meetings • Emails / letters / phone calls / factsheet / newsletter updates / website / direct contact line (mobile and email) / regular reporting
Project neighbours	• Door knocking • Face-to-face meetings • Email / letter / phone calls / factsheet / newsletter updates / website / direct contact line • Community information sessions / community workshops • Advertising in local newspapers • Radio interviews • Discussions of opportunities to expand the Project Area onto project neighbour's land to host project infrastructure.
Community members and special interest groups	• Emails / factsheet / Project updates / website / direct contact line (mobile and email) • Information sessions • Advertising in local newspapers
First Nations groups and / or Traditional Owners	• Face-to-face meetings • Email / letter / phone calls / factsheet / newsletter updates / website / direct contact line
Local councils and elected representatives	• Face-to-face meetings • Email / letter / phone calls / factsheet / newsletter updates / website / direct contact line (mobile and email) • Community information sessions
State and Commonwealth Government	• Face-to-face meetings • Email / letter / phone calls / factsheet / newsletter updates / website / direct contact line (mobile and email)
Local industry	• Information sessions (virtual and in-region) / website / direct contact line (mobile and email) / newsletter and email updates • Advertising in local newspapers and via local council channels
Local business	• Information sessions (virtual and in-region) / website / direct contact line (mobile and email) / newsletter and email updates • Advertising in local newspaper and via local council channels
Local media	• Emails / factsheet / Project updates / website / direct contact line (mobile and email) • Information sessions
Forest users	• Information sessions (virtual and in-region) / website / direct contact line (mobile and email) / newsletter and email updates • Advertising in local newspaper and via local council channels
Electricity / utility service providers	• Information sessions (virtual and in-region) / website / direct contact line (mobile and email) / newsletter and email updates

6 ASSESSMENT OF IMPACTS

This section outlines matters requiring further assessment in the EIS and the level of assessment that will be undertaken for each aspect.

6.1 Aspect Categorisation

Appendix A provides potential environmental and social issues which have a potential to occur as a result of the Project and have been identified in relation with the Scoping Report Guidelines.

Each aspect provided in **Appendix A** has been considered in relation to the project description at **Section 3** and allocated a relevant level of assessment for consideration in the EIS.

The key matters requiring more detailed assessments have been identified on a preliminary assessment of the Project Area and by taking into consideration other wind farm developments in NSW.

6.2 Visual

A Visual Scoping Report (VSR) has been prepared by Moir Landscape Architecture Pty Ltd (Moir Studio) for the Project and is included in full at **Appendix D**. Relevant guidelines and policies are listed at **Appendix A**.

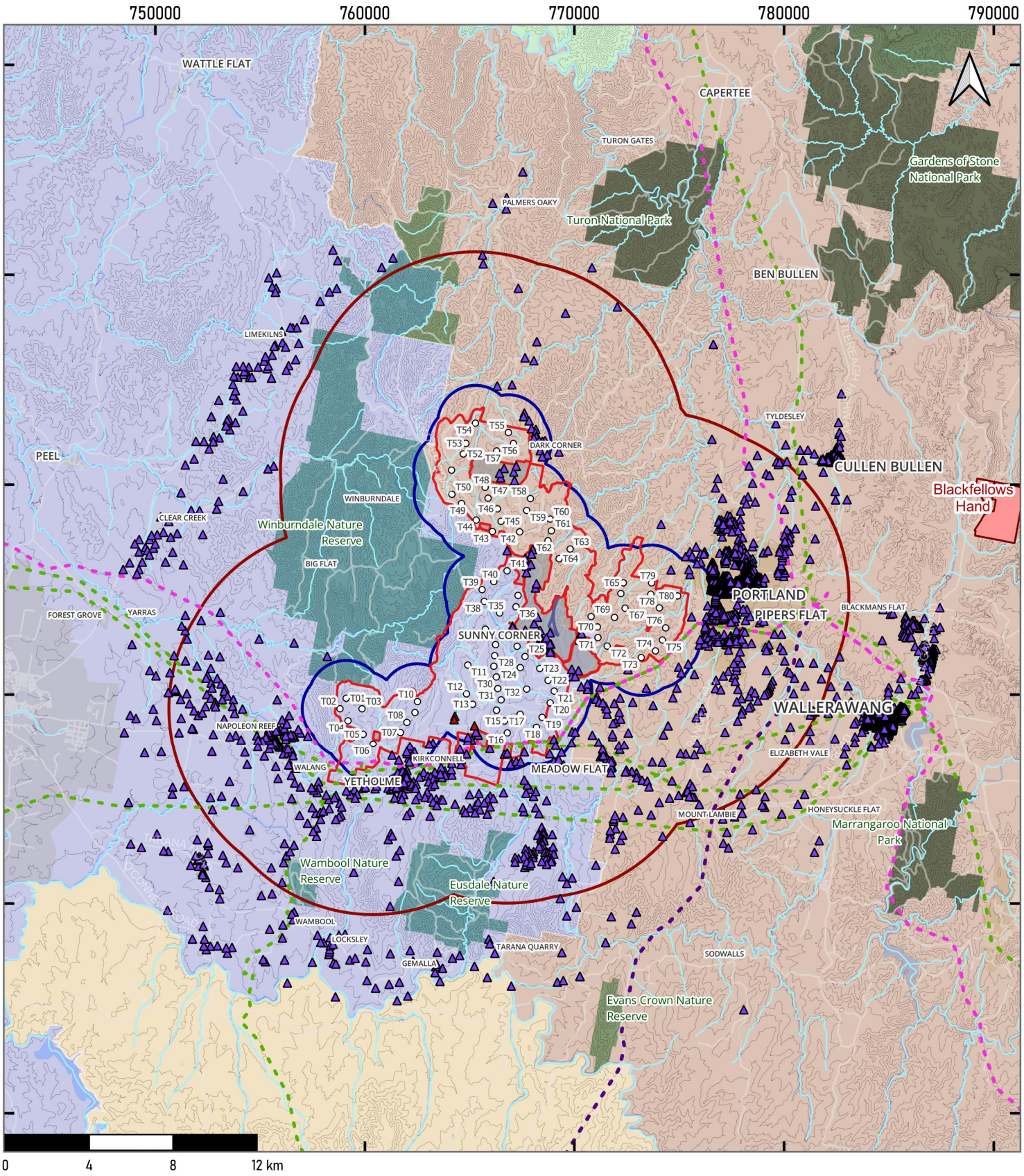
A summary of the preliminary assessment, background, preliminary results and EIS assessment approach is provided below.

6.2.1 Preliminary Assessment

The VSR Study Area has been defined in accordance with the 'DPHI *Wind Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment*' (DPHI, 2024) (the Visual Guidelines) and has identified receptors and public viewpoints for assessment as described in **Section 6.2.3.4**. The Study Area for the VSR is shown in **Figure 6-1**.

The following has been undertaken to develop the VSR:

- Desktop Assessment:
  - Identification of receptors that will require consideration in the assessment process;
  - Preparation of the WTG Setback and Study Area; and
  - Viewshed Mapping Process (VSM) to determine the areas with potential visibility of the Project.
- Site Inspection:
  - Photographic survey work for the assessment was undertaken in November 2024 to carry out a preliminary assessment of the existing landscape character from publicly accessible land within the Study Area. The findings of the site inspection have been included in the VSR and will form the basis for discussion with the community in the EIS Phase of the Project; and
- Community Consultation:
  - Community consultation has been undertaken through the Scoping phase of the Project. Results of the community consultation have also been utilised to gain perspective on the landscape values held by the community to inform the VSR and are described in **Section 5.**



Sunny Corner Wind Farm

Figure 6-1 Visual Study Area

Legend

Project Infrastructure
- Project Area
- Non-Project Area
- Wind Turbine Locations

Existing Infrastructure

Exisiting Transmission Lines (kV)
- 132
- 330
- 500

- Roads

Receivers
- Non-Associated Receiver
- Commercial Non-Associated Receiver
- National Park
- State Conservation Area
- Nature Reserve
- Watercourse
- Aboriginal Place
- Contours - 50m

Local Government Areas
- Bathurst Regional Council
- Lithgow City Council
- Mid-Western Regional Council
- Oberon Council

Visual Assessment
- Setback - 1800m
- Study Area - 8160m

Date:	10/02/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:250000
Basemap:	ESRI (2024)
Data Sources:	NSW Spatial Portal (2024)

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Version: 3.1
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6.2.2 Background

6.2.2.1 Existing Landscape Character

The Project is located within the Southeastern Highlands bioregion in Central NSW, approximately 1,100 m above sea level. The existing landscape surrounding the Study Area is made up of gentle to steep undulations with cleared pastoral farmlands, softwood plantations and native bushland. Small rural villages and the town of Portland dot the landscape.

The Project is adjacent to the Winburndale Nature Reserve, which supports a ridge system of conglomerate cliff lines, remnant wet and dry sclerophyll forests, grassy woodlands and sub-alpine vegetation.

Cement factories in Portland and remnants of gold and silver mining activities from the 19th century are present. Transmission lines run through the area, with infrastructure associated with Mt Piper Power Station visible from far distances.

Distant ridgelines associated with the Blue Mountains are visible to the east. Further detail is presented in **Section 2.3**.

6.2.3 Results

6.2.3.1 Turbine Setback

The Turbine Setback is equivalent to 9° of a person's vertical field of view. If a sensitive receiver is located within the setback distance it will trigger a high visual impact unless the turbine(s) are screened by topography or vegetation.

The Turbine Setback for the Project is 1,800 m. There are 161 non-Associated receivers identified within the Turbine Setback.

6.2.3.2 Study Area

As per the Visual Guidelines, the Study Area for the Project based off the maximum WTG height is:

- 8,160 m for private receivers and Other Public Viewpoints (based on 2° vertical field of view); and
- 1,723 non-Associated receivers identified within the Study Area.

6.2.3.3 Viewshed Mapping

Moir Studio has undertaken Viewshed Mapping (VSM) to determine the areas with potential visibility of the Project. **Appendix D** presents the viewshed for the wind turbines based on the tip height of 285 m.

Due to the undulating topographic character of the region, views range from filtered to open and are likely available across the entire Study Area.

As per the VSM of the Project, all non-Associated receivers within the Study Area (8,160 m) are identified as having potential visibility. This is based on a worst-case scenario where the assessment has not considered vegetation or structures. Ground truthing during field work will ascertain potential visibility from receivers taking into account structures and vegetation.

6.2.3.4 Receptors

Public Viewpoints

Key public viewing corridors identified include the following (refer **Figure 6-2**):

1. The Great Western Highway: Primary road that falls along the southern boundary of the Project Area. Runs in an east-west direction;

2. Sunny Corner Road: Low use loop road that connects the Great Western Highway to Sunny Corner. Cuts through the south and centre of Project;
3. Dark Corner Road: Low use road that runs in a north-south direction through north of Project;
4. Macabee Forest/Kirkconnell Road: Low use road that connects Great Western Highway, Yetholme and Kirkconnell. Runs in a north-south direction and cuts through south and centre of Project;
5. Bathurst Street: Low use road through Sunny Corner village. Runs in an east-west direction in the centre of Project;
6. Range Road: Low use road that connects Great Western Highway with Portland. Runs in a north-south direction to the east of the Project;
7. Portland Sunny Corner Road: low use road connecting Sunny Corner to Portland. Runs in an east-west direction from the centre to the east of Project;
8. Portland Cullen Bullen Road: Low use road connecting Portland to Cullen Bullen. Runs in a north-south direction to the east of Project;
9. Diamond Swamp Road: Low use road that connects the Great Western Highway to Tarana in a north-south direction to the south of Project.

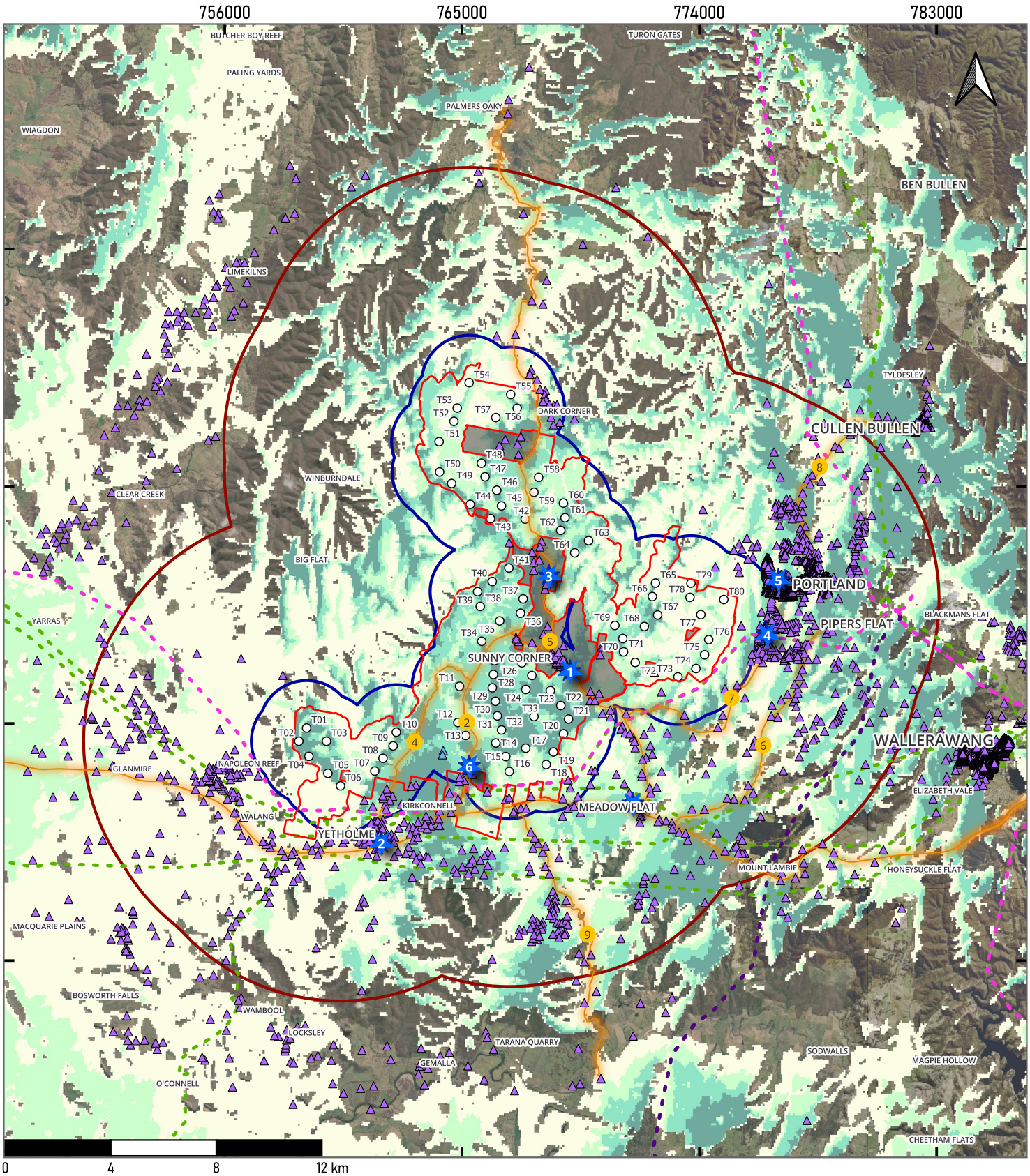
Key public viewpoints include (refer **Figure 6-2**):

1. Sunny Corner Recreational Reserve, Sunny Corner: 1 km to nearest WTG, centre of Project;
2. Yetholme Community Hall: 2.6 km to nearest WTG, south of Project;
3. Sunny Corner Cemetery, Sunny Corner: 1.3 km to nearest WTG, centre of Project;
4. Portland Cemetery, Portland: 2.03 km to nearest WTG, east of Project;
5. Township of Portland: 1.58 - 4.1 km to nearest WTG, east of Project;
6. Kirkconnell Correctional Centre, Kirkconnell: 1.16 km from nearest WTG, centre of Project;
7. Meadow Flat Public School, Meadow Flat: 3.7 km from nearest WTG, southeast of Project.

Private Receptors

Three non-Associated Receivers (NAR) have been identified within the Project Area which are associated with the Kirkconnell Correctional Centre. These NARs include NAR 63, 64, and 66.

161 non-Associated Receivers were identified within the WTG Setback. 1,723 non-Associated Receivers were identified within the Study Area (refer **Figure 2-3** to **Figure 2-7** and **Figure 6-2-1** to **Figure 6-2-3**).



Sunny Corner Wind Farm

Figure 6-2 Visual Scoping Map

Legend

Project Infrastructure
- Project Area
- Non-Project Area
- Wind Turbine Location

Existing Infrastructure

Exisiting Transmission Lines
- 132kV
- 330kV
- 500kV

Receivers
- Non-Associated Receivers
- Commercial Non-Associated Receiver

Visual Assessment
- Setback - 1800m
- Study Area - 8160m

Receptors
- Public Viewing Corridor
- Places of Interest

Wind Turbine ZVI
- 61 - 80 Turbines Visible
- 41 - 60 Turbines Visible
- 21 - 40 Turbines Visible
- 1 - 20 Turbines Visible

Date:	07/02/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:200000
Basemap:	ESRI Satellite (2024)
Data Sources:	NSW Spatial Portal (2024)

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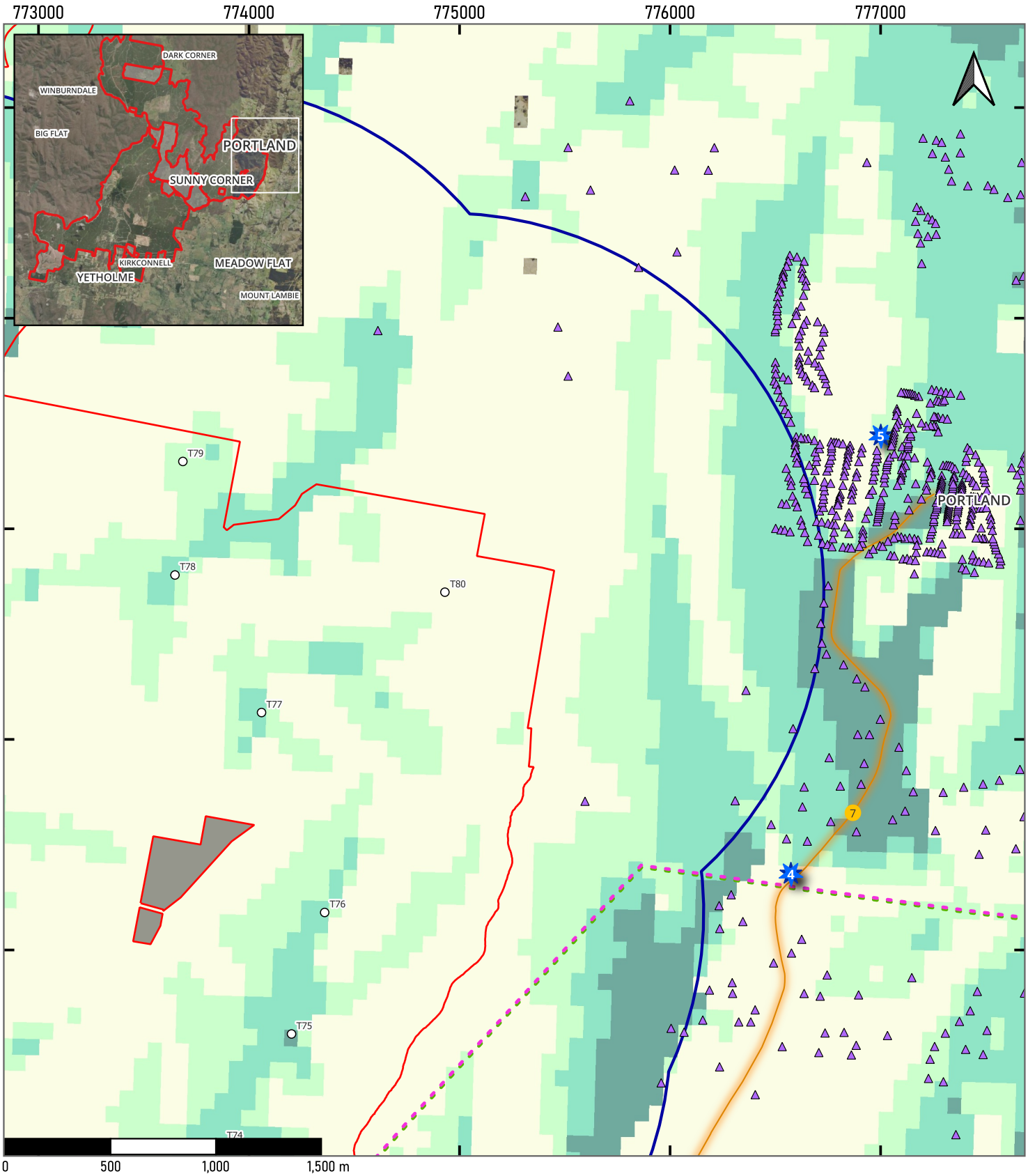

Sunny Corner Wind Farm

Figure 6-2-1 Portland Visual Scoping

Date: 07/02/2025
CRS: GDA2020 / MGA zone 55
Scale: 1:25000
Basemap: ESRI Satellite (2024)
Data Sources: NSW Spatial Portal (2024)

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Legend

Project Infrastructure
- Project Area
- Non-Project Area
- Wind Turbine Location

Existing Infrastructure

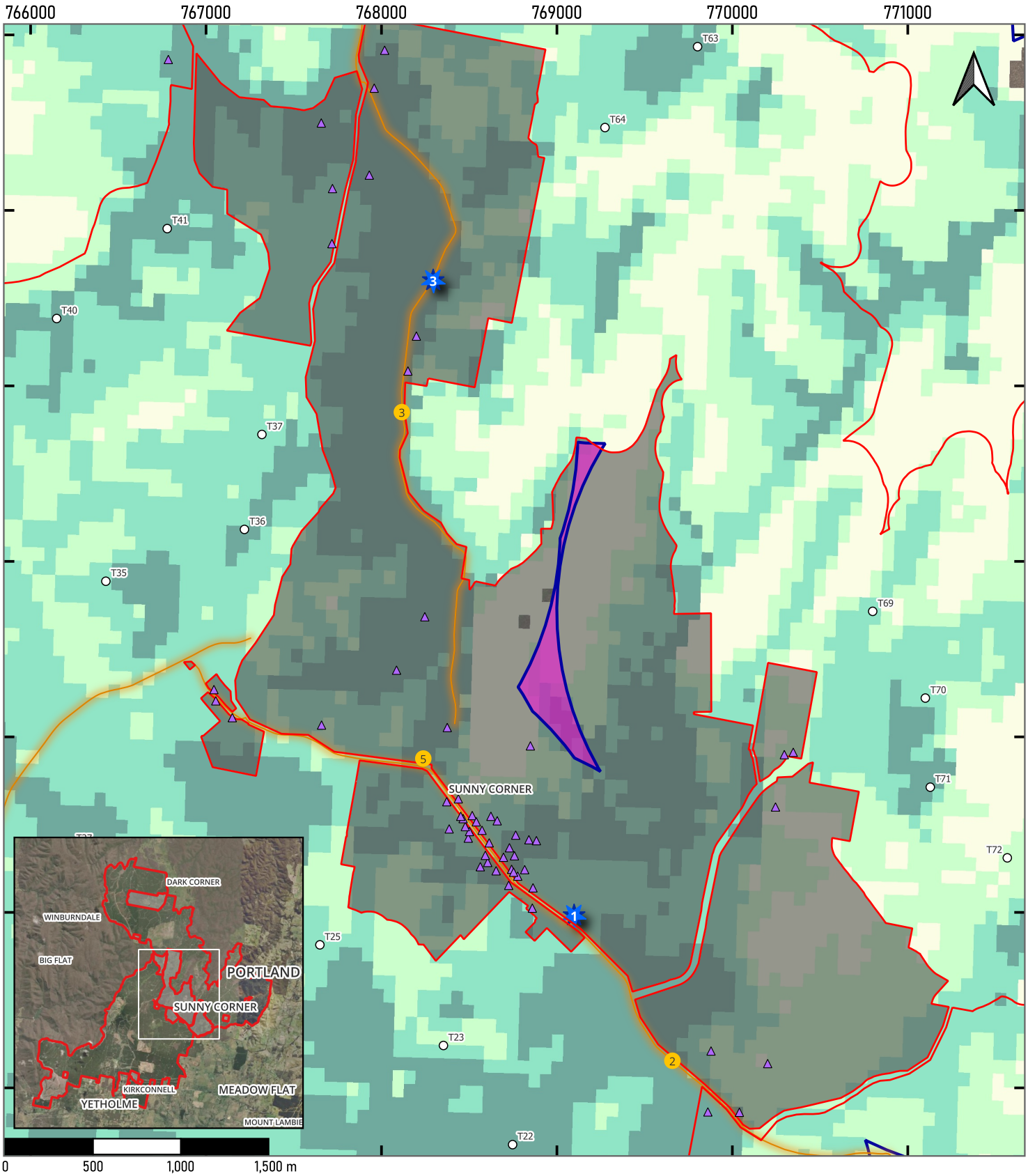
Exisiting Transmission Lines
- 132kV
- 330kV

Receivers
- Non-Associated Receivers

Visual Assessment
- Setback - 1800m

Receptors
- Public Viewing Corridor
- Places of Interest

Wind Turbine ZVI
- 61 - 80 Turbines Visible
- 41 - 60 Turbines Visible
- 21 - 40 Turbines Visible
- 1 - 20 Turbines Visible



Sunny Corner Wind Farm

Figure 6-2-2 Sunny Corner Visual Scoping

Legend

Project Infrastructure
- Project Area
- Non-Project Area
- Wind Turbine Location

Receivers
- Non-Associated Receivers

Visual Assessment
- Setback - 1800m
- Non-Setback Area

Receptors
- Public Viewing Corridor
- Places of Interest

Wind Turbine ZVI
- 61 - 80 Turbines Visible
- 41 - 60 Turbines Visible
- 21 - 40 Turbines Visible
- 1 - 20 Turbines Visible

Date:	07/02/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:30000
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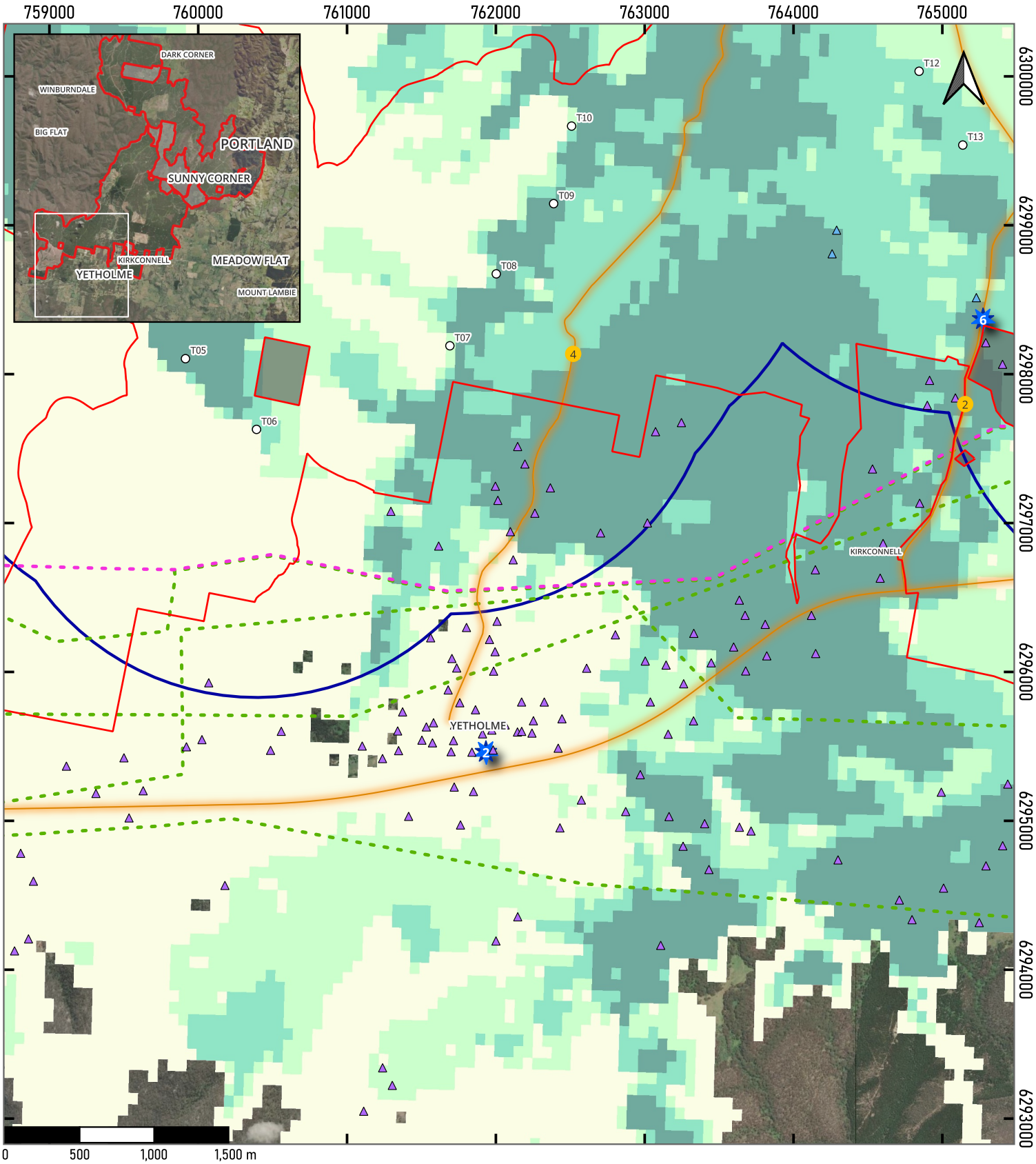

Sunny Corner Wind Farm

Figure 6-2-3 Yetholme Visual Scoping

Legend

Project Infrastructure
- Project Area
- Non-Project Area
- Wind Turbine Location

Existing Infrastructure

Exisiting Transmission Lines
- 132kV
- 330kV

Receivers
- Non-Associated Receivers
- Commercial Non-Associated Receiver

Visual Assessment
- Setback - 1800m

Receptors
- Public Viewing Corridor

- Places of Interest

Wind Turbine ZVI
- 61 - 80 Turbines Visible
- 41 - 60 Turbines Visible
- 21 - 40 Turbines Visible
- 1 - 20 Turbines Visible

Date:	07/02/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:35000
Basemap:	ESRI Satellite (2024)
Data Sources:	NSW Spatial Portal (2024)

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6.2.4 EIS Assessment Approach

A detailed Landscape Character and Visual Impact Assessment (LCVIA) will be prepared in accordance with the '*Technical Supplement for Landscape Character and Visual Impact Assessment'* to support the Project EIS, and will comprise the following:

- Utilise the landscape character assessment to prepare a detailed Visual Baseline Study;
- Identify any additional key features, key viewpoints valued by the community through ongoing consultation;
- Refine the Landscape Character Units (LCUs) and allow the community to provide feedback on the relative scenic quality ratings of LCUs;
- Undertake a cumulative landscape character assessment;
- Undertake a visual impact assessment of the Project from public and private receptors located within the Study Area;
- Identification of all sensitive receptors within the Study Area;
- Assess each receptor through the proportionate visual impact assessment process (Simple Assessment, Intermediate Assessment and Detailed Assessments);
- Site inspection and detailed receiver assessment at sensitive non-Associated receivers;
- Determine the visual impact of each sensitive receptor and provide mitigation methods to reduce potential visual impacts;
- Include graphic representations of the Project using GIS technology including wire frame diagrams and photomontages;
- Assessment of the Project against the performance objectives; and
- Include an assessment and justification for placement of WTGs in multiple, along with information on the mitigation and management measures being employed to reduce impacts.

6.3 Noise and Vibration

A Preliminary Noise Impact Assessment (PNIA) has been prepared by Sonus Pty Ltd and is included in full at **Appendix E**. Relevant guidelines and policies are listed at **Appendix A**.

A summary of the key background, preliminary assessment and EIS assessment approach is provided below.

6.3.1 Background

The Project Area both historically and currently operates as a softwood timber pine plantation on FCNSW owned land which also supports a range of recreational uses. It is located within a highly industrialised area in proximity to Mt Piper Power Station and coal mining activities as discussed in **Section 2.4**.

6.3.2 Preliminary Assessment

The '*NSW Wind Energy Guideline for State Significant Wind Energy Development*' (DPHI, 2024) (The Guideline) provides criteria based on the baseline of 35 dB(A), or 5 dB(A) above the background noise level at each integer wind speed for non-associated residences. The predictions of environmental noise from the Project have been based on the noise propagation model described by ISO 9613-2:1996 "*Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation*" (ISO 9613-2) and SoundPLAN noise modelling software. This model predicts noise based on the assumptions of downward noise propagation (resulting in higher noise levels) from all WTGs to all noise sensitive receptors, therefore representing a conservative approach.

Sonus prepared the preliminary noise impact assessment on an indicative 7.2 MW WTG with a maximum sound power level (SPL) of 105 dB(A) (assuming blades with serrated trailing edge) and assumes the WTG is free of any excessive levels of tonality or any other special noise characteristics.

Background noise monitoring will be conducted as part of the EIS process and may result in an increase in the criteria above the baseline limit. The criteria do not apply at associated residences.

6.3.2.1 Wind Turbines

There are 80 residences that have a predicted noise level greater than 35 dB(A) (refer **Appendix E**). The majority of these residences are within 3 dB(A) of the 35 dB(A) baseline criterion.

Within this, there are 20 sensitive receivers with a predicted greater than 3 dB(A) exceedance, and three sensitive receivers predicted to exceed the criteria by 5 dB(A). Predicted exceedances are summarised in **Table 6-1**.

However, the preliminary assessment also separately considered the effect of using sound optimised operational modes (curtailment) at key WTG locations. In this scenario, there were zero (no) exceedances of the 35 dB(A) baseline criterion. Further detail is provided in **Appendix E.**

Table 6-1 WTG Noise Impact Predicted Exceedances

Predicted Noise Level	Number of Sensitive Receivers
Above 35 dB(A)	80
Above 36 dB(A)	67
Above 37 dB(A)	59
Above 38 dB(A)	20
Above 39 dB(A)	7
Above 40 dB(A)	3

The highest predicted noise level at a national park (Winburndale National Park) is 40 dB(A). This prediction is anticipated to be reduced when considering wind speeds at 4m/s or use of sound optimisation.

6.3.3 EIS Assessment Approach

A detailed NIA will be prepared for inclusion in the EIS according to (at least) the guidelines outlined in **Appendix A**. The NIA will include:

- Background noise monitoring results;
- Establishment of criteria in accordance with the background noise monitoring results;
- Predictions which account for the SPLs and locations of WTGs, BESS and ancillary infrastructure;
- A construction noise assessment and framework for a management plan if exceedances are predicted;
- A traffic noise assessment;
- Commentary on vibration impacts; and
- Noise reduction measures where the relevant operational or construction assessment criteria are not achieved.
- The Project will be refined as part of the ongoing design process to seek to minimise noise impacts at all non-associated residences. These refinements may include consideration of:
- Modification to the WTG layout or WTG selection;
- Agreements with landowners;
- Background noise monitoring; and
- Directional noise modelling.

6.4 Biodiversity

A Preliminary Biodiversity Development Assessment Report (PBDAR) has been prepared by Biosis Pty Ltd and is included in full in **Appendix F**. Relevant guidelines and policies are listed at **Appendix A**.

This PBDAR describes the biodiversity values and constraints associated with the Project, within the subject land (Project Area).

A summary of the key background, preliminary assessment and EIS assessment approach is provided below.

6.4.1 Background

The following has been undertaken to develop the PBDAR:

- Database and literature review searches;
- Land category and desktop vegetation mapping assessment;
- Field investigation and Spring Bird and Bat Utilisation Surveys (BBUS);
  - An initial site visit undertaken between 29-30 October 2024 to ground truth the suitability of pre-planned BBUS locations. Following initial site visit, rapid field validation survey of the Subject Land between 12-14 November 2024 was undertaken to ensure informed ongoing design decisions with biodiversity impacts avoided and minimised from the outset including preliminary mapping and validation of Plant Community Types (PCTs) and Threatened Ecological Communities (TECs);
- Preliminary biodiversity constraints mapping;
  - Overview and explanation of the preliminary biodiversity constraints parameters used to develop a site-specific biodiversity constraints GIS model and GIS outputs (refer **Section 1.5.2**). This constraints model has been used to undertake initial avoidance and minimisation of impacts and will continue to form the basis for impact minimisation throughout the design and assessment phases of the Project.

6.4.2 Preliminary Assessment

The majority of the Project Area is located in approximately 10,000 hectares (ha) of softwood pine plantation in the Sunny Corner State Forest. Winburndale Nature Reserve borders the Project to the west, in addition to a number of private landholders.

The Project Area is within the:

- Southeastern Highlands Interim Biogeographic Regionalisation for Australia (IBRA) region and Hill End IBRA subregion;
- Bathurst Granites and Mount Horrible Plateau Mitchell Landscapes; and
- Central Tablelands Local Land Services (LLS) Management Areas.

6.4.2.1 Land Category Assessment

Land subject to forestry operations is excluded from the application of the *Local Land Services Act Amendment Act 2016* (LLS Act). Preliminary review suggests the LLS Act may apply to small areas of land in localised areas within the south of the Project Area, with some overlap with the preliminary disturbance footprint. Further evaluation will be undertaken as the preliminary disturbance footprint and Project Area is refined.

Locating impacts on land mapped as Category 1 – Exempt land will aim to minimise impacts to biodiversity values, and confirmation of the relevant land categories relevant to the Project will be included within any BDAR prepared to support the EIS.

6.4.2.2 Vegetation Communities

Desktop mapping and analysis confirmed 10 potential PCTs had been modelled as occurring within the Project Area (NSW DCCEEW 2024). Not all PCTs within the broader Project Area were validated and will be subject to future field assessment.

In addition to extensive areas of *Pinus radiata* (pine plantations), six PCTs were confirmed as present during the field investigation, ranging from freshwater and forested wetlands to forests and grassy woodland (refer **Table 6-2** and **Figure 6-3**).

Figure 6-3 shows where both native and non-native vegetation occurs within the Project Area. Vegetation condition ranged from high condition in areas less subject to historical pressures such as nearby clearing or plantation activities, to thinner tracts of native vegetation, usually associated with waterways or fence lines, and forestry environmental exclusion areas, where edge effects such as non-native plant invasion, were evident.

A summary of ground validated PCTs within the Project Area is provided in **Table 6-2**.

Table 6-2 Plant Community Types within the Project Area

PCT No.	BC Act	EPBC Act
3211: Central Tableland Montane Wet Forest	N/a	N/a
3294: Central Tableland Peppermint-Gum Montane Forest	N/a	N/a
3303: Central Tableland Ribbon Gum Sheltered Forest	Yes (outside Project Area)	N/a
3347: Southern Tableland Creekflat Ribbon Gum Forest	N/a	N/a
3367: Central Tableland Granites Grassy Box Woodland	N/a	N/a
3369: Central Tableland Ranges Peppermint-Gum Grassy Forest	N/a	N/a
3534: Central West Stony Hills Stringybark-Box Forest	N/a	N/a
3734: Central Tableland Dry Slopes Stringybark-Box Forest	N/a	N/a
3735: Central Tableland Peppermint Shrub-Grass Forest	N/a	N/a
3747: Southern Tableland Western Hills Scribbly Gum Forest	N/a	N/a
3932: Central and Southern Tableland Swamp Meadow Complex	Yes (refer Section 4.2 of **Appendix F**)	Yes (refer Section 4.2 of **Appendix F**)
4063: Central and Southern Tableland River Oak Forest	N/a	N/a
4134: Mount Canobolas Rockplate Shrubland	Yes (outside Project Area)	N/a

6.4.2.3 Threatened Ecological Communities

There are no TECs within the preliminary disturbance footprint. One PCT recorded within the Project Area, PCT 3932, is associated with TECs listed under the BC Act and EPBC Act (Cth DCCEEW 2024):

- Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions (Endangered, BC Act); and
- Temperate Highland Peat Swamps on Sandstone (Endangered, EPBC Act).

Both TECs are potentially present, however will not be directly impacted by the disturbance footprint.

PCTs 3303 and 4134 are both modelled as occurring within the Project Area by the SVTM and are associated with the BC Act listed TEC *Mt Canobolas Xanthoparmelia Lichen Community*. However, the final determination for this TEC states the community occurs at Mt Canobolas in central-western New South Wales, on rock faces and soils of the Mt Canobolas Tertiary volcanic complex, which occurs approximately 80 km west of the Project Area. Therefore, this TEC is considered not to occur.

Within 500 m of the Project Area, the BC Act listed TEC *Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions* also occurs. However, these TECs associated PCTs have not been recorded within the Project Area.

6.4.2.4 Aquatic Habitats

Hydrological features occur within the Project Area including channels, creeks, drainage lines and dams. The aquatic ecological communities within the Project Area and broader locality include highly modified watercourses, altered flow regimes, channel formation, diversions and removal or modification of riparian vegetation. Nevertheless, during peak periods and overflow, parts of Project Area and surrounds may provide habitat for a diverse range, and large number of species.

Aquatic habitats are considered to be in poor to moderate condition state generally and provide sub-optimal to optimal habitat for aquatic species.

Key Fish Habitat is located within streams and waterways of Strahler order 3 and above, including Coolamigal Creek, Dark Corner Creek and Mitchells Creek. Habitat for the threatened Southern Purple Spotted Gudgeon, is also mapped for a small section of Coolimagal Creek that enters the very northern boundary of the Project Area.

Waterway crossings as well as clearing and excavation near KFH and threatened fish habitat will consider impacts on aquatic habitat in accordance with the FM Act, will be subject to impact avoidance/minimisation strategies, and will be designed in accordance with the Policy and Guidelines for *Fish Habitat Conservation and Management* and the Policy and Guidelines for *Fish Friendly Waterway Crossings*.

6.4.2.5 Threatened Flora and Fauna Species

Background searches identified 28 threatened flora species and 76 threatened fauna species recorded (NSW DCCEEW 2024) or predicted to occur (Cth DCCEEW 2024) within 10 km of the Project Area. Based on the PCTs confirmed present within the Project Area, a total of 32 BAM candidate species credit species and 36 BAM predicted ecosystem credit species, have been generated as potentially occurring within the Project Area.

Table 6-3 provides a summary of candidate species based on ground validated vegetation mapping. A minimum of 32 candidate species are considered to require further assessment. Of these, three species were recorded within the Project Area during field surveys:

- Little Eagle *Hieraaetus morphnoides* (Vulnerable, BC Act);
- South-eastern Glossy Black Cockatoo *Calyptorhynchus lathami lathami* (Vulnerable, BC and EPBC Act);
- Gang-gang Cockatoo *Callocephalon fimbriatum* (Endangered, BC Act and EPBC Act); and
- Large Bent-winged Bat *Miniopterus orianae oceanensis* (Vulnerable, BC Act).

Table 6-3 Preliminary List of Candidate Biodiversity Species

Scientific name	Common name	Conservation Status
Aprasia parapulchella	Pink-tailed Legless Lizard	Vulnerable (EPBC Act) Vulnerable (BC Act)
Burhinus grallarius	Bush Stone-curlew	Endangered (BC Act)
*Callocephalon fimbriatum**	Gang-gang Cockatoo	Endangered (EPBC Act) Vulnerable (BC Act)
*Calyptorhynchus lathami lathami**	Sth-eastern Glossy Black-Cockatoo	Vulnerable (EPBC Act) Vulnerable (BC Act)
Cercartetus nanus	Eastern Pygmy-possum	Vulnerable (BC Act)
Chalinolobus dwyeri	Large-eared Pied Bat	Vulnerable (BC Act)
*Eucalyptus aggregata**	Black Gum	Vulnerable (EPBC Act) Vulnerable (BC Act)
*Eucalyptus cannonii**	Capertee Stringybark	Vulnerable (BC Act)
Eucalyptus pulverulenta	Silver-leafed Gum	Vulnerable (EPBC Act)

Scientific name	Common name	Conservation Status
		Vulnerable (BC Act)
Eucalyptus robertsonii subsp. *hemisphaerica**	Robertson's Peppermint	Vulnerable (EPBC Act) Vulnerable (BC Act)
Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable (BC Act)
Hieraaetus morphnoides	Little Eagle	Vulnerable (BC Act)
Leucochrysum albicans subsp. *tricolor*	Hoary Sunray	Endangered (EPBC Act) Endangered (BC Act)
Litoria aurea	Green and Golden Bell Frog	Vulnerable (EPBC Act) Endangered (BC Act)
Litoria booroolongensis	Booroolong Frog	Endangered (EPBC Act) Endangered (BC Act)
Litoria castanea	Yellow-spotted Tree Frog	Critically Endangered (EPBC Act) Critically Endangered (BC Act)
Lophoictinia isura	Square-tailed Kite	Vulnerable (BC Act)
*Miniopterus orianae oceanensis**	Large Bent-winged Bat	Vulnerable (BC Act)
Myotis macropus	Southern Myotis	Vulnerable (BC Act)
Ninox connivens	Barking Owl	Vulnerable (BC Act)
*Ninox strenua**	Powerful Owl	Vulnerable (BC Act)
*Paralucia spinifera**	Purple Copper Butterfly	Vulnerable (EPBC Act) Endangered (BC Act)
*Persoonia marginata**	Clandulla Geebung	Vulnerable (EPBC Act) Vulnerable (BC Act)
*Petauroides volans**	Southern Greater Glider	Endangered (EPBC Act) Endangered (BC Act)
Petaurus norfolcensis	Squirrel Glider	Vulnerable (BC Act)
Phascogale tapoatafa	Brush-tailed Phascogale	Vulnerable (BC Act)
*Phascolarctos cinereus**	Koala	Endangered (EPBC Act) Endangered (BC Act)
Polytelis swainsonii	Superb Parrot	Vulnerable (EPBC Act) Vulnerable (BC Act)
Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable (EPBC Act) Vulnerable (BC Act)
Tympanocryptis mccartneyi	Bathurst Grassland Earless Dragon	Critically Endangered (EPBC Act) Critically Endangered (BC Act)
Tyto novaehollandiae	Masked Owl	Vulnerable (BC Act)
Veronica blakelyi	Veronica blakelyi	Vulnerable (BC Act)

6.4.2.6 Bird and Bat Species with Potential Collision Risk

Aerial species may be subject to a higher risk from the Project due to WTG collision and movement corridor impacts, and areas of potential habitat have been subject to avoidance and minimisation from the outset of project design. Species with a higher risk of being impacted by wind farms are those with potential for ongoing population impacts during operation, such as:

- Raptors which may manoeuvre close to turbine blades to prey on carrion below. These species can be at low density in the landscape and removal of even one breeding pair may be significant at a local level;
- Flocking birds (e.g. Superb Parrot);

- Migrating or nomadic waterbirds which may be less able to manoeuvre around WTG blades and operational WTGs may also affect breeding viability, inclusive of large colonial nesting events; and
- Resident or colonial roosting bats that may fly within the rotor swept area.

Most woodland birds and bats forage and move within or just above canopies, at lower than turbine height, and are considered at a generally lower risk of collision. Impacts to more sedentary species are more likely able to be avoided early in the project design or assessed thoroughly to confirm that losses are negligible. Migratory and nomadic species represent an increased risk as one migratory movement through an operational wind farm may have a local population-level impact on the species. Ongoing collisions may affect the population as a whole.

A preliminary assessment of the bird and bat species likely to occur within the Project Area is provided in Table 4 of **Appendix F**.

Threatened and migratory species known or predicted to occur within the Project Area, or within 10 km of the Project Area, have been preliminarily determined to be most at-risk, where they have a moderate or greater likelihood of occurrence, combined with a predicted high collision risk (refer **Appendix F**).

Further detailed assessment of all relevant species will be provided in the Project's BDAR.

6.4.2.7 Matters of National Environmental Significance

Based on the results of a Protected Matters Search Tool (PMST) and the findings of preliminary field investigations and spring BBUS, MNES potentially of relevance to the Project are outlined below:

- Two critically endangered Commonwealth listed TECs are predicted to occur within the Project Area and/or 10 km buffer;
- 61 listed threatened species are predicted to occur within the Project Area and 10 km buffer; and
- 8 listed migratory species are predicted to occur within the Project Area and 10 km buffer.

The MNES listed above, along with any other MNES recorded or predicted as likely to occur within the Project Area, will require consideration as part of ongoing ecological assessments. A referral of the Project to Commonwealth DCCEEW is planned and will provide a determination as to whether the Project is considered a Controlled Action under the EPBC Act. The above listed MNES will form the basis of potential impacts included in the Referral. The MNES search results are contained within the PBDAR in **Appendix F**.

6.4.2.8 Direct Impacts to Biodiversity Values

The preliminary disturbance footprint has been developed following initial efforts to avoid and minimise impacts to biodiversity values as outlined in **Section 1.5.2**, with the estimated direct impacts associated with the Project outlined in **Table 6-4**.

Table 6-4 Estimated Project Direct Impacts to Biodiversity

Biodiversity value	Estimated impacts (ha)
Native vegetation	
• 8 PCTs (based on rapid field validation survey)	• 38.6
• Non-native vegetation	• 460.4
TECs	
Montane Peatlands and Swamps (BC Act and EPBC Act) (Potential)	No direct impacts expected to occur.
Potential SAII candidate species habitat	
• Bathurst Grassland Earless Dragon	• 0.8 (potential habitat)
• Large Bent-winged Bat	• 38.6 (native vegetation)
• Large-eared Pied Bat	• 38.6 (native vegetation)
• Robertson's Peppermint	• 0.2 (potential habitat)
• Yellow-spotted Tree Frog	• 25.7 (potential habitat)

**SAII relates to impacts within 100 m of known/potential breeding habitat only*

6.4.3 EIS Assessment Approach

Despite being located within Sunny Corner State Forest and being dominated by soft wood pine plantation, the Project Area supports a range of biodiversity values and habitat for threatened species, a small number of which have been recorded to date.

Areas dominated by pine plantation are considered to be of lower risk of impact, whereas higher risk areas are associated with higher condition, wooded PCTs associated with remnant vegetation and existing creeklines. Ongoing application of the principles of avoid, minimise and mitigate will be essential in development of a project design with further detailed surveys to be completed as part of the BDAR.

Opportunities exist to locate project infrastructure, particularly WTGs, in areas considered to be of lower risk to biodiversity values. Impacts to native vegetation and higher quality habitats will largely be restricted to linear infrastructure such as reticulation and transmission. Risks associated with WTG and powerline collisions are expected to be relatively uniform in terms of their occurrence over the life of the operation of the Project.

One further consideration is the operational nature of the forestry activity within the Project Area, with an estimated 18 % of the preliminary disturbance footprint (90.4 ha of a total 499 ha) and 23 % of the broader Project Area (2,392 ha of a total 10,434 ha) to be scheduled to be subject to either clear felling or thinning between 2023 (having already occurred) and 2028. Operations are expected to continue into the foreseeable future and over the life of the operational wind farm.

This cycle of disturbance is likely to have the effect of regular negative impacts to the habitat value of the pine plantations within the Project Area.

6.4.3.1 BAM Assessment Pathway

The BAM assessment pathway will determine the presence of SAII species and communities within the Project Area. SAII species and communities have the potential to occur within the Project Area. These include:

- Bathurst Grassland Earless Dragon *Tympanocryptis mccartneyi* (Critically Endangered, BC Act and EPBC Act);
- Large Bent-winged Bat *Miniopterus orianae oceanensis* (Vulnerable, BC Act);
- Large-eared Pied Bat *Chalinolobus dwyeri* (Vulnerable, BC Act and Endangered, EPBC Act);
- Robertson's Peppermint *Eucalyptus robertsonii* subsp. *hemisphaerica* (Vulnerable, BC Act and EPBC Act); and
- Yellow-spotted Tree Frog *Litoria castanea* (Critically Endangered, BC Act and EPBC Act).

The potential for SAIIs will be further investigated as part of the preparation of a BDAR. Of particular importance will be the determination of potential breeding habitat supported by, among other items, disused mine shafts and audits for Large Bent-winged Bat (recorded within the Project Area), Large-eared Pied Bat and potential Eastern Cave Bat *Vespadelus troughtoni* (both considered to potentially occur within the Project Area). Impacts within 100 m of known/potential breeding habitat will be considered a potential SAII under the BAM.

6.4.3.2 Bird and Bat Adaptive Management Plan

A draft Bird and Bat adaptive Management Plan (BBAMP) will be prepared. Construction and operational management plans will contain an adaptive management component. Adaptive management strategies will be receptive to any new and relevant data that may arise through ongoing assessment and monitoring and is key to the successful implementation of crucial objectives yet also allow flexibility to changing dynamics and ongoing feedback and results.

Bird and bat utilisation surveys commenced in November 2024 with the collection of the initial spring season data that will be required to inform the biodiversity impacts assessment and preparation of the BBAMP.

6.4.3.3 Targeted Surveys

Targeted surveys will be undertaken for each of the candidate species as to assess all impacts, inclusive of indirect, prescribed and uncertain impacts. The targeted survey will:

- Use methods appropriate for the species being targeted;
- Be performed at times of the year appropriate for identifying the species; and
- Be based on a repeatable method for inclusion in any ongoing monitoring program post-approval.
- Based on the outcomes of the targeted survey the BDAR will include:
- Maps of the predicted and habitual flight paths for nomadic and migratory species likely to fly over the Project Area; and
- Maps of the likely habitat for resident threatened aerial and raptor species.
- Prescribed impacts listed for collision risk in Section 6.1.5 of the BAM applies to wind farms. During the preparation of the BDAR, a candidate list of species that may use the Project Area as a flyway or migration route will be identified including:
- Resident threatened aerial species;
- Resident raptor species; and
- Nomadic and migratory species that are likely to fly over the project area or periodically breed win the locality.

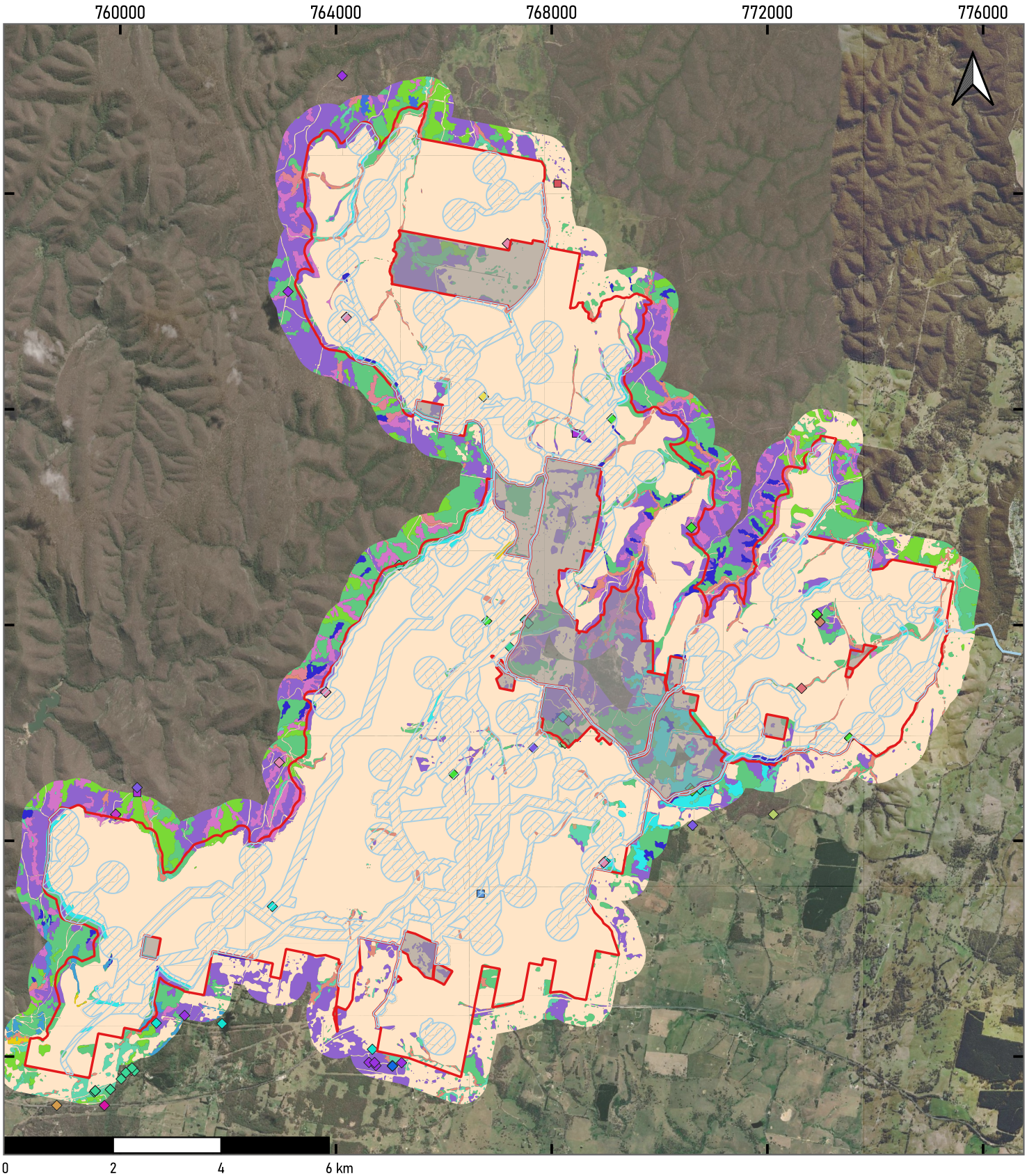
6.4.3.4 Biodiversity Development Assessment Report

As part of a BDAR, detailed ecological surveys, investigations and assessment will be undertaken including:

- Further detailed mapping of PCTs and ecological condition states to develop vegetation zones;
- Collection of floristic plot data;
- Confirmation of presence/extent of any TECs;
- Targeted surveys for candidate flora and fauna species;
- Full 24 months bird and bat utilisation surveys;
- Assessment of all direct, indirect and prescribed impacts; and
- Offset planning for unavoidable residual impacts.

On-site survey effort by suitability qualified ecologists will be undertaken to further ground truth vegetation types, associations with TECs and associations with threatened species habitats. Field surveys in relation to the BDAR will be grouped together into optimal surveys windows to address the requirements of the BAM, most likely within spring and summer. Surveys required for future operational requirements in the way of BBUS for collision risk modelling will require field data capture across all seasons and across a minimum 24 month survey period.

As the Project may significantly impact MNES, EPBC Act assessment requirements are also considered likely, and will need to be addressed with an EPBC referral and assessed under the NSW bilateral agreement.



Sunny Corner Wind Farm

Figure 6-3 Vegetation PCT, Flora and Fauna

Date:	06/02/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:97500
Basemap:	ESRI Satellite (2024)
Data Sources:	NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS
Version: 2.0
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This figure is provided for information purposes only and may not be to scale.

Legend

Project Infrastructure
- Project Area
- Non-Project Area
- Preliminary Development Corridor

Plant Community Types
- 0 - Exotic Vegetation
- 3211 - Central Tableland Montane Wet Forest
- 3294 - Central Tableland Peppermint-Gum Montane Forest
- 3303 - Central Tableland Ribbon Gum Sheltered Forest
- 3347 - Southern Tableland Creekflat Ribbon Gum Forest
- 3366 - Central Tableland Clay Apple Box Grassy Forest
- 3367 - Central Tableland Granites Grassy Box Woodland
- 3369 - Central Tableland Ranges Peppermint-Gum Grassy Forest
- 3510 - Capertee Slopes Stringybark-Box Forest
- 3534 - Central West Stony Hills Stringybark-Box Forest
- 3734 Central Tableland Dry Slopes Stringybark-Box Forest
- 3735 - Central Tableland Peppermint Shrub-Grass Forest
- 3747 - Southern Tableland Western Hills Scribbly Gum Forest
- 3932 - Central and Southern Tableland Swamp Meadow Complex
- 4063 - Central and Southern Tableland River Oak Forest
- 4134 - Mount Canobolas Rockplate Shrubland

Threatened Flora Sightings
- Black Gum
- Capertee Stringybark
- Clandulla Geebung
- Robertson's Peppermint

Threatened Fauna Sightings
- Brown Treecreeper (eastern subspecies)
- Dusky Woodswallow
- Eastern False Pipistrelle
- Flame Robin
- Gang-gang Cockatoo
- Glossy Black-Cockatoo
- Greater Broad-nosed Bat
- Koala
- Large Bent-winged Bat
- Little Eagle
- Powerful Owl
- Purple Copper Butterfly, Bathurst Copper Butterfly
- Scarlet Robin
- Southern Greater Glider
- Spotted-tailed Quoll
- Varied Sittella

6.5 Aboriginal Heritage

6.5.1 Background

The Project Area is situated on the lands of Wiradjuri people within the Bathurst LALC. The Wiradjuri nation is the largest cultural footprint in NSW; from the Blue Mountains in the east, to Hay in the west, north to Nyngan and south to Albury in the South Western slope's region. The Wiradjuri people are the people of three rivers – the Wambool (Macquarie), the Calare (Lachlan) and the Murrumbidgee and have lived these lands and along rivers for more than 40,000 years. Approximately 3,000 Wiradjuri people were living in NSW during European settlement.

The Wiradjuri people occupied and settled along the current rivers, as well as ancient rivers that now exist as palaeochannels (i.e. rivers that have been filled with sediment). Wiradjuri culture was based on small clans or family groups whose movements followed seasonal food gathering and ritual patterns (Bathurst Regional Council, 2023). Differences in dialect existed in some areas, including around Bathurst and near Albury. The Bathurst Wiradjuri were the most easterly grouping of the Wiradjuri nation.

The environmental context (including landscape features and landforms) of the region is important to understand in terms of identifying whether there is potential for Aboriginal archaeology. The geological history of the Bathurst regional area comprises an area extending west of the Great Dividing Range across river valleys, tablelands and slopes (Time Past Productions). The centre of the area contains the Macquarie River and its tributaries, bounded on all sides with rugged and often forested hills (Bathurst Regional Council, 2023). The Project Area and surrounds is known for its rolling hills and dense forests and being on the crest of the dividing range at an elevation of over 1,200 m. Sunny Corner town is exposed to both westerly and easterly rainfall systems.

The Wiradjuri lands were often signposted with carved trees which marked burial grounds. Carved trees have been found at the junction of the Macquarie and Campbell Rivers at O'Connell and can be seen on display at the Bathurst Historical Museum.

Bora rings were located on key sites like Wahlu (Mount Panorama) where initiations and other important ceremonies were held (around 31 km from Project Area). Stone monuments associated with men's business also exist on Bald Hill and Mount Pleasant, within the Bathurst region. Handcrafts included woven baskets and delicately stitched and engraved possum skin cloaks, worn for protection against cold weather. The Wiradjuri shaped their landscape through controlled burning to encourage animals into cleared grassland for better hunting. Spears were crafted from sharpened quartz spearheads fastened with kangaroo sinews. Stone axe heads were crafted from stone on the edge of the Oberon plateau and traded widely (Bathurst Regional Council, 2023).

Aboriginal heritage sites are commonly located along waterways and waterbodies. There are no major waterbodies (rivers, wetlands and estuaries) within the Project Area, with the nearest major river channels being the Coxs River (17 km east of the Project Area), Macquarie River (27 km west of the Project Area), and Turon River (26 km north of the Project Area). Landscape features with archaeological potential include:

- Rivers – the greatest concentration of potential archaeological sites were identified within close proximity to water courses (i.e. within 12 km of river channels, particularly those with sandy paleochannel features, and within 8 km of lakes);
- Open plains – in areas where wind and water erosion has stripped the topsoil along channelled plains and which may be associated with burials;
- Large (former) open water lakes – identified to have a higher-than-average artefact site density; and
- Mounds – characterised by material such as ash, charcoal, fauna remains and occasionally burials.

6.5.2 Preliminary Assessment

An extensive search of the Aboriginal Heritage Information Management System (AHIMS) database was carried out on 8 August 2024 for the Project Area as well as Meadow Flat, Mount Lambie, Portland and Mt Piper Power Station with a buffer of 2.5 km (search area). A total of nine AHIMS sites were identified within the Project Area as outlined in **Table 6-5.**

Table 6-5 AHIMS sites identified within the Project Area

AHIMS Site No.	Description
44-3-0027	Open site comprising artefact and grinding groove
44-3-0114	Open site comprising stone quarry and artefact
44-3-0222	Open site comprising artefact
44-3-0076	Open site comprising artefact
44-3-0163	Open site comprising artefact
44-3-0225	Open site comprising artefact
44-3-0224	Open site comprising artefact
44-3-0223	Open site comprising artefact
44-3-0070	Open site comprising artefact

A total of 89 other AHIMS sites were identified outside of the Project Area within the search area. These comprised of mainly artefacts, modified trees, stone quarry and grinding grooves. Within these sites, a total of eight Potential Archaeological Deposits (PADs) were identified.

Figure 6-4 shows the location of the AHIMS sites in relation to the Project Area.

A search of the National Native Title Tribunal database in October 2024 found that there are no Native Title registers under the NT Act currently registered in the Project Area. However, approximately 50 % of the Project is on land under the Warrabinga Wiradjuri Native Title Claim (NC2018/002 – Warrabinga-Wiradjuri), which is currently pending. The Dabee and Mudgee people of the Warrabinga-Wiradjuri Nation's Native Title claim has been accepted for registration by the National Native Title Tribunal.

6.5.3 EIS Assessment Approach

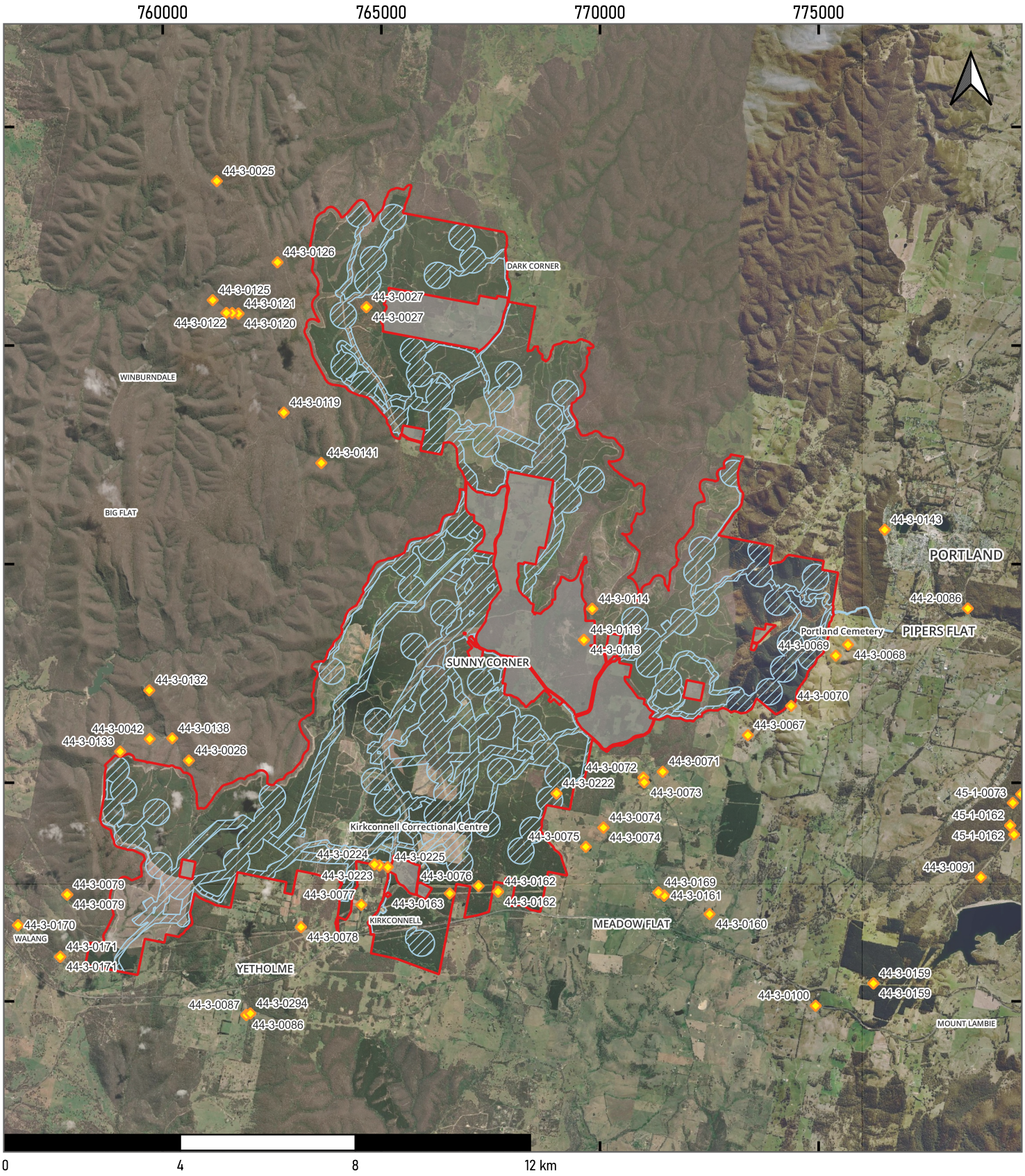
An Aboriginal Cultural Heritage Assessment Report (ACHAR) will be prepared to support the EIS in accordance with the 'Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW' (OEH, 2011) and the 'Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW' (NSW DECCW, 2010a).

Engagement with Registered Aboriginal Parties (RAPs) will be undertaken in accordance with 'Aboriginal Cultural Heritage Consultation Requirements for Proponents' (NSW DECCW, 2010b) (RAP Consultation Guidelines) to determine and assess impacts, develop options, and select options and mitigation measures, as discussed in **Section 5.6**.

This will consider the archaeological potential of the Project Area, and document management and mitigation measures that would be implemented.

The ACHAR will include:

- Literature review and predictive model development (as required);
- Comprehensive investigation (including adequate pedestrian field survey, consultation with RAPs, sensitivity mapping, and results from any archaeological test excavation (if required)). Any required investigations will be undertaken in accordance with all relevant guidelines as outlined in **Appendix A**;
- Identification of Project impacts on items of Aboriginal heritage and cultural values;
- Definition of any required management and mitigation measures in relation to the identified impacts; and
- Commitment to the preparation of an Aboriginal Cultural Heritage Management Plan (ACHMP) in consultation with RAPs to ensure appropriate management of any identified heritage.



Sunny Corner Wind Farm

Figure 6-4 Aboriginal Heritage

Date: 10/02/2025

CRS: GDA2020 / MGA zone 55

Scale: 1:120000

Basemap: ESRI Satellite (2024)

Data Sources: NSW Spatial Portal (2024), AHIMS (2024)

Prepared By: EL Reviewed By: TS

Version: 3.0

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Legend

Project Infrastructure

- Project Area
- Non-Project Area

- Preliminary Development Corridor
- Aboriginal Heritage Sites

6.6 Historic Heritage

6.6.1 Background

6.6.1.1 Bathurst

Bathurst

Sunny Corner is a historic town in NSW, with a rich European history dating back to the 1880s. The town has historic features including a silver mine and historic footbridge (Powys, 1989).

Bathurst is situated 35 km west of Sunny Corner regional centre and is Australia's oldest inland European settlement having been established in 1815. The history of Bathurst includes facades of grand buildings, old hotels and the towns post office, Victorian Park and Machattie Park (Bathurst Region Tourism, 2024).

The government surveyor, George Evans, was the first European to sight the Bathurst Plains in 1813, following the first successful European crossing of the Blue Mountains the same year. In May 1915, Governor Macquarie raised the flag and proclaimed and named the future town of Bathurst after the Secretary of State for War and the Colonies, Henry Bathurst, 3rd Earl Bathurst (Bathurst Regional Tourism, 2024). This made Bathurst the first inland settlement in colonial Australia.

In the 1860s, the town of Bathurst began to bloom. Bathurst was to become the first gold centre of Australia as the nearby gold localities would transport their gold to Bathurst then to Sydney. Bathurst's economy was transformed by the discovery of gold in 1851. One illustration of the prosperity gold brought to Bathurst is the growth and status of hotels and inns in the town.

6.6.1.2 Lithgow

Lithgow is situated 55 km southeast of Sunny Corner, named in 1827 by Hamilton Hume in honour of Governor Brisbane's private secretary, William Lithgow. Lithgow Valley's first European settlers arrived in 1824. The first commercial coal mine was completed in 1869, allowing the descent of trains into the valley. Lithgow provided vast coal reserves and a rail service, which offered an ideal location for industries dependent on these resources (Lithgow Tourism, 2024).

Lithgow was previously perceived to be an inland mining and industrial centre, however, recent developments have seen it recognised as an important tourism destination, heritage centre and a desirable residential area. The area includes World Heritage listed National Parks and State Forests, making Lithgow an important leisure destination for Sydney residents. Today, Lithgow is shaped by a colourful history, challenged by ongoing technological and cultural development and surrounded by nature.

6.6.2 Preliminary Assessment

6.6.2.1 Heritage Register Searches

Commonwealth Heritage List

The Commonwealth Heritage List includes natural, Aboriginal and historical heritage places owned or controlled by the Australian Government. Items on the list have satisfied the Minister as having one or more Commonwealth Heritage values.

A search of the 'Commonwealth Heritage Register' was conducted on 28 October 2024.

There are no Commonwealth Heritage listed places within or in close proximity (within 5 km) to the Project Area.

National Heritage List

The 'Australian National Heritage List' contains natural, historic, and Aboriginal places deemed to be of outstanding heritage significance to Australia. Before a site is placed on the list, a nominated place is assessed against nine criteria by the Australia Heritage Council.

A search of the National Heritage List was conducted on 28 October 2024.

There are no National Heritage listed places within or in proximity (within 5 km) to the Project Area. The closest listed National Heritage place to the Project Area is the Greater Blue Mountains, located approximately 55 km southeast of the Project Area.

State Heritage Register

A search of the NSW State Heritage Register (SHR) was conducted on 28 October 2024.

No State historic heritage listings have been identified within the Project Area. There are two listed State historic heritage items within Portland, approximately 2 km east of the Project Area, being:

- Portland Cement Works Precinct (Listing No: 01739);
- Raffan's Mill and Brick Bottle Kilns Precinct (Listing No: 01738).

One Local Environmental Policy (LEP) (Bathurst LEP) listing has been identified within the Project Area and has potential to be impacted by the Project (refer to **Figure 6-5**):

- Kirkconnell Correctional Centre (formally Kirkconnell House) (located southwest of the Project Area, between T08 and T09) (LEP item #I169).

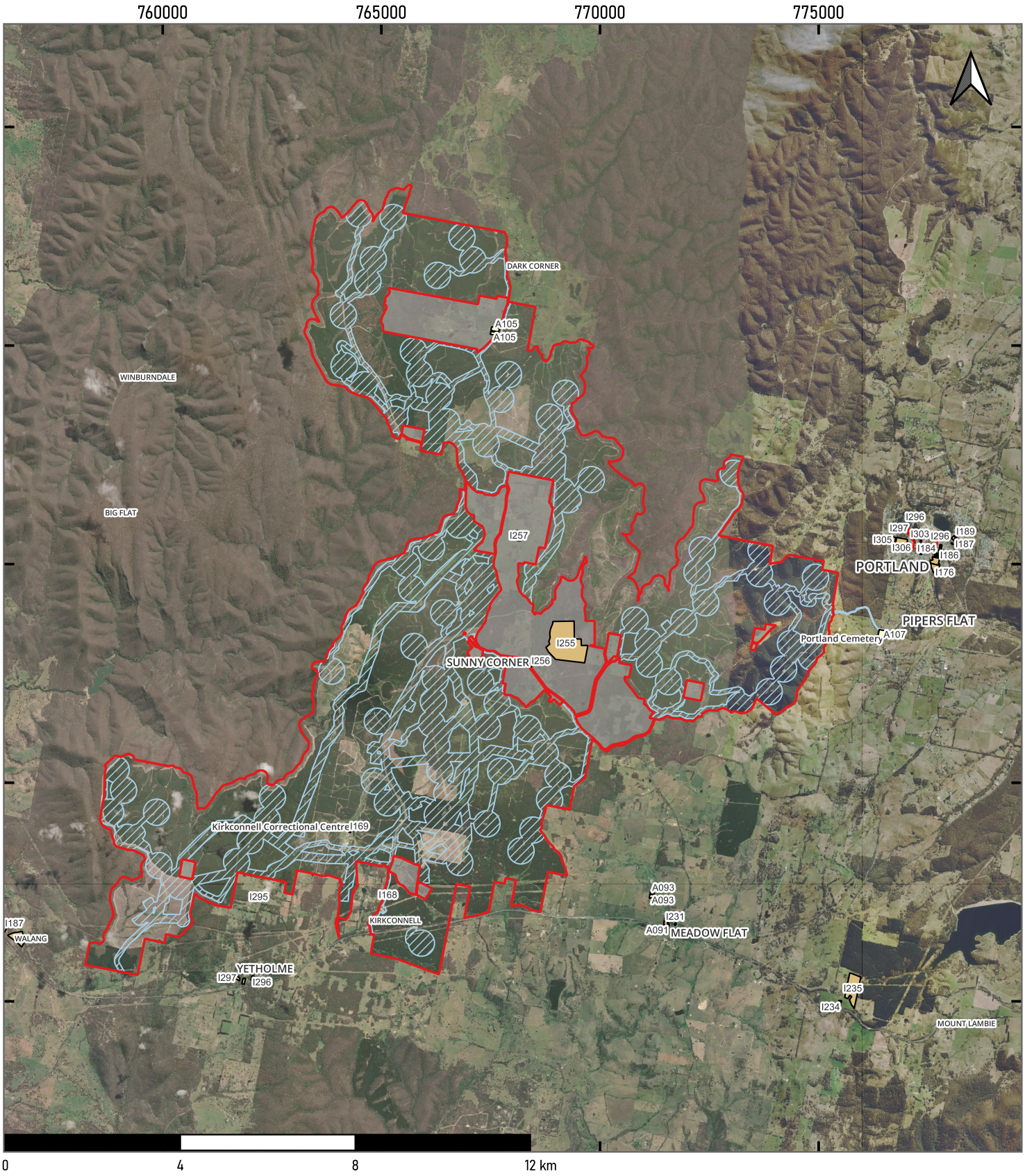
Five other LEP listings have been identified proximate to the Project Area (within 1 km) (refer to **Figure 6-5**). These include:

- Sunny Corner Cemetery (located within hatched 'non-Project Area' in the centre of the site, along Dark Corner Road, with closest turbines being T41 and T37, as shown on **Figure 6-5**) (LEP item #I257);
- Sunny Corner Mine (located within hatched 'non-Project Area' in the centre of the site, along Austral St) (LEP item #I255);
- 'Cottage' (located within hatched 'non-Project Area' in the centre of the site, at 981 Bathurst Street) (LEP item #I256);
- Dark Corner Cemetery (located within hatched 'non-Project Area' in the north of the site, along Dark Corner Road, with closest turbines being T48 and T58, approximately 2.2 km south of the entrance at Dark Corner Road) (LEP item #A105)
- Portland Cemetery (located approximately 950 m east of the Project Area, near Portland) (LEP item #A107).

Section 170 Heritage Register

Section 170 of the NSW *Heritage Act 1977* requires all NSW state agencies to identify, conserve and manage the heritage assets owned, managed and occupied by that agency. In order to facilitate this, Section 170 heritage registers were established for all NSW government agencies. These registers are held and maintained by each state agency and updated as assets are acquired, altered, or decommissioned.

- A search of the Section 170 Heritage Register was conducted on 29 October 2024.
- No Section 170 heritage places are located within or in close proximity (within five km) to the Project Area.
- The closest listed Section 170 Heritage places include the following:
- Bathurst Railway Precinct (located at Havannah Street, Bathurst) SHI#4806340; and
- Rydal Railway Station (located at Bathurst Street, Lithgow) SHI#4801311.



Sunny Corner Wind Farm

Figure 6-5 Non-Aboriginal Heritage

Legend

Project Infrastructure
- Project Area
- Non-Project Area
- Preliminary Development Corridor

Heritage
- Conservation Area - General
- Item - Archaeological
- Item - General

Date: 10/02/2025
CRS: GDA2020 / MGA zone 55
Scale: 1:120000
Basemap: ESRI Satellite (2024)
Data Sources: NSW Spatial Portal (2024)
Prepared By: EL Reviewed By: TS
Version: 3.0
This figure may contain third party information.
This figure is provided for information purposes only and may not be to scale.

6.6.3 EIS Assessment Approach

This preliminary assessment did not identify any historic heritage items within the Project Area listed on National or State statutory heritage registers. There is one Local listed heritage item within the Project Area; and five within 1 km. There remains the potential for historic heritage items to be present in the Project Area considering the continuous European presence since the 19th century.

Further assessment is required to establish the historic archaeological potential for the Project Area. An Historic Heritage Impact Assessment (HHIA) will be prepared having regard to '*Assessing heritage significance – a NSW Heritage Manual update*' (DPIE, 2022d) to support the EIS and will include (but not be limited to):

- A desktop assessment;
- Site inspection to ground-truth desktop assessment;
- Significance assessment;
- Impact assessment; and
- Identification of any required mitigation and management for any items of significance.

The HHIA would align with the guidelines outlined in **Appendix A**.

6.7 Traffic and Transport

6.7.1 Background

Construction of the Project will result in increased volumes of traffic, including both light and heavy vehicles used to transport construction workers, materials and other equipment to and from the Project Area.

Once construction of the Project has been completed, traffic associated with ongoing operations of the Project will be minimal and will generally involve only light vehicle movements for operational personnel.

The Project Area is located 35 km from Bathurst, 55 km from Lithgow, 170 km from Sydney, 820 km from Melbourne, and 830 km from Adelaide (by road). The major WTG components for the Project are anticipated to be delivered to a port and transported by road to the Project Area.

It is expected that the Project will utilise the Port of Newcastle, located 190 km northeast of the Project Area, however, this will be confirmed in the EIS. The Project Area is immediately serviced by Sunny Corner Road and the Great Western Highway, a major highway which has the capacity to carry oversize and overmass (OSOM) vehicles to and from the Project Area.

As discussed in **Section 3.3.3.2**, up to six site entrances are proposed from Dark Corner Road in the north, McManus Road, Portland Sunny Corner Road and Sunny Corner Road in the east, and Sibleys Road in the southwest, all which intersect with the Great Western Highway or Castlereagh Highway. West Mitchell Road runs through the centre of the Project Area and will likely be used to access parts of the Project Area. Potential towns that may need to be intersected during haulage routes include Portland, Lisdale, Lithgow and Bathurst.

Great Western Highway and Pacific Highway serve as important commuting corridors as they provide connection to Bathurst, Lithgow, Sydney, Gosford, Newcastle and others. Minor road connections are provided by Dark Corner Road and Sunny Corner Road.

The transport route of the WTG components and other Project related materials will be subject to a Port and Transport Route Assessment, which will be prepared as part of the EIS, the outcomes of which will be incorporated into the Traffic and Transport Impact Assessment (TTIA). This will identify a proposed transport route from the receiving port(s) to the Project Area, as well as any required road upgrades.

Whilst a port and transport route has not yet been determined, the ports of origin identified above will be refined, and/or the preferred route(s) confirmed in the EIS.

6.7.2 Preliminary Assessment

The Project may require upgrades to roads along the transport route. The details and specifications of these upgrades will be dependent on the size of the vehicles and infrastructure required to be delivered to the Project Area.

The construction and/or upgrade of internal of access tracks will also be required throughout the Project Area to facilitate construction, allow for maintenance to occur throughout the operational and during the decommissioning phase of the Project.

In addition, Sunny Corner Road, Portland Sunny Corner Road, Dark Corner Road, McManus Road, Sibleys Road and West Mitchell Road are expected to be utilised for the Project and as such may require road upgrades however this will be determined in the EIS.

6.7.3 EIS Assessment Approach

A Transport Route Assessment will be prepared which will consider potential transportation routes for construction traffic and potential impacts of the size, loads, and volumes of vehicles on the road network.

Engagement will be undertaken with relevant stakeholders as details in **Section 5**.

A Traffic Impact Assessment (TIA) will be prepared in accordance with the guidelines outlined in **Appendix A**.

The scope of the TIA will likely involve:

- Assessment of haulage routes, access points, and swept paths through intersections to determine potential risks and impacts from the largest vehicles (OSOM);
- Review of any previous traffic impact assessments undertaken for the surrounding area and traffic counts in selected areas;
- Assessment of likely project-alone and reasonable cumulative traffic impacts during the construction and operational phases of the Project (including intersection performance, capacity, safety and site access);
- Assessment of the potential traffic impacts of the Project on road network function including intersection performance, site access arrangements, site access and haulage routes, and road safety (including school bus routes and school zones);
- Identification of any road upgrades required and associated clearing and disturbance works;
- Assessment of the potential impacts of the proposed works on residences and access ways; and
- Identification of mitigation and management measures if required, including traffic volumes, sight lines.

6.8 Aviation

6.8.1 Background

Risks posed to aircraft from a wind farm potentially include:

- Physical obstruction – this is most notable for aircraft that are closest to the ground such as those during take-off and landing;
- Interference with safe flight – the presence of excessively tall structures (such as buildings and turbines) may present a hazard;
- Reduction of areas available for pilots to use in the event of forced landing, such as engine failure after take-off;
- FCNSW use of light aircraft for spraying weeds within the plantation areas;
- Impact on use of emergency helicopter access;

- Additional wind turbulence – the effect of WTG-induced turbulence may affect aircraft that are smaller or lighter;
- Electrical transmissions interfering with technical equipment – the electromagnetic field generated by the transmission line and wind farm may cause interference with technical equipment; and
- Impact on nearby farmers that use aerial spraying to manage their agricultural businesses.

6.8.2 Preliminary Assessment

A review of known Aircraft Landing Areas (ALAs) and aerodromes within 30 nautical miles (55.6 km) of the Project Area was undertaken as shown on **Figure 1-1**. A total of 17 ALAs have been identified.

The closest airport to Bathurst is Bathurst Airport. Bathurst airport is a regional airport located 12 km west of the Project Area, which is operated by Bathurst Regional Council and shown on **Figure 1-1.**

There also are multiple private airstrips in the surrounding area, which will require further investigation in the EIS phase.

6.8.3 EIS Assessment Approach

An Aviation Impact Assessment (AIA) will be undertaken for the EIS, which will assess any potential impacts to aviation safety associated with the Project. The assessment will include consideration of:

- Potential impacts to aviation safety including wake / turbulence issues;
- Confirmation of any additional air strips or other ALAs;
- The need for any aviation safety lighting;
- Air traffic routes, heights procedures, Obstacle Limitation Surfaces, air space classification, radar and communications systems and navigation aids;
- Impacts on aerial emergency services, aerial firefighting, and aerial agricultural operations; and
- Mitigation and management measures for relevant impacts identified.

WTG maximum heights and indicative coordinates will be presented in the EIS.

The AIA will address any aviation concerns raised during consultation with the community and key stakeholders and identify relevant mitigation strategies to be implemented where required.

Consultation with the Civil Aviation Safety Authority (CASA) and Airservices Australia will also be undertaken to determine relevant aviation safety lighting requirements, notification and reporting requirements, and the potential marking of WTG wind monitoring towers, and overhead transmission lines and towers.

Consultation will also be undertaken with Department of Defence, Bathurst and Lithgow Councils and the Royal Flying Doctor service.

The AIA will generally be prepared in accordance with the guidelines in **Appendix A.**

6.9 Telecommunications

6.9.1 Background

The operation of a wind farm has the potential to interfere with the electromagnetic signals associated with nearby telecommunication services. Large structures such as WTGs that are located within or close to the telecommunication signal path may interfere with broadcast and point to point communications and any services that rely on these signals.

Existing telecommunication services in the vicinity of the Project Area that may be affected include forestry, mobile phone services, radio communication services, television and radio broadcast services, and aircraft navigation services, which local residences and towns are reliant upon.

6.9.2 Preliminary Assessment

A search of the Australian Communication and Media Authority (ACMA) database carried out in November 2024 has identified 219 registered sites associated with licences and point to point links within 20 km of the Project Area.

Only two sites are located within the village of Sunny Corner, and 64 sites are located within 10 km of the Project Area.

6.9.3 EIS Assessment Approach

A Telecommunications (Electromagnetic Interference (EMI)) assessment will be undertaken which will consider the potential impacts of the Project on telecommunications services.

The assessment will involve the preparation of a detailed desktop assessment of existing proximal electromagnetic services to the Project Area, and recommended measures to avoid or minimise potential impacts to telecommunications services during construction and operation of the Project. Assessed impacts include:

- Point-to-point microwave links;
- Meteorological radar;
- Mobile voice-based communications;
- Wireless and satellite internet services;
- Broadcast and digital radio;
- Broadcast, digital and satellite television; and
- Trigonometry stations and GPS.

It will identify any required suitable options to avoid potential disruptions to radio communication services from the Project. Consultation with operating services (at least NSWTA, Transgrid or the Department of Customer Service – Telco Authority) that may be impacted by the Project will be undertaken where necessary to understand potential EMI-related impacts to operations and services.

6.10 Water Resources

6.10.1 Background

Soils will be subject to disturbance during Project-related construction activities associated with site establishment, installation of infrastructure and replacement of soils for revegetation. However, significant portions of the Project Area are identified for forestry-related clearing and logging activities as described in **Section 2.4**.

The Project has a potential to result in impacts to downstream watercourses, in the absence of management and mitigation measures additional to forestry-related activities. Operational and maintenance activities require water use and may also lead to impacts on water resources, in the absence of management and mitigation measures.

6.10.2 Preliminary Assessment

6.10.2.1 Surface Water

The Project Area is located within the Macquarie-Bogan catchment in Central West NSW, which covers an area of around 74,800 km^2. The headwaters of the Macquarie River are in the Great Dividing Range south of Bathurst, with the river flowing north-westerly until it joins the Barwon River near Brewarrina (NSW Government, 2024).

The Project Area is located east of the Macquarie River, south of the Turon River and north of the Fish River. There are a number of creeks within the Project Area including Dark Corner Creek and Daylight Creek (refer **Section 2.3.1.3**).

'Stream order' is used to describe the hierarchy of streams from the top to the bottom of a catchment. The Strahler system is based on the confluence (joining) of streams of the same order. A 1st order stream has no other streams flowing into it. When two streams with different orders join, the resulting stream has the same order as the highest order of the two joining streams (DPIE Water, 2024).

The Strahler stream orders for the watercourses within the Project Area include Archers Gully and Dark Corner Creek, with others identified in **Section 2.3.1.3** and shown on **Figure 2-1.**

There is one potential swamp located within the Project Area which is Lucky Swamp. There are 43 dams located across the Project Area.

The Project Area is located between 922 m ASL and 1,282 m ASL. A search of the ePlanning portal in November 2024 did not indicate the Project Area was located on flood prone land. The surrounding LGAs of Bathurst and Lithgow experience flooding from the Macquarie River and Coxs River.

There are a number of turbines in close proximity to minor watercourses. During project refinement during the EIS, micro-siting will be utilised to ensure all WTGs are at least 40 m from the bank of a stream.

6.10.2.2 Groundwater

Due to the nature of the proposed construction works, there would be limited to no impact to groundwater. Standard mitigation measures would manage the small risk of contaminants into groundwater.

There are a number of groundwater bores within the Project Area.

Groundwater Dependent Ecosystems (GDEs) rely on access to groundwater to maintain water requirements for plants and animals. GDEs will be considered in the EIS.

6.10.3 EIS Assessment Approach

A relevant assessment of water resources will be undertaken for inclusion in the EIS which includes:

- Flooding and Hydrology Assessment:
  - Existing flood behaviour through review of existing available data, developing computer models and defining flood levels, depths, velocities and flood hazard category for the Project Area for existing topographic conditions; and
  - Post development flood behaviour, including quantifying flood levels, depths, velocities and flood hazard category with the Project in place, and measures proposed to monitor, reduce and mitigate impacts;

- Water Resources Assessment:
  - Identify the existing water resources and environment;
  - Assess the potential impacts of the Project on hydrology;
  - Identify and indicatively quantify sources of water required during construction and operation of the Project and determine whether any water access licences under the WM Act are required;
- An assessment of the likely impacts on surface water resources, including local waterbodies and GDEs;
- Identification of any works within 40 m of the high bank of any waterfront land, impacts and required mitigation;
- A discussion of construction erosion and sediment control measures to ensure that impacts during excavation, road works, transport of machinery, etc. are adequately mitigated through avoidance, minimisation and management; and
- Measures to monitor, reduce and mitigate the impacts of the Project.

The water impact assessment will be generally undertaken in accordance with the guidelines outlined in **Appendix A.**

A detailed groundwater assessment is not required for the Project and will only be addressed in the EIS in relation to proposed minor management measures as part of 'post-approvals' documentation.

6.11 Agriculture and Land Resources

6.11.1 Background

Soils will be subject to disturbance during construction activities associated with site establishment, installation of infrastructure and replacement of soils for revegetation. Operational and maintenance activities may also lead to impacts on land resources of the Project Area.

Majority of soils within the Project Area have been previously disturbed through the existing FCNSW pine plantation.

6.11.2 Preliminary Assessment

6.11.2.1 Soils

A preliminary review of the mapped 'Soil and Land Capability Mapping' data for NSW (NSW SEED Database, 2024a) was undertaken.

There is no mapped Biophysical Strategic Agricultural Land (BSAL) land or LSC Classes 1-3 present in the Project Area as shown on **Figure 6-6.**

There are four mapped Land and Soil Capability (LSC) classes including:

- LSC Class 5 – severe limitations: land not capable of sustaining high impact land uses except where resources allow for high specialised land management practises to overcome limitations (e.g. high value crops). Located across majority of the Project Area, mainly across the centre;
- LSC Class 4 – moderate to severe limitations: land generally not capable of sustaining high impact land uses unless using specialised management practises with high level of knowledge, expertise, inputs and investment. Located within the western portion of the Project Area;
- LSC Class 7 – Extremely severe limitations for most land uses. It is unsuitable for any type of cropping or grazing because of its limitations. Use of this land for these purposes will result in severe erosion and degradation. Located in the northern portion of the Project Area; and

- LSC Class 6 – very severe limitations: land incapable of sustaining many land use practises (e.g. cropping, moderate to high intensity grazing and horticulture). Located to the north of the Project Area.

A search of the 'Australian Soil Classification (ASC) Soil Type Map of NSW' (NSW SEED Database, 2024b) shows that the Project Area has the following soil orders:

- Kandosols (KA) located across majority of the Project Area;
- Sodosols (SO) located in the southwest portion of the Project Area; and
- Rudosols (RU) located through the northeast of the Project Area.

6.11.2.2 Land Contamination

Contamination is managed under the *Contaminated Land Management Act 1997*. A search on the NSW EPA Contaminated Land Record of Notices on 7 November 2024 for the Bathurst Regional Council and Lithgow City Council LGA identified no known contaminated sites within the Project Area (EPA, 2024). The nearest contaminated site notified to the EPA is located at Williwa Street, Portland approximately 1.5 km east of the Project Area.

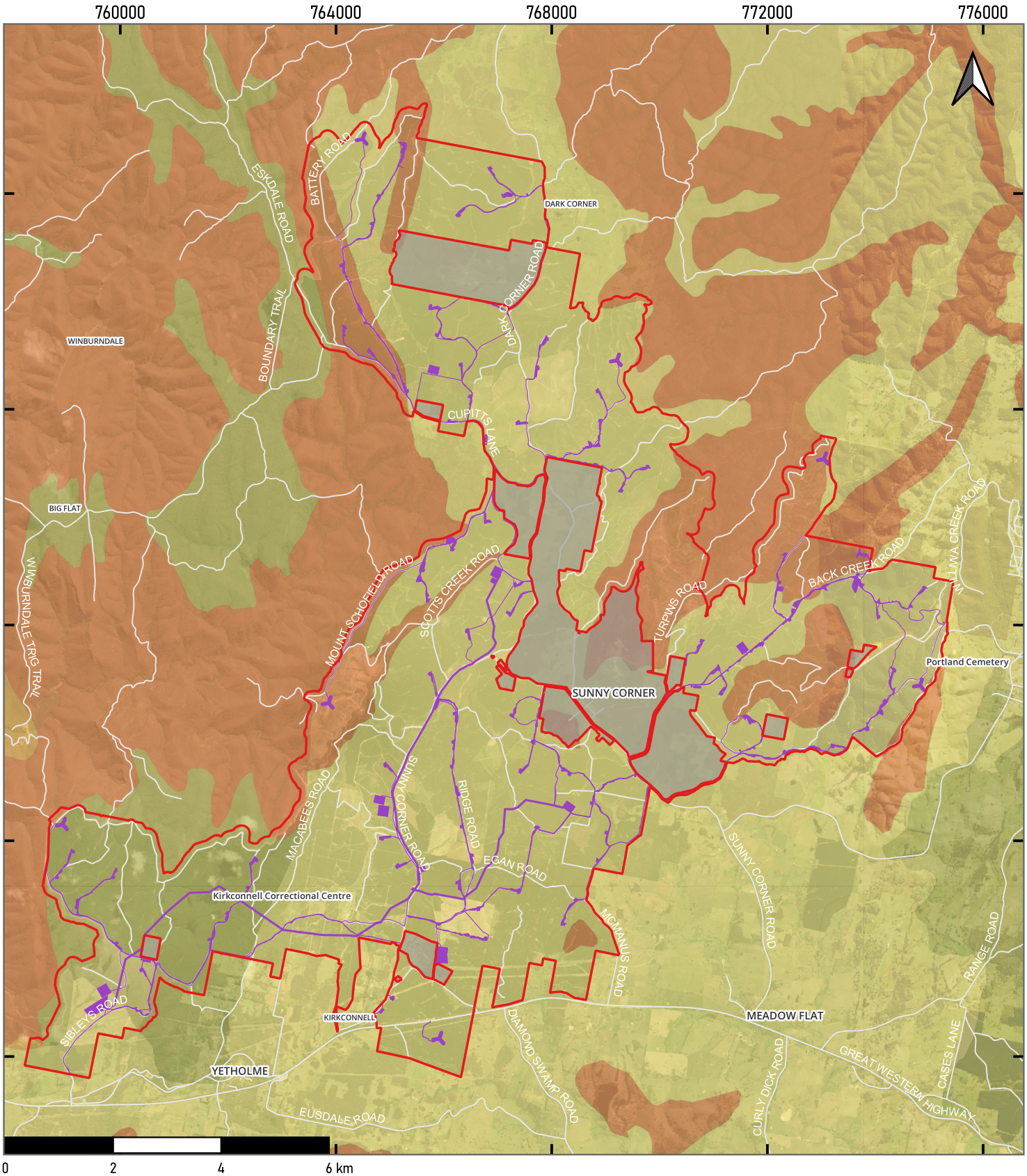
Acid Sulphate Soils (ASS) are naturally occurring soils that contain high concentrations of micro-crystalline iron sulphide (pyrite), which on contact with oxygen and water combines to become sulfuric acid, potentially making the soil highly acidic. A search of the NSW ePlanning database on 7 November 2024 did not identify any ASS within the Project Area.

6.11.3 EIS Assessment Approach

An Agricultural and Soil Assessment (ASA) will be undertaken for the EIS, which will primarily focus on assessing the Project impacts on the soil and LSC of the Project Area (including a relevant soil survey to confirm desktop work), as well as the likely impacts on agricultural resources (focusing on forestry), enterprises and industries.

The ASA will include an impact assessment on productivity and enterprises for the Project, impacts on agricultural land, impacts on agricultural resources and other agricultural impacts including weed and pest species, biosecurity and cumulative impacts.

A Land Use Conflict Risk Assessment will be prepared during the EIS phase. The assessment will also propose appropriate mitigation measures during construction and operation of the Project. The Agricultural and Soil Assessment will consider the requirements and guidelines outlined in **Appendix A**.



Sunny Corner Wind Farm

Figure 6-6 Soil and Land Capability

Date: 10/02/2025
CRS: GDA2020 / MGA zone 55
Scale: 1:97500
Basemap: ESRI Satellite (2024)
Data Sources: NSW Spatial Portal (2024)
Prepared By: EL Reviewed By: TS
Version: 3.0

Legend

Project Infrastructure
- Project Area
- Non -Project Area
- Preliminary Development Footprint

Existing Infrastructure
- Roads

Soil and Land Capability
- 4 - Moderate to severe limitations
- 5 - Severe limitations
- 6 - Very severe limitations
- 7 - Extremely severe limitations

6.12 Economics

6.12.1 Background

The employment status within the Bathurst Regional LGA in 2021 indicates that 58.4% of residents are full-time workers, 31.7% are part time and 4% are unemployed (ABS, 2021). Within the Lithgow City LGA, 53.7% are full-time workers, 32.3% part-time workers and 5.5% are unemployed (ABS, 2021).

The three most prevalent industries of employment in the Bathurst Regional LGA in 2021 are hospitals (expect psychiatric hospitals) (4.2%), other social assistance services (4.0%) and state government administration (3.3%) (ABS 2021). The three most frequent occupations in the Bathurst Regional LGA are professionals (19.1%), community and personal service workers (15%) and technicians and trades workers (14.2%).

In the Lithgow City LGA, the three most prevalent industries of employment are coal mining (6.9%), aged care residential services (3.4%) and supermarket and grocery stores (3.1%) (ABS 2021). The three the three most frequent occupations are technicians and trades workers (16.6%), community and personal service workers (14.0%) and professionals (13.4%) (ABS 2021).

Further detail is provided on demographics relevant to economics are in **Section 6.14.2**.

6.12.2 Preliminary Assessment

During construction, the Project will involve the procurement of broad array of equipment, products and services, some of which may be procured from within the Bathurst Regional and Lithgow City LGAs and broader NSW. Construction supplies and construction-related services, including local civil, labour and electrical businesses in particular are likely to benefit from the Project. Additionally, because of the inter-linkages between sectors, many indirect businesses would also benefit through increased economic activity.

The presence of the construction workforce would also increase demand for food, entertainment, accommodation and other consumables in the local region, which would deliver a positive impact for existing retail, beverage, food and accommodation service providers in towns such as Bathurst and Lithgow.

During operations, the Project would provide a long-term benefit to the local economy through employment and business opportunities, that would service the Project.

Additional benefits to the local economy will be delivered through the neighbour benefit sharing program and VPA that will be established for the Project.

6.12.3 EIS Assessment Approach

An Economic Assessment (EA) will be undertaken for the EIS, which will review the impacts or benefits of the Project for the region and State as a whole.

It will consider any increase in demand and impact on local and regional economy during construction and operation of the Project, as well as reduction in agricultural activity as a result of the Project development, and other economic issues such as potential impact on land values and regional wages, house prices, tourism, and cumulative impacts. The EA will also include mitigation methods to maximise the projected economic benefits whilst minimising impacts from the Project.

6.13 Estimated Cost Development

The EIS will be supported by an Economic Development Cost (EDC report) prepared by an AIQS Certified Quantity Surveyor or RICS Chartered Quantity Surveyor in accordance with ‘Planning Circular PS-24-002 Changes to how development costs are calculated for planning purposes’ (or latest version).

The estimated EDC will be accurate at the date of application and include methodological assumptions and details of all components and assumptions from which it is derived, as well as an estimate of the jobs that would be created during the construction and operational phases of the Project as per **Section 3.5.**

In accordance with the 'Standard Form of Estimated Development Cost Report (State significant projects) - October 2024', the EDC will include:

- An executive summary;
- A description of the basis of preparation;
- A description of the scope of the estimated development cost (EDC); and
- A detailed calculation schedule that supports the EDC.

6.14 Social

6.14.1 Background

6.14.1.1 Introduction

This section provides a summary of the preliminary Social Impact Assessment (PSIA) undertaken for the Project (**Appendix G**).

The PSIA has been undertaken for the Project in accordance with the DPIE's 'Social Impact Assessment Guideline for State Significant Projects' (DPIE, 2023a) (Social Guidelines), 'Cumulative Impact Assessment Guidelines for State Significant Projects '(DPIE, 2022b), and 'Undertaking Engagement Guidelines for State Significant Projects' (DPIE, 2022c) (Engagement Guidelines).

In accordance with the Social Guidelines, the PSIA involves scoping and preliminary assessment, identifies the level of assessment to be applied, and sets further parameters for the second phase SIA (the assessment report to be appended to the EIS). Accordingly, the first phase SIA:

- Defines the Project's social locality (**Section 6.14.1.2**);
- Describes the community profile in the preliminary social baseline (**Section 6.14.1.3**);
- Outlines the potential social impacts (**Section 6.14.2.2**); and
- Outlines the approach to complete the second phase SIA (**Section 6.14.3**).

This preliminary SIA has been undertaken as a desktop analysis supplemented by 10 in-region visits and supplementary remote engagement. All population and demographic data presented in this section are from the ABS 2021 Census unless otherwise stated.

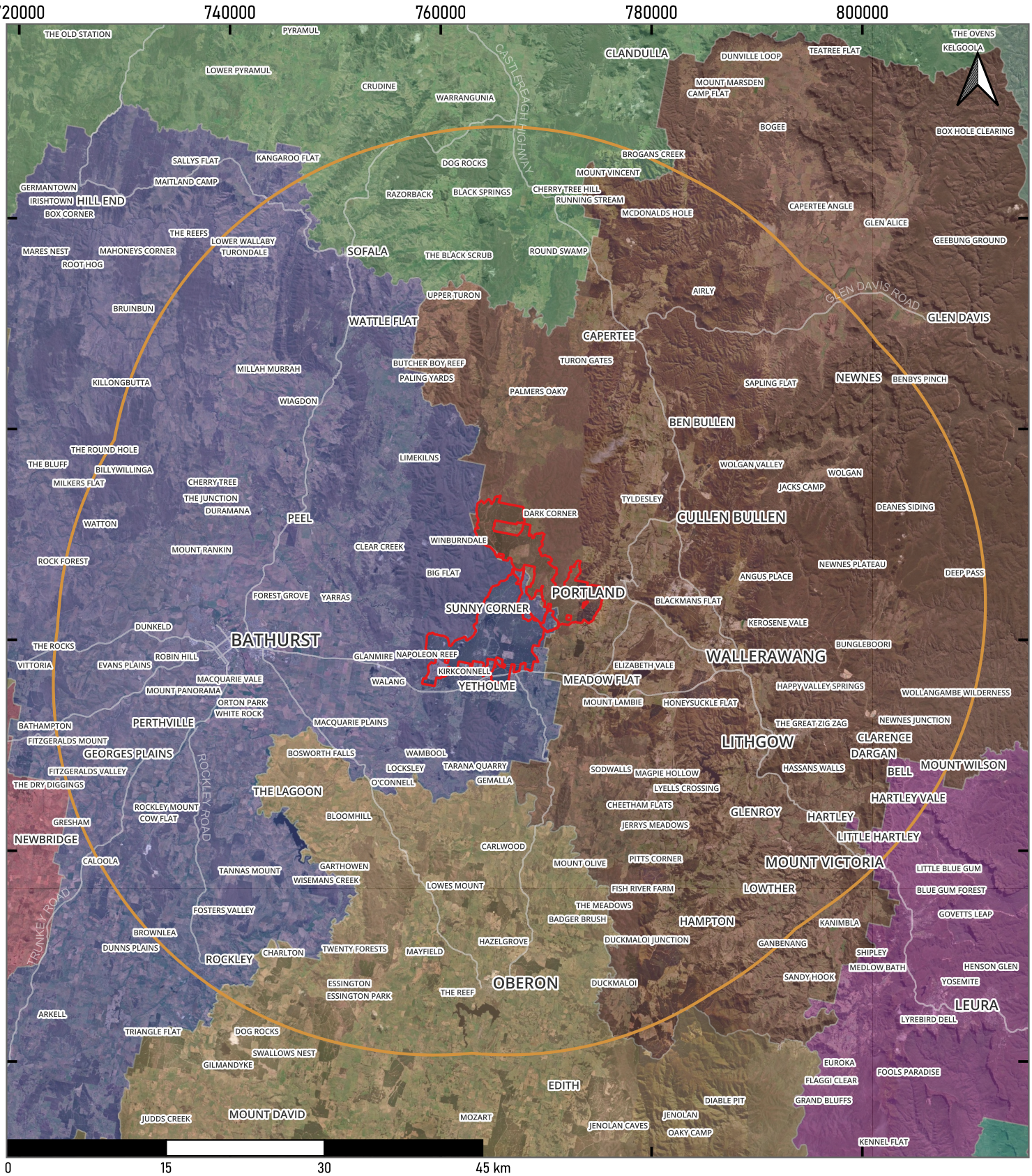
6.14.1.2 Social Locality

The social locality of the Project includes:

- Associated landowners and adjacent/near neighbouring properties, including residents and local businesses;
- Localities likely to be impacted by and/or benefit from the Project; and
- Localities likely to experience construction-related workforce, procurement, and traffic impacts.

For the purposes of this PSIA, the Project's social locality is shown in **Figure 6-7** and comprises the following three components:

- Project Area and immediate surrounding areas located within the Australian Bureau of Statistics (ABS) LGAs of Bathurst (ABS reference LGA 10470) and Lithgow (ABS reference LGA 14870);
- Transportation and haulage routes, including primary vehicular routes within the region; and
- Surrounding towns and regional centres of Bathurst and Lithgow, which may provide construction and operations phase goods and services to support the Project. **Table 6-6** lists the surrounding townships within 35 km of the Project Area and notes their travel time and direction from the Project Area.



Sunny Corner Wind Farm

Figure 6-7 Social Locality

Legend

- Project Area
- Project Area 35km Buffer
- Roads

Local Government Areas

- Bathurst Regional Council
- Blayney Council
- Blue Mountains City Council
- Cabonne Council
- Lithgow City Council
- Mid-Western Regional Council
- Oberon Council
- Singleton Council
- Wollondilly Shire Council

Date:	07/02/2025
CRS:	GDA2020 / MGA zone 55
Scale:	1:500000
Basemap:	ESRI Satellite (2024)
Data Sources:	NSW Spatial Portal (2024)

Prepared By: EL Reviewed By: TS
Version: 2.0
This figure may contain third party information.
This figure is provided for information purposes only and may not be to scale.

Table 6-6 Distance to Project Area

Town/Regional Centre	Travel Distance and Direction
Sunny Corner	0 km
Kirkconnell	7.6 km South southwest
Meadow Flat	8.4 km South southwest
Dark Corner	10.6 km North
Yetholme	13.5 km South southwest
Mount Lambie	14.2 km Southeast
Portland	15.5 km East
Walang	16.2 km Southwest
Tarana	21.1 km South
Blackmans Flat	21.6 km East northeast
Wallerawang	22.4 km East southeast
Rydal	23 km Southeast
Wambool	24 km Southeast
Cullen Bullen	25.1 km Northeast
Glanmire	26 km West southeast
Marrangaroo	28 km East southeast
Napoleon Reef	28.6 km West
Locksley	29.9 km South southwest
Brewongle	30 km Southwest
Lidsdale	30.3 km East
Sodwalls	32.9 km South southwest
Gemalla	33.8 km South southwest
Lithgow (regional centre)	34.7 km Southeast
Bathurst (regional centre)	36.3 km West

6.14.1.3 Community Profile

The community profile for the Project Area is described in Table 3 of **Appendix G** with a summary below.

Initial Insights to From Desktop Analysis

For the purposes of the PSIA, project neighbours are defined as people living within 8 km of a WTG or other Project related infrastructure, which includes approximately 4,000 people and 1,840 receivers.

There are 22 towns or townships within 35 km of the Project Area as shown in **Table 6-6**, with populations ranging from 22 (Blackmans Flat) to 2,447 (Portland); as well as the two nearby bigger regional centres of Lithgow and Bathurst. The regional community around the Project Area appears to rely heavily on the provision of essential services from Lithgow and Bathurst. Lithgow is the smaller of the two LGAs, and has an older population, lower average weekly income per household, and higher unemployment rate. Bathurst faces less socio-economic disadvantage, being in the 61st percentile within Australia, and the 64th within NSW.

Bathurst appears to have the stronger business service centre followed by Lithgow, especially for civil works and construction services/suppliers, and Bathurst appears to be the primary hub for technicians, construction suppliers and trades services for the surrounding area (within 35 km).

Lithgow and Bathurst are the most likely areas to support increased demand on local housing requirements for the Project workforce (should an onsite accommodation or other project's approved temporary accommodation not be relied upon for the Project). To minimise the impact on the local surrounding communities, the SIA will seek to fully understand:

- Current housing and accommodation availability, and requirements of the workforce during construction and future operations. The Applicant will explore accommodation-sharing options for workers and support staff to reduce demand impacts on local housing, including liaison with local real estate providers to seek further advice;
- Community sentiment towards a significant increase in proposed largescale renewable energy development projects; and
- Overlapping periods of peak employment through early consultation with other local industry activities and businesses in the area.

6.14.2 Preliminary Assessment

6.14.2.1 Social Infrastructure Overview

Sunny Corner is a small village of under 100 people. Community capital and infrastructure includes a community hall, rural fire service brigade, war memorial, recreation ground, children's playground, tennis court, picnic spaces, and a waste management facility. Sunny Corner Sundays is a local food and flea community market. A range of old mines are also present throughout the Project Area.

Portland is the biggest of the nearby townships, with a population of approximately 1,840. Located 15.5 km east of Sunny Corner State Forest, Portland is surrounded by sheep and cattle farms on undulating countryside. The economic focus of the town is the Mt Piper Power Station and related coal mines, noting Mt Piper Power Station is set to close by 2040. Wool and forestry are other major local industries.

Most businesses and communities around the Project Area rely on the regional centres of Lithgow and Bathurst for essential and community support services. The Great Western Highway connects Lithgow and Bathurst. Some small towns are located along this Highway between the two and have small populations and limited accommodation and service support options: Marrangaroo (783 people), Mount Lambie (65 people), Meadow Flat (356 people), Yetholme (241 people) and Walang (109 people). The Great Western Highway will be used throughout the Project as the primary connection between nearby regional centres and the Project Area.

Lithgow LGA

The Lithgow LGA is on the western ramparts of the Blue Mountains, 140 km from Sydney. The LGA totals 4,567 square kilometres from the Capertee and Wolgan Valleys in the north, Little Hartley in the east, Tarana in the south and Meadow Flat in the west. In addition to the major urban centre of Lithgow, the Lithgow LGA has 12 villages/hamlets with mining or farming backgrounds, including Dark Corner, Sunny Corner, Meadow Flat and Portland.

Bathurst Regional LGA

Bathurst is Australia's oldest European inland settlement located just over 200 km west of Sydney on the Macquarie River. On Wiradjuri land, Bathurst LGA covers 3,818 square km and includes the city of Bathurst and rural nine villages: Georges Plains, Hill End, Peel, Rockley, Sofala, Sunny Corner, Trunkey Creek, Wattle Flat and Yetholme. As the hub of central west NSW, Bathurst provides access to a market of more than eight million people with Sydney just two and a half hours drive away. Bathurst Regional Council was created in 2004 with the merger of Bathurst City Council and Evans Shire Council. It services a population of 44,000, and more than one million visitors annually. The road network covers more than 1,360 km, with almost 1,000 km of that being sealed.

6.14.2.2 Potential Social Impacts

The analysis of potential impacts has been undertaken in line with the requirements of the SIA and are outlined in **Appendix G**.

Table 5 of **Appendix G** lists the 25 potential impacts that have been identified by stakeholders through consultation to date, ranked in approximate order of significance and the frequency raised through consultations and community survey responses.

Table 6 of **Appendix G** lists other potential impacts observed in similar largescale renewable projects in other areas and are predicted to occur for this Project.

6.14.3 EIS Assessment Approach

This section outlines the plan for developing the second phase SIA alongside the EIS process, in accordance with the requirements of the SIA Guidelines.

The SIA will allow for a more comprehensive understanding of the potential social impacts and benefits of the Project. The SIA prepared to support the EIS will also examine any other social issues raised by the community during further engagement as described in **Section 5**. Cumulative impacts of other proposed developments in the area will also be considered.

Where significant impacts are found, the Applicant will develop mitigation and management measures, and describe expected residual impacts post-application of these measures.

Accordingly, the second phase SIA structure will be:

- Introduction, Project Description, Regulatory Context: more detailed overview of the information provided to date including applicable legislative and regulatory frameworks;
- Social Locality and Stakeholder Identification: more detailed analysis on the Project's social locality and stakeholder feedback;
- Methodology: will follow the DPE's Social Impact Significance matrix;
- Stakeholder Engagement for SIA: details of relevant stakeholder engagement to date in accordance with the Community Engagement Strategy, noting it is a live document and will be updated based on stakeholder feedback and monitoring of other Project data;
- Social Baseline: more detail provided and updated in accordance with stakeholder feedback;
- Expected and Perceived impacts: more detail on expected and perceived impacts;
- Impact Assessment and Prediction: pre and post mitigation efforts will be detailed in relation to social impacts informed by stakeholder engagement;
- Social Impact Enhancement, Mitigation, and Residual Impacts: a summary of all impacts and mitigation measures taken throughout all phases of the Project, noting residual impacts;
- Monitoring and Management Framework: overview of monitoring and social impact management measures to be implemented covering all phases of the Project;
- Current housing and accommodation availability, and requirements of the workforce during construction and future operations;
- Community sentiment towards a significant increase in proposed largescale renewable energy development projects;
- Overlapping periods of peak employment through early consultation with other local industry activities and businesses in the area;
- References: all references will be cited in the SIA; and
- Appendices: will include all community profiles and supporting materials used.

6.15 Hazard – Preliminary Hazard Analysis

This section provides a preliminary assessment of hazards and risks that could arise during the construction and operation of the Project. Specifically, it considers hazards and risks associated with hazardous materials, bushfire, blade throw and Electromagnetic Field (EMF).

6.15.1 Background

The Project will result in the introduction of potentially hazardous materials during construction that are likely to be transported to, stored, and used at the Project Area, and transported from the Project Area, including detonators/explosives, welding gases, diesel, and gasoline/petrol. Hazardous substances during operation will be largely limited to gear oils and transformer oils.

6.15.2 Preliminary Assessment

A Preliminary Hazard Assessment (PHA) is required where potentially hazardous or offensive development under Resilience and Hazards SEPP. Clause 3.2 of the Resilience and Hazards SEPP defines a potentially hazardous industry is as:

> *"development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality—*
>
> *(a) to human health, life or property, or*
>
> *(b) to the biophysical environment, …"*

Appendix 3 of the 'Applying SEPP 33 Guidelines' (DoP, 2011) lists the industries that may fall within the Resilience and Hazards SEPP (former SEPP 33), which do not include wind farms or energy storage facilities. However, the BESS facility proposed for the Project is likely to utilise lithium-ion batteries, which are listed as 'Class 9 – Miscellaneous dangerous goods'. While Class 9 materials are excluded from the SEPP 33 screening test, the hazards related to these materials should be considered in accordance with the Resilience and Hazards SEPP guidelines.

The PHA will be prepared in accordance with the following:

- *Resilience and Hazards SEPP* (2021);
- 'Applying SEPP 33' (DoP, 2011);
- 'Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis' and Multi-level Risk Assessment' (DoP, 2011)'; and
- 'Hazardous Industry Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning (DoP, 2011)'.

The PHA will also assess dangerous goods to be stored and utilised at the site and identify and analyse key hazards, including in relation to electrical equipment, transformers and electromagnetic field (EMF). The PHA will also examine the potential effects of the Project on human health and provide an analysis if adverse health impacts are identified.

Batteries can be a serious safety risk for occupants and installers, potentially leading to electric shock, fire, flash burns, explosion or exposure to hazardous chemicals or gases. The installation of the BESS will be assessed as per the guidelines stated in **Appendix A.**

6.15.3 EIS Assessment Approach

A PHA 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.

The PHA will generally involve:

- A Multi-Level Risk Assessment as the basis to determine the level of risk assessment required being either:
  - Qualitative – no major off-site consequences and societal risk is negligible;
  - Partially Qualitative – Off-site consequences but with low frequency of occurrence;
  - Quantitative – where Qualitative and Partially Qualitative analyses are exceeded;
- A Risk Assessment Study Approach considering:
  - Hazard analysis which determined the potential for an incident to have an off-site impact;
  - Consequence analysis for incidents qualitatively identified in the hazard analysis to have a potential offsite impact;
  - Frequency analysis which identified the frequency of incidents which did not have a simple management solution;
  - Risk assessment and reduction which determined the risk of incidents identified in consequence and frequency analysis by comparing them to risk criteria in HIPAP No. 4 (Ref. [2]); and
  - Reporting on the outcomes of the PHA.

6.16 Hazard – Bushfire

6.16.1 Background

Bushfire presents a threat to human life and assets and can adversely impact ecological values. Bushfire risk can be considered in terms of environmental factors that increase the risk of fire (fuel quantity and type, topography and weather patterns), as well as specific activities (such as hot works and construction activities) or infrastructure components that exacerbate combustion or ignition risks (such as transmission lines and other electrical components).

FCNSW incorporate several initiatives to effectively manage and mitigate bushfire risk (see **Section 2.4.1.3**). FCNSW implements a Fire Management Plan which includes mechanisms that prompt the fast detection and response of bushfire, with a target response time of under 30 minutes. FCNSW also has a mutual relationship with the local community and supports the fire detection and putting out of fires both in the local community and the forest. FCNSW has extensive capability and expertise in the management of bushfire and bushfire risk and have numerous plans and processes in place to ensure effective bushfire management. Operational crews will also be trained as additional firefighting support for the local region.

6.16.2 Preliminary Assessment

A review of the NSW RFS Bushfire Prone Land mapping shows that the Project Area in relation to bushfire prone land as shown in **Figure 6-8**.

The Bushfire Prone Land map contains three categories to classify the risk of developing on the land (NSW Rural Fire Service, 2015):

- Vegetation Category 1 is the highest risk for bushfire. It is represented as red on the bush fire prone land map and an appropriate Asset Protection Zone (APZ) around all infrastructure will be identified in the EIS. This vegetation category has the highest combustibility and likelihood of forming fully developed fires including heavy ember production;

- Vegetation Category 2 is a lower bushfire risk than Category 1 and Category 3 but higher than the excluded areas. It is represented as light orange on a Bushfire Prone Land map. This vegetation category has lower combustibility and/or limited potential fire size due to the vegetation area shape and size, land geography and management practices; and
- Vegetation Category 3 is medium bushfire risk vegetation. It is higher in bushfire risk than category 2 (and the excluded areas) but lower than Category 1. It is represented as dark orange on a Bush Fire Prone Land map.

The Project Area is predominantly mapped as Vegetation Category 1 land (highest bushfire risk), with small parcels of Category 3 land (medium bushfire risk) within the upper eastern border. There is a small parcel of vegetation buffer and non-bushfire prone land located within the mid-eastern border of the Project Area. Land within 2 km of the Project Area is also predominantly mapped as Category 1 Land, with some Category 2 land occurring primarily to the east, and parcels of non-bushfire prone land and vegetation buffer to the south.

FCNSW manages Sunny Corner State Forest through the provision several policies, plans and codes of conduct to ensure all risks are identified and managed in a proactive manner. Several of these policies, plans and codes are applied to monitor and mitigate the potential for bushfire, and will be utilised for the Project, where relevant, including:

- 'Plantations and Reafforestation (Code) Regulation 2001' (DR 1.3.3), which include State regulations for bushfire hazard reduction;
- 'Forest Practices Code Part 1 April 2022' (DR 1.3.6), which applies to contractor licences relating to harvesting and haulage, and include conditions for fire prevention, identification of threat periods, inspection for bushfire, potential harvesting restrictions, safe operation of machinery, preventing sparks, limits for lighting fires and fired preparedness for bushfire categories I-III;
- 'Forest Management Plan July 2022 to June 2027' (DR 1.3.19), which include a focus around fire management and emergency response procedures; and
- 'Forest Practices – Miscellaneous Conditions July 2021' (DR 1.3.32), which applies to activities conducted within the forest by external parties, and conditions around includes fire operations, equipment, lighting, smoking, threats and hazard category and work restrictions.

The above and other relevant codes will be considered in the preparation of management plans and risk matrices for the Project, where applicable.

6.16.3 EIS Assessment Approach

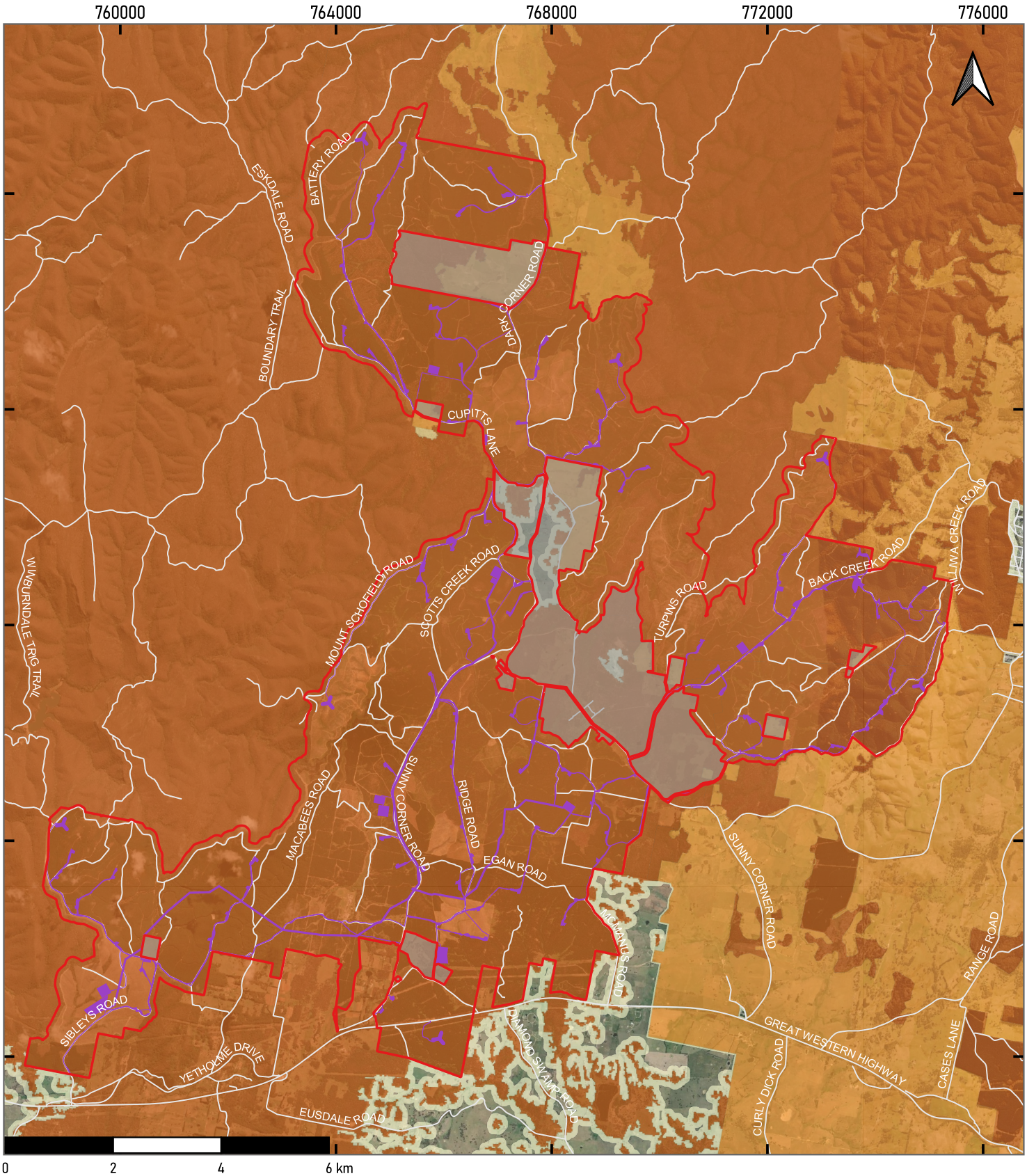
The EIS will include a Bushfire Risk Assessment and will aim to identify potential hazards and risks associated with bushfires / use of bushfire prone land.

The 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 Project and the community, as discussed in **Sections 6.16.1** and **6.16.2** above.

The assessment will aim to demonstrate that the Project can be designed, constructed and operated to minimise ignition risks and provide for asset protection consistent with the guidelines outlined in **Appendix A**.



Sunny Corner Wind Farm

Figure 6-8 Bushfire Prone Land

Date: 10/02/2025
CRS: GDA2020 / MGA zone 55
Scale: 1:97500
Basemap: ESRI Satellite (2024)
Data Sources: NSW Spatial Portal (2024)
Prepared By: EL Reviewed By: TS
Version: 3.0
This figure may contain third party information.
This figure is provided for information purposes only and may not be to scale.

Legend

Project Infrastructure
- Project Area
- Non -Project Area
- Preliminary Development Footprint

Existing Infrastructure
- Roads

Bushfire Prone Land
- Category 1 - High Risk
- Category 3 - Medium Risk
- Category 2 - Lower Risk
- Buffer Zone

6.17 Hazard – Blade Throw

Blade throw refers to an incident where structural failure results in either a whole blade, or parts of a blade detaching and being thrown into the surrounding area while the WTG is in operation. Detachment may occur where blades are damaged by lightning strike, storms or erosion and material fatigue.

It is also possible for structural failure to occur without resulting in a blade throw incident, such as if a blade or part of a blade detaches and falls to the ground close to the WTG while the rotor is not operating. In these cases, the danger risk to the surrounding area is low.

Modern WTGs and components supplied by major manufacturers are designed and certified to recognised standards to ensure structural integrity and safe operation over the lifetime of the WTG.

A Blade Throw Risk Assessment will be prepared as part of the EIS, which will describe the potential impacts associated with blade throw to nearby residential receptors during operation of the Project. The assessment will be undertaken having consideration of applicable international standards concerning the design of WTG components.

The Blade Throw Risk Assessment will likely include the following scope of works:

- Assessment of the likelihood of occurrence for a blade throw event;
- Assessment of theoretical distance radii for a blade throw event;
- Review of distances between turbines and nearby receivers;
- Review of historical blade throw occurrences in Australian wind farms; and
- Provision of relevant mitigation measures for Project implementation.

6.18 Hazard – Electromagnetic Field

6.18.1 Background

EMF is potentially associated with all electrical wiring and equipment. Electrical fields are caused by the voltage of the equipment, while magnetic fields are caused by the current flowing (amperage). Electric fields and magnetic fields are independent of one another and, in combination, cause energy to be transferred along electric wires.

6.18.2 Preliminary Assessment

The Project will involve the generation of EMFs during operation from the proposed transmission lines and substations. Over the past 50 years, concerns have been expressed that the EMFs associated with electrical equipment might have adverse health effects. There are well-known health effects where there are very high levels of EMFs and health standards have been established to protect against these effects.

However, the World Health Organisation (WHO) recognises that no adverse health effects from long-term exposure to Extremely Low Frequency (ELF) and EMF have been confirmed (WHO, 2020).

The EMF Assessment will be prepared in accordance with the ‘International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields’.

6.18.3 EIS Assessment Approach

An EMF assessment will be prepared as part of the PHA and will consider and document the potential impacts and risks to human health associated with the EMF generated by the WTGs and associated electrical infrastructure.

The assessment will consider the latest advice of the National Health and Medical Research Council, and identify potential hazards and risks associated with EMF and demonstrate the application of the principles of prudent avoidance in accordance with the guidelines listed in **Appendix A.**

6.19 Air Quality and Greenhouse Gas

6.19.1 Background

Land uses in the Project Area and surrounding areas are diverse and include forestry, industrial, farming, mining, power generation, residential, recreational and commercial services. Air quality in the region is generally expected to be of good quality and typical of what is expected in a forestry setting, due to factors including low population density and low traffic volumes. Regular forestry clearing and logging activities are undertaken regularly as described in **Section 2.4.1**.

Existing sources of air pollution are likely sourced from dust, vehicle, and machinery from agricultural production, and emissions generated by industrial production and mining. Background air quality and other meteorological matters are described at **Section 2.3.1.3**.

6.19.2 Preliminary Assessment

The Project is not expected to have significant impacts on air quality in the region.

Emissions to the atmosphere from the Project are anticipated to be predominantly associated with construction phase activities which will be temporary and limited to:

- Localised dust emissions generated by land disturbance; and
- Exhaust emissions of civil construction and vehicle, plant and machinery.

During the temporary construction phase, dust particles and other air quality emissions could potentially be released from activities including:

- Construction of new / upgraded access tracks and roads;
- Vegetation clearing and creation of open exposed areas;
- Excavation works and stockpile management;
- Mobile concrete batching plants and rock crushing;
- Transport of material and equipment;
- Processing and handling of material;
- Construction activities and associated earthmoving and construction equipment;
- Transfer points;
- Loading and unloading of material; and
- Haulage activities along unsealed roads.

During operations, the Project will generate electricity without directly emitting air pollutants that are known to affect the climate and human health.

The Project will contribute to the improvement of air quality through the displacement of emissions that would otherwise be generated through the burning of fossil fuels used to generate electricity from traditional coal fired power stations.

6.19.3 EIS Assessment Approach

The EIS will quantitatively consider the potential impacts to air quality and stipulate appropriate management and mitigation measures during the construction, operations and decommissioning phases of the Project.

Beneficial GHG savings as a result of the Project will also be described.

Air quality and dust management will generally be assessed in accordance with relevant guidelines and policies as outlined in **Appendix A.**

6.20 Waste Management

6.20.1 Background

The management of waste is primarily regulated under the *Protection of the Environment Operations Act 1997* (POEO Act), the *Protection of the Environment Operations (Waste) Regulation 2014* (Waste Regulation) and the *Waste Avoidance and Resource Recovery Act 2001* (WARR Act).

Unlawful transportation and deposition of waste is an offence under Section 143 of the POEO Act, and littering is an offence under Section 145 of the POEO Act.

The descriptions and classifications of different types of wastes in NSW are provided by POEO Act, the Waste Regulation, and supporting guidelines including the Waste Classification Guidelines (EPA, 2014).

6.20.2 Preliminary Assessment

Waste types generated by the Project are expected to be consistent with those 'pre-classified' under Schedule 1 of the POEO Act. Pre-classified waste types do not require further testing or classification and must be treated according to their classification. Pre-classified wastes include:

- General solid waste (non-putrescible) e.g., glass, plastic, rubber, building and demolition waste, concrete, metal, wood;
- Paper, cardboard and other domestic waste;
- General solid waste (putrescible) (e.g. food waste, organics and animal wastes);
- Hazardous wastes (e.g. contaminated soils);
- Liquid wastes (e.g. wastewater effluent and fuels and lubricants);
- Restricted solid wastes; and
- Special wastes (e.g. asbestos, waste tyres, clinical wastes).

6.20.3 EIS Assessment Approach

The EIS will identify, quantify and classify the likely waste streams to be generated during construction, operation and decommission phases of the Project.

The EIS will consider strategies to ensure resources are used effectively, waste generation is reduced and follow the general principals of manage, reuse, recycle and safe disposal.

Relevant management and mitigation will be identified as required.

Relevant guidelines to inform the assessment are outlined in **Appendix A**.

7 TERMINOLOGY

Term	Definition
KEY TERMINOLOGIES	
Project	A wind farm as described in **Section 3** to which this Application applies
Project Area	Red boundary shown on key figures to which the Application applies (unless otherwise stipulated)
Non-Project Area	Areas that are not part of the Project Area application
Applicant	MRP Someva ProjectCo Pty Ltd as trustee for the MRP Someva Project Trust 1 (Joint venture between Someva Pty Ltd and Mainstream Renewable Power Australia Pty Ltd)
Application	Application for Development Consent under Part 4.7 of the EP&A Act; and Determination under Part 9 of the EPBC Act
Development Corridor	Detailed study area within the Project Area within which the project will be largely constructed. This will be larger than the preliminary disturbance footprint to allow flexibility in placement of infrastructure during detailed design
FCNSW	Forestry Corporation of New South Wales, primary landholder within Project Area
Associated receiver	Habitable receiver which does have any agreement with the Project
Non-associated receiver	Habitable receiver which does not have an Agreement with the Project
Receiver	Approved, Habitable, private receiver from which Project impacts are assessed
Preliminary Disturbance Footprint	Preliminary area of Project-related disturbance determined for use in Scoping Report phase, which will be refined for the EIS
Sunny Corner Wind Farm	Project Name
OTHER TERMINOLOGIES	
°C	Degrees Celsius
ABN	Australian Business Number
ABS	Australian Bureau of Statistics
ACCU	Australian Carbon Credit Unit
ACHAR	Aboriginal Cultural Heritage Assessment Report
ACMA	Australian Communication and Media Authority
AD	Associated receiver
AEMO	Australian Energy Market Operator
AHD	Australian Height Datum
AHIMS	Aboriginal Heritage Information Management System
AIA	Aviation Impact Assessment
AL Act	*Aboriginal Land Rights Act 1983*
ALA	Aircraft Landing Areas
APZ	Asset Protection Zone
AQC	Air Quality Category
ASC	Australian Soil Classification
ASL	Above Sea Level
AWA	Australian Wind Alliance
Bathurst LEP	Bathurst Regional Local Environmental Plan 2014
BBUS	Bird and Bat Utilisation Surveys
BC Act	*Biodiversity Conservation Act 2016*
BESS	Battery and Energy Storage System

Term	Definition
BOM	Bureau of Meteorology
BSAL	Biophysical Strategic Agricultural Land
CASA	Civil Aviation Safety Authority
CBF	Community Benefit Funds
CH	Chromosols
CHMP	Cultural Heritage Management Plan
CIV	Capital Investment Value
CL Act	*Crown Land Management Act 2016*
Climate Change Act	*Climate Change Act 2022*
CMS Act	*Coal Mine Subsidence Compensation Act 2017*
Construction & Operations Permit	As issued where the Option for Permit is validly exercised
Conveyancing Act	*Conveyancing Act 1919*
COP	Conference of the Parties
CSP	Community Strategic Plan
Cwlth	Commonwealth
DA	Development Application
DCCEEW (State)	Department of Climate Change, Energy, the Environment and Water
DCCEEW (Cwth)	Department of Climate Change, Energy, the Environment and Water
DCP	Development Control Plans
DP	Deposited plan
EIS	Environmental Impact Statement
ELF	Extremely Low Frequency
EMF	Electromagnetic Field
EMI	Electromagnetic Interference
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EPL	Environment Protection Licence
ESD	Ecologically Sustainable Development
FM Act	*Fisheries Management Act 1994*
Forestry Act	*Forestry Act 2012 (NSW)*
Forestry Plans	All plans relating to FCNSW operation of State Forest and Plantation Activities
Forestry Regulations	*Forestry Regulation 2022 (NSW)*
FTE	Full Time Equivalent
GDE	Groundwater dependent ecosystem
GWh	Giga Watt Hour
Ha	Hectares
Hazards SEPP	State Environmental Planning Policy (Resilience and Hazards) 2021
Heritage Act	*Heritage Act 1977*
Integration Permit	As issued with the Development Agreement and Option for Permit
kV	Kilovolt
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
LGCs	Large-scale generation certificates

Term	Definition
LiDAR	Light Detection and Ranging
Lithgow LEP	Lithgow Local Environment Plan 2014
LLS Act	*Local Land Services Act 2013*
LRET	Large-scale Renewable Energy Target
LSC	Land and Soil Capability
LSPS	Local Strategic Planning Statements
MLA	Moir Landscape Architecture Pty Ltd
MNES	Matters of National Environmental Significance
MP	Member of Parliament
Mtpa	Metric tonnes per annum
MW	Megawatt
NAD	Non-associated receiver
NEM	National Energy Market
Net Zero Plan	Net Zero Plan Stage 1: 2020-2030
NIA	Noise Impact Assessment
NPW Act	*National Parks and Wildlife Act 1974*
NSW RFS	NSW Rural Fire Service
NSW Strategy	NSW Electricity Strategy
NSWTA	NSW Telco Authority
NT Act	*Native Title Act 1993*
O&M	Operations and Maintenance
OSOM	Oversize and Overmass
PBDAR	Preliminary Biodiversity Development Assessment Report
Planning Systems SEPP	State Environmental Planning Policy (Planning Systems) 2021
PLVIA	Preliminary Landscape and Visual Impact Assessment
PM	Particulate Matter
POEO Act	*Protection of the Environment Operations Act 1997*
QLD	Queensland
RAAF	Royal Australian Air Force
RAPs	Registered Aboriginal Parties
Renewable Energy Project Agreements	Agreements which provide for the issue of permits to undertake the construction and operation of renewable energy infrastructure under Section 60(1)(b) of the Forestry Act
Renewable Energy Projects	Projects for the construction and operation of renewable energy infrastructure Forestry Corporation intends to facilitate, or facilitates under Sections 59 and 60 of the Forestry Act
RET	Renewable Energy Target
REZ	Renewable Energy Zone
RF Act	*Rural Fires Act 1997*
RIS	Renewable Integration Study
Roadmap	NSW Electricity Roadmap
Roads Act	*Roads Act 1993*
RPS	RPS Group AAP Consulting Pty Ltd
RU	Rudosols
SA	South Australia
SDGs	Sustainable Development Goals

Term	Definition
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SES	State Emergency Service
SGRE	Siemens Gamesa Renewable Energy
SHR	State Heritage Register
SIA	Social Impact Assessment
SSD	State Significant Development
TAFE	Technical and Further Education
TAS	Tasmania
TEC	Threatened Ecological Communities
TISEPP	State and Environmental Planning Policy (Transport and Infrastructure) 2021
Transmission Strategy	NSW Transmission Infrastructure Strategy
TSR	Travelling Stock Reserves
TTIA	Traffic and Transport Impact Assessment
UN	United Nations
VE	Vertosols
VPA	Voluntary Planning Agreement
VRE	Variable Renewable Energy
Weather Monitoring Permit	As issued on the terms set out in Schedule 23 of the Development Agreement and Option for Permit
WHO	World Health Organization
WM Act	*Water Management Act 2000*
WP	Wind Pioneers
WTGs	Wind Turbine Generators
ZVI	Zone of Visual Influence

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Appendix A
Scoping Summary Table

Level of Assessment	Aspect	Scale of Impact	Nature of Impact	Cumulative Impact	Engagement*	Relevant Government Plans, Policies and Guidelines	Section
Detailed Technical	Visual and Lighting	Moderate - High	Direct Cumulative Perceived	Yes	Specific	• 'NSW Wind Energy: Visual Assessment Bulletin' (DPE, 2016c) • 'Wind Energy Guideline – Technical Supplement for Landscape Character and Visual Impact Assessment' (DPHI, 2024)	**6.2**
Detailed Technical	Noise and Vibration	Moderate - High	Direct Cumulative Perceived	Yes	Specific	• 'NSW Wind Energy: Noise Assessment Bulletin' (DPE, 2016b) • 'NSW Noise Policy for Industry' (EPA, 2017) • 'Draft Construction Noise Guideline' (NSW EPA, 2020) • 'NSW Road Noise Policy' (DECCW, 2011) • 'Assessing Vibration: A Technical Guideline' (DECC, 2006) • 'Wind Energy Guideline – Technical Supplement for Noise Assessment'	**6.3**
Detailed Technical	Biodiversity	Moderate-Low	Direct Indirect Cumulative	Yes	Specific	• 'Biodiversity Assessment Method (BAM)' (DPIE, 2020b) • 'Commonwealth EPBC 1.1 Significant Impact Guidelines – Matters of National Environmental Significance' (Commonwealth of Australia, 2013a) • 'Commonwealth Department of the Environment – Survey Guidelines for Nationally Threatened Species' (DCCEEW, various) • 'Policy and Guidelines for Fish Habitat Conservation and Management' (DPI, 2013) • 'Guidelines for Fish Friendly Water Crossings' (DPI, unknown)	**6.4**
Detailed Technical	Aboriginal Heritage	Moderate	Direct Indirect Cumulative Perceived	Yes	Specific	• 'Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW' (OEH, 2011) • 'Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW' (DECCW, 2010a) • 'Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010' (DECCW, 2010b)	**6.5**
Standard Technical	Historic Heritage	Low	Direct Indirect	No	General	• 'Commonwealth EPBC 1.1 Significant Impact Guidelines – Matters of National Environmental Significance' (Commonwealth of Australia, 2013a) • 'Commonwealth EPBC 1.2 Significant Impact Guidelines – Actions on, or Impacting upon, Commonwealth Land and Actions	**6.6**

Level of Assessment	Aspect	Scale of Impact	Nature of Impact	Cumulative Impact	Engagement*	Relevant Government Plans, Policies and Guidelines	Section
						by Commonwealth Agencies' (Commonwealth of Australia, 2013b) • 'NSW Skeletal Remains: Guidelines for Management of Human Remains' (Heritage Office, 1998) • 'Criteria for the Assessment of Excavation Directors' (NSW Heritage Council, 2019) • 'Assessing heritage significance – a NSW Heritage Manual update' (NSW Heritage Manual – Assessing Heritage Significance' (DPE, 2023) • 'Historical Archaeology Code of Practice' (Heritage Council, 2006)	
Detailed Technical	Traffic and Transport	Moderate	Direct Indirect Cumulative	Yes	Specific	• 'Guide to Traffic Generating Developments' (RTA, 2002) • 'Guide to Traffic Management' (Austroads, 2020) • 'Guide to Road Design' (Austroads, 2021)	**6.7**
Detailed Technical	Aviation	Moderate	Direct	No	Specific	• 'National Airports Safeguarding Framework Guideline D: Managing Wind Turbine Risk to Aircraft' (DITRDCA, 2019)	**6.8**
Detailed Technical	Telecommunications	Moderate	Direct	No	Specific	• 'NSW Wind Energy Guideline for State Significant Wind Development' (DPIE, 2016) • 'Best Practice Charter for Renewable Energy Projects' (Clean Energy Council, 2021)	**6.9**
Standard Technical	Water Resources (flooding and hydrology)	Low	Direct Indirect	No	General	• 'Managing Urban Stormwater; Soils & Construction' (Landcom, 2004) • 'Controlled Activities on Waterfront Land - Guidelines for riparian corridors on waterfront land' (DPE, 2022) • 'Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings' (DPI 2003) • 'Policy & Guidelines for Fish Habitat Conservation & Management' (DPI, 2013) • 'Relevant Water Sharing Plans' (DPI , various) • 'Guidelines for Watercourse Crossings on Waterfront Land' (DPE, 2022)	**6.10**

Level of Assessment	Aspect	Scale of Impact	Nature of Impact	Cumulative Impact	Engagement*	Relevant Government Plans, Policies and Guidelines	Section
						• 'Floodplain Risk Management Guidelines' (State of NSW and OEH, 2019) • 'Floodplain Development Manual: The management of flood liable land' (DPE, 2023)	
Detailed Technical	Agriculture and Land Resources	Low	Direct Indirect	No	General	• 'Soil and Landscape Issues in Environmental Impact Assessment' (OEH, 2000) • 'Land Use Conflict Risk Assessment Guide' (DPI, 2011) • 'Large Scale Solar Energy Guideline' (DPE, 2022) • 'Landslide Risk Management Guidelines' (AGS, undated) • 'Site Investigations for Urban Salinity' (OEH, 2002) • 'Guidelines for surveying Soil and Land Resources' (NJ McKenzie, 2008) • 'The Australian Soil Classification' (Isbell N. C., 2016) • 'Australian Soil and Land Survey Field Handbook' (NCST, 2009) • 'The land and soil capability assessment scheme' (Office of Environment and Heritage, 2012) • 'Interpreting Soil Test Results – What do all the numbers mean?' (Hazelton, 2007) • 'Managing Urban Stormwater: Soils and Construction' (Landcom, 2004)	**6.11**
Standard Technical	Economic	Moderate	Direct Indirect Cumulative	Yes	General	None	**6.12**
Standard Technical	Social	Moderate	Direct Indirect Cumulative Perceived	Yes	Specific	• 'Social Impact Assessment Guideline for State Significant Projects' (DPIE, 2023a) • 'Technical Supplement' (DPIE, 2023b) • 'Undertaking Engagement Guidelines for State Significant Projects' (DPHI, 2024)	**6.14**
Standard Technical	Hazards and Risks – Preliminary Hazard Assessment	Moderate	Direct Indirect Perceived	No	Specific	None	**6.15**

Level of Assessment	Aspect	Scale of Impact	Nature of Impact	Cumulative Impact	Engagement*	Relevant Government Plans, Policies and Guidelines	Section
Standard Technical	Hazards and Risks – Bushfire	Moderate	Direct Indirect	No	Specific	• 'Planning for Bushfire Protection' (RFS, 2019)	**6.16**
Standard	Hazards and Risks – Blade Throw	Low	Direct	No	General	• Relevant international studies and standards for design of wind turbine components and blade throw	**6.17**
Standard	Hazards and Risks – Electromagnetic Field	Low	Direct Perceived	No	General	• 'Guidelines - for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields' (ICNIRP, 1998)	**6.18**
Standard	Air Quality and Greenhouse Gases	Low	Direct Indirect	No	General	• 'National Greenhouse Accounts Factors' (Australian Government, 2023) • 'NSW Climate Change Policy Framework' (OEH, 2016) • 'Approved Methods and Guidelines for the Modelling and Assessment of Air Pollutants in New South Wales' (NSW EPA, 2022)	**6.19**
Standard	Waste Management	Low	Direct Indirect	No	General	• 'Waste Classification Guidelines – Part 1: classifying waste' (NSW EPA, 2014) and Addendum (NSW EPA, 2016) • 'Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities' (NSW EPA, 2012)	**6.20**

Appendix B
Scoping Report Guidelines and Where Addressed

Requirement	Section
Structure and length	
Main report: Introduction, Strategic context, Project, Statutory context, Engagement, Proposed assessment of impacts, References Appendices: A: Scoping summary table, and B: Supporting information, including any detailed engagement or technical reports	**Whole report**
General map and GIS data specifications	
Maintain appropriate geo-referenced file formats of maps	**Whole report**
The applicant must supply the relevant GIS data to the Department as polygon datasets in one of the following file formats: shapefile, file geodatabase or MapInfo TAB	**Whole report**
Use the following coordinate system details: Datum: GDA 1994, Projection: GCS GDA 1994	**Whole report**
Maps must build on a standard base-map for the project and include: north arrow, a scale (or where a cross section is not to scale, an indication of the elevation of key features and vertical exaggeration), a legend, the source data.	**Whole report**
Accessibility and navigation	
Use plain English to explain complex information and avoid using jargon.	**Whole report**
Conform with the Web Content Accessibility Guidelines (WCAG) 2.0 Level AA and material relevant to creating accessible documents:	**Whole report**
• be provided as accessible PDF files (commonly referred to as “tagged” PDF files) • have a navigable table of contents • present information in a linear and easy to follow format • use headings (in Microsoft Word this means using heading styles, e.g. Heading 1, Heading 2, Normal) • use captions for tables, pictures and figures • include a header row in any tables • provide alternate text descriptions for all images preferably under 100 characters, except for images that are decorative • use text to convey information rather than, or in addition to, images where possible • use a contrast ratio of 3:1 for large text (18+ points or 14+ points bold) and at least 4.5:1 for text and images of text • not rely on colour to convey information and instead use text labels, patterns and symbols to supplement colour • use hyperlinks to assist with navigation through the document	**Whole report**
1. Introduction	
Include the applicant’s details, including ABN and address.	**1.2**
Include a statement of the project objectives, site information including address and lot details, how the site was selected, and a map of the site in its regional setting.	**1.4** **2.7** **Figure 1-1**

Requirement	Section
Include the background to the project, including: any relevant history, key strategies that will be adopted to avoid, minimise or offset the impacts of the project to the extent known at the scoping stage.	**1.5**
Include a description of any related development, including any: • existing or approved development (including any existing use rights or continuing use rights) • development that is required for the project but would be subject to a separate assessment (e.g. upgrades to ancillary infrastructure, approvals for subsequent stages of the project).	**2.6**
2. Strategic context	
Identify at a high level the key strategic issues that are likely to be relevant to the project and will be investigated in more detail in the EIS	**2**
Level of detail should be proportionate to the importance of the strategic context to the project and tailored towards informing the setting of the SEARs	**2**
Key strategic issues may include: the justification of the project, relevant plans that establish a regional or local land use planning context for the project, key features of the site or surrounds that could affect or be affected, whether the project is likely to generate cumulative impacts with other relevant future projects in the area, and identifying whether the applicant has entered into any agreements with other parties to mitigate or offset the impacts of the project	**2.1** **2.2** **2.3** **2.6**
3. Project	
Overview of the project including: • the project area, including the area likely to be physically disturbed by the project • the conceptual physical layout and design of the project • the main uses and activities that would be carried out on site as well as the materials and products that would be transported to and from the site • the likely timing of the delivery of the project, including staging, phases (e.g. construction, operations, decommissioning) or sequencing of staging	**3**
Identify aspects of the projects where some flexibility may need to be incorporated into the design to allow the final design to be refined or changed over time without further approval	**3**
Identify any restrictions or covenants that apply to the land.	**2.4**
Include a high-level analysis of feasible alternatives considered and rejected, including the consequences of not carrying out the development.	**3.6**
4. Statutory context	
This section should provide an overview of the key statutory requirements for the project, having regard to: • the EP&A Act and EP&A Regulation • other relevant legislation • relevant environmental planning instruments • relevant approvals (e.g. concept plan approvals, staged DA consents)	**4.1** **4.2** **4.3** **4.4**

Requirement	Section
The statutory requirements should be summarised in a table under the following headings: Power to grant consent, Permissibility, Other approvals, Pre-conditions to exercising the power to grant consent, and Mandatory matters for consideration	**4.1** **4.2** **4.3** **4.4**
5. Community Engagement	
Identify what engagement has already been carried out that is relevant to setting the SEARs, this may include: • community engagement that has been carried out by other parties that is relevant to the project • any actions taken by the applicant to identify and engage with key groups or individuals within the community that may have an interest in the project • any actions taken by the applicant to inform, consult or engage with the community during the development of the project or preparation of the scoping report • Engagement should also be undertaken having regard to the community participation objectives in the Department's Undertaking Engagement Guidelines for State Significant Projects	**5.4**
Summarise the key findings of any community engagement carried out and give an early indication of community views on the project using suitable maps, graphics and tables	**5.5**
Identify the likely level of community interest in the project and the geographic extent of this interest (e.g. local: < 5 km from the site; regional: 5-100 km from the site or state: > 100 km from the site)	**5.5**
Group the community views on the project into one of the following categories: • Strategic context (e.g. key natural/built features that could be impacted, and the potential cumulative impacts) • Alternatives that may be considered • Statutory issues • Community engagement during the preparation of the EIS • Key matters to be assessed during the EIS • Issues beyond the scope of the project or not relevant	**5.5**
Summarise the community engagement that will be carried out during the preparation of the EIS, having regard to the findings of any community engagement carried out during scoping and the community participation objectives in the Department's Undertaking Engagement Guidelines for State Significant Projects including: • identify the key stakeholders (councils, government agencies, special interest groups, people living close to the site) for further engagement, to the extent that this will be known at the scoping stage • describe what actions will be taken to identify and engage with other interested stakeholders during the preparation of the EIS • describe the key actions that will be carried out to: • keep the community informed about the project • obtain feedback from the community on the project • engage with certain stakeholders on the detailed assessment of key matters	**5.6**

Requirement	Section
• demonstrate that these actions are consistent with the community participation objectives in the Undertaking Engagement Guidelines for State Significant Projects • describe how the effectiveness of this engagement will be monitored, reviewed and adapted over time to encourage community participation in the project	
6. Proposed assessment of impacts	
Matters that should be considered by the project: access (e.g. traffic and transport), air quality, amenity (e.g. noise, visual), biodiversity, built environment, economic, hazards and risk (e.g. bushfire, flooding, waste), heritage (Aboriginal and non-Aboriginal), land, social, water. These specific matters can be divided further into different components of the specific matter, where relevant.	**6**
Key factors that should be considered for each matter: • the scale and nature of the likely impacts of the project and the sensitivity of the receiving environment • whether the project is likely to generate cumulative impacts with other relevant future projects in the area • the ability to avoid, minimise and/or offset the impacts of the project, to the extent known at the scoping stage • the complexity of the technical assessment of the project • It is important to note that the applicant is not required to carry out a detailed assessment of each factor and document this assessment in the scoping report. This should be done in the detailed assessment of the project in the EIS.	**6**
Appendix A	
Include a scoping summary table which groups the matters requiring further assessment in the EIS by the level of assessment required, and identify: • whether any cumulative impact assessment is required, and the likely level of this assessment (e.g. standard or detailed) • whether any specific community engagement will be carried out on the matter during the preparation of the EIS • the relevant government plans, policies and guidelines that will be considered during the assessment of the impacts of the project on the matter • the relevant section of the scoping report where the assessment of the impacts on the matter are discussed in more detail.	**Appendix A**
Document the matters requiring no further assessment in the EIS in a table in the scoping report. This table should identify each matter and explain why no further assessment is necessary.	**Appendix A**

Appendix C
Schedule of Lands

Title	Owner
68/755774	NSW Government
102/755767	NSW Government
16/243649	NSW Government
99/755805	Crown
98/755805	NSW Government
244/755764	NSW Government
201/755764	NSW Government
216/755805	NSW Government
227/755764	NSW Government
10/755764	NSW Government
9/755764	NSW Government
31/755764	NSW Government
39/755764	NSW Government
226/755764	NSW Government
146/755764	NSW Government
95/755774	NSW Government
13/755764	NSW Government
14/755764	NSW Government
49/755764	NSW Government
249/755764	NSW Government
15/755764	NSW Government
6/755764	NSW Government
12/755764	NSW Government
210/755764	NSW Government
72/755764	NSW Government
217/755764	NSW Government
17/755764	NSW Government
247/755764	NSW Government
12/243649	NSW Government
14/243649	NSW Government
13/243649	NSW Government
15/243649	NSW Government
7/755764	NSW Government
92/755805	NSW Government
68/755764	NSW Government
199/755764	NSW Government
147/755764	NSW Government
148/755764	NSW Government
56/755764	NSW Government

Title	Owner
162/755764	NSW Government
137/755764	NSW Government
40/755764	NSW Government
132/755764	NSW Government
36/755764	NSW Government
159/755764	NSW Government
143/755764	NSW Government
149/755764	NSW Government
118/755764	NSW Government
122/755764	NSW Government
173/755764	NSW Government
165/755764	NSW Government
46/755764	NSW Government
166/755764	NSW Government
164/755764	NSW Government
190/755764	NSW Government
179/755764	NSW Government
182/755764	NSW Government
181/755764	NSW Government
34/755764	NSW Government
35/755764	NSW Government
121/755764	NSW Government
131/755764	NSW Government
124/755764	NSW Government
130/755764	NSW Government
125/755764	NSW Government
260/728636	NSW Government
113/755774	NSW Government
145/755764	NSW Government
144/755764	NSW Government
150/755764	NSW Government
251/755764	NSW Government
174/755764	NSW Government
238/755764	NSW Government
151/755764	NSW Government
139/755764	NSW Government
134/755764	NSW Government
136/755764	NSW Government
135/755764	NSW Government

Title	Owner
161/755764	NSW Government
157/755764	NSW Government
133/755764	NSW Government
158/755764	NSW Government
183/755764	NSW Government
160/755764	NSW Government
44/755764	NSW Government
126/755764	NSW Government
123/755764	NSW Government
128/755764	NSW Government
127/755764	NSW Government
129/755764	NSW Government
117/755764	NSW Government
116/755764	NSW Government
119/755764	NSW Government
163/755764	NSW Government
168/755764	NSW Government
191/755764	NSW Government
177/755764	NSW Government
178/755764	NSW Government
176/755764	NSW Government
180/755764	NSW Government
189/755764	NSW Government
231/755764	NSW Government
11/755764	NSW Government
192/755764	NSW Government
120/755764	NSW Government
1/533699	NSW Government
66/755764	NSW Government
194/755764	Crown
75/755764	Crown
30/755767	NSW Government
50/755764	Crown
56/755795	NSW Government
10/755767	NSW Government
42/755767	NSW Government
36/755767	NSW Government
68/755767	NSW Government
13/755767	NSW Government

Title	Owner
40/755767	NSW Government
28/755767	NSW Government
48/755767	Crown
14/755767	Crown
37/755767	NSW Government
22/755767	Crown
45/755767	NSW Government
21/755767	NSW Government
46/755767	NSW Government
1/590792	Crown
234/755764	NSW Government
58/755764	Crown
57/755764	NSW Government
214/755764	NSW Government
45/755764	NSW Government
101/755767	NSW Government
193/755764	NSW Government
2/872162	Crown
12/873545	Crown
7003/1025845	Crown
7007/1031145	Crown
203/755764	NSW Government
216/755764	NSW Government
13/878486	NSW Government
39/755795	NSW Government
52/755795	NSW Government
55/755795	NSW Government
57/755795	Crown
1/755764	NSW Government
107/755764	NSW Government
138/755764	NSW Government
140/755764	NSW Government
141/755764	NSW Government
142/755764	NSW Government
152/755764	NSW Government
153/755764	NSW Government
154/755764	NSW Government
155/755764	NSW Government
156/755764	NSW Government

Title	Owner
196/755764	NSW Government
232/755764	NSW Government
233/755764	NSW Government
235/755764	NSW Government
239/755764	Crown
240/755764	NSW Government
245/755764	NSW Government
30/755764	NSW Government
32/755764	NSW Government
38/755764	NSW Government
5/755764	NSW Government
51/755764	NSW Government
63/755764	NSW Government
8/755764	NSW Government
1/755767	Crown
119/755767	NSW Government
32/755767	NSW Government
39/755767	NSW Government
41/755767	NSW Government
64/755767	NSW Government
66/755767	NSW Government
84/755767	NSW Government
94/755767	NSW Government
98/755767	NSW Government
100/755805	NSW Government
220/755805	NSW Government
38/755805	Crown
79/755805	Crown
153/755774	NSW Government
94/755774	Crown
2/501004	NSW Government
46/755772	NSW Government
7301/1134865	Crown
197/755764	NSW Government
2/755764	NSW Government
1/1198727	Crown
370/1207247	NSW Government
10/1207255	NSW Government
8086/1206111	NSW Government

Title	Owner
8082/1206111	NSW Government
8087/1206111	NSW Government
8085/1206111	NSW Government
8083/1206111	NSW Government
8079/1206111	NSW Government
8078/1206111	NSW Government
8076/1206111	NSW Government
8077/1206111	NSW Government
8075/1206111	NSW Government
8065/1205868	NSW Government
8063/1205868	NSW Government
8074/1205868	NSW Government
8064/1205868	NSW Government
8067/1205868	NSW Government
8066/1205868	NSW Government
8070/1205868	NSW Government
8071/1205868	NSW Government
8062/1205868	NSW Government
8073/1205868	NSW Government
1139/1207308	NSW Government
31/1207313	NSW Government
105/755774	NSW Government
1070/1207402	NSW Government
8084/1206111	NSW Government

Appendix D
Preliminary Landscape and Visual Impact Assessment

moir STUDIO

Sunny Corner Wind Farm

Visual Scoping Report

We at Moir Studio acknowledge the traditional custodians of the lands and waters of Australia - most notably the Awabakal Nation in which our office resides and the Wiradjuri, on whose traditional land this Project resides. As a practice, we recognise First Nations' ongoing contribution to Country and deep spiritual connection to Place. We pay our respects to Elders both past and present.

Sunny Corner Wind Farm

Visual Scoping Report

Prepared for
Someva

Project Number
2520

Revision	Date	Author	Checked	Comment
A	26/11/2024	TS	AR	Draft for review
B	29/11/2024	TS	AR	Draft for review
C	10/12/2024	TS	AR	Draft for Review
C	17/12/2024	TS	AR	Final
C	18/12/2024	TS	AR	Final
D	15/01/2024	TS	AR	Final

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1.0 Overview

1.1 Overview

Moir Studio was engaged by MRP Someva Project Co Pty Ltd as trustee for the MRP Someva Project Trust 1 (Joint venture between Someva Pty Ltd and Mainstream Renewable Power Australia Pty Ltd) (the Applicant) to conduct a Visual Scoping Report (VSR) to support the Scoping Report for the Sunny Corner Wind Farm (Project).

The Project includes the construction, operation and decommissioning of up to a 600 MW wind farm and associated infrastructure largely within the Sunny Corner State Forest in NSW. The Forestry Corporation of NSW have awarded the Applicant an investigation permit to develop the project in Sunny Corner State Forest, which is located north of the Great Western Highway, between Bathurst and Lithgow in NSW.

The Project will supply electricity to the national electricity grid, largely via the existing electricity transmission network and if approved, would power approximately 300,000 homes annually.

The Scoping Report applies to the preliminary Project Area as shown in **Figure 01** within both the Bathurst Regional Council and Lithgow City Council Local Government Areas (LGAs). The land within the Project Area is predominantly zoned RU1 Primary Production and RU3 Forestry.

The Project Area both historically and currently operates as a softwood timber pine plantation on NSW Forestry Corporation owned land which also supports a range of recreational uses. It is within a highly industrialised area in proximity to Mt Piper Power Station, and coal mining activities.

The Scoping Report supports a State Significant Development (SSD) Development Consent application under Part 4, Division 4.7 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and applies to the Project Area.

The VSA for the Project has been prepared in accordance with the Department of Planning Housing and Infrastructure's *Wind Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment,* November 2024, (referred to hereafter as 'the Guideline') to identify Project constraints and high level risks prior to undertaking the Landscape Character and Visual Impact Assessment (LCVIA) reporting. This VSA will support the Scoping Report seeking the Secretary's Environmental Assessment Requirements (SEARs).

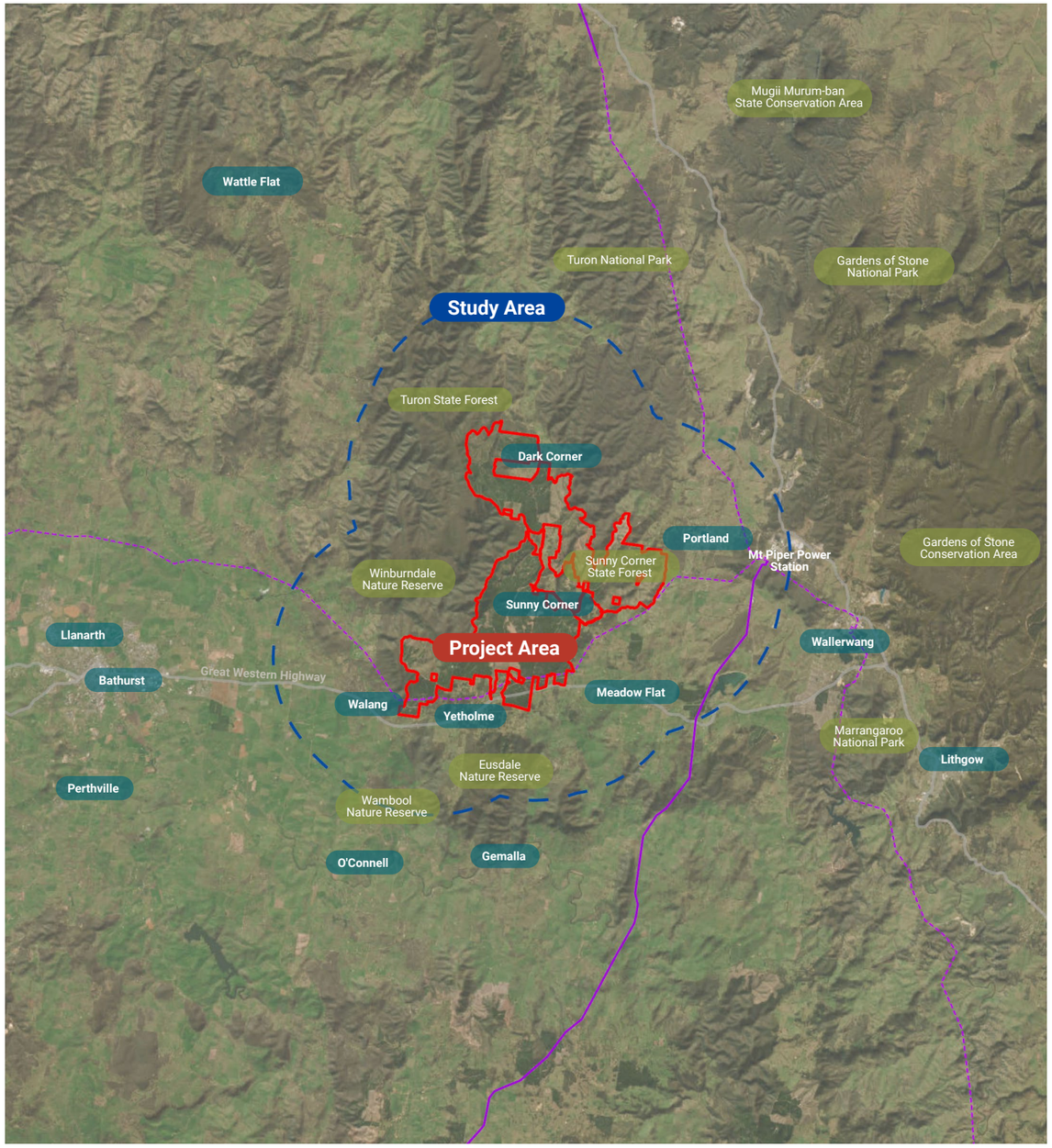


Figure 01 Regional Context
Basemap Source: ESRI 2024

1.2 Project Description

The Project will involve the construction, operation and decommissioning of a wind farm, Battery Energy Storage System (BESS), electrical infrastructure, other infrastructure and ancillary activities generally including the following components:

- Up to 80 Wind Turbine Generators (WTGs) each with a rating of approximately **8MW**, and a tip height of up to **285 m** and hub height of up to **185 m**;
- Electrical reticulation network:
  - One switching station;
  - Up to four substations and additional switch room and reactive plant;
  - On-site connection to existing 330 kV transmission line to the south of the Project Area (or other option to be confirmed in the EIS);
  - Internal electrical reticulation (both underground and overhead);
  - Approximately 500 MW / 2000 MWh (4 hours) Battery Energy Storage (BESS);
- Other temporary and permanent infrastructure including:
  - Operations and Maintenance (O&M) facility and infrastructure including site office, storage facilities, car parking and fencing;
  - Concrete batching plant and laydown areas for construction of the Project;
  - Transmission infrastructure;
  - Water tank;
  - Internal access tracks;
  - Up to seven meteorological masts;
  - Construction and operational compounds;
  - Hardstands for WTGs and other infrastructure;
  - Internal access tracks and road turning head connecting Project infrastructure.
- Access road use and Project-required upgrades associated with:
  - Project Area access: approximately five access points;
  - Wind farm components access: Port of Newcastle (or other option to be confirmed in the EIS);
- Operational workforce of up to 35 Full Time Equivalent (FTE) and construction up to 475 FTE;
- Construction generally within standard hours and operations 24 hours per day 7 days per week; and
- Preliminary Project Area of up to 10,434 ha and a Preliminary Disturbance Footprint of up to 496 ha.

1.3 Terminology

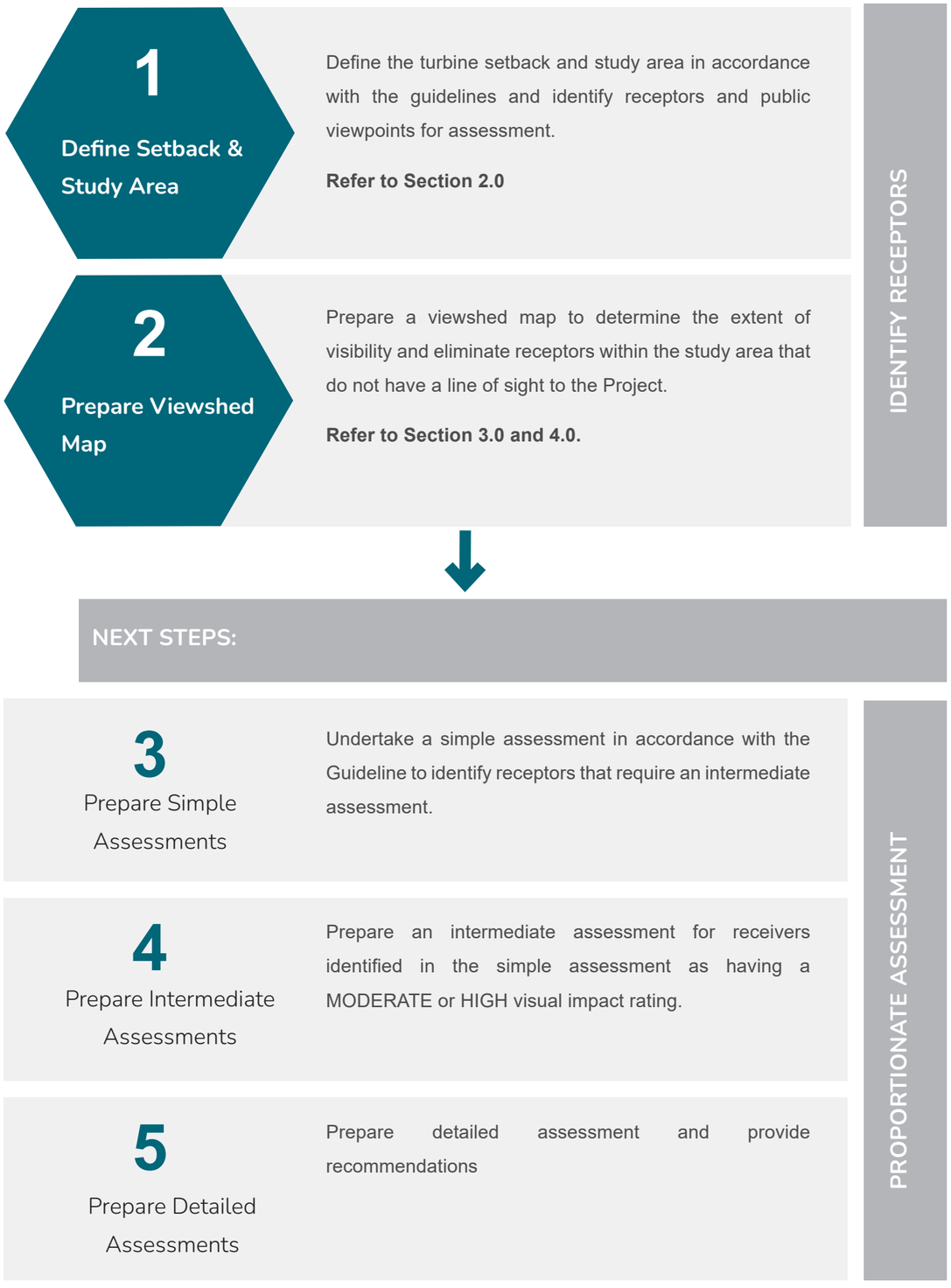
Term	Definition
Project	A wind farm as described in Section 1.2 to which this Application applies
Project Area	Red boundary shown on key figures to which the Application applies (unless otherwise stipulated)
Applicant	MRP Someva ProjectCo Pty Ltd as trustee for the MRP Someva Project Trust 1 (Joint venture between Someva Pty Ltd and Mainstream Renewable Power Australia Pty Ltd)
Application	Application for Development Consent under Part 4.7 of the EP&A Act; and Determination under Part 9 of the EPBC Act
Development Corridor	Detailed study area within the Project Area within which the project will be largely constructed. This will be larger than the preliminary disturbance footprint to allow flexibility in placement of infrastructure during detailed design
FCNSW	Forestry Corporation of New South Wales, primary landholder within Project Area
Associated receiver	Habitable receiver which does have any agreement with the Project
Non-associated receiver	Habitable receiver which does not have an Agreement with the Project
Non-associated receiver (associated other Project)	Habitable receiver which does not have an Agreement with the Project, however does have an Agreement with another Project
Receiver	Approved, Habitable, private receiver from which Project impacts are assessed
Preliminary Disturbance Footprint	Preliminary area of Project-related disturbance determined for use in Scoping Report phase, which will be refined for the EIS
Sunny Corner Wind Farm	Project Name
Study Area	Buffer from WTGs equivalent to 2° of a person's vertical field of view
Turbine Setback	Buffer from WTGs equivalent to 9° of a person's vertical field of view
Viewpoint	A location within a private or public domain with a potential view of a wind energy project
Viewshed Mapping	Theoretical visibility based on topography alone

1.4 Overview of Study Method

The first step of the assessment is to identify receptors that will require consideration in the assessment process. This process involves defining study areas through distance thresholds and application of viewshed mapping.

Once the receptors have been identified, further refinement is undertaken through proportionate assessment process to ensure the assessments are focused on the receivers with potential impacts.

An overview of the structure is shown adjacent.



2.0 Setback and Study Area

2.1 Overview

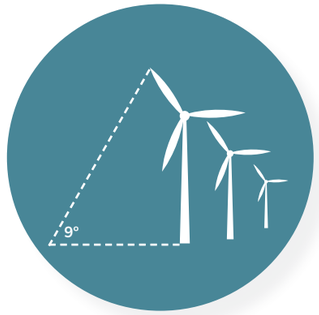
In accordance with the Guideline, the Applicant is to identify the Turbine Setback and Study Area for the Project relative to the maximum turbine height (tip height). For this Project, the maximum proposed turbine height (at tip height) is **285m**.

2.2 Turbine Setback

The Turbine Setback is equivalent to 9° of a person's vertical field of view. As outlined in the Guideline: If a sensitive receiver is located within the setback distance it will trigger a high visual impact unless the turbine(s) would be largely screened by topography or vegetation (as outlined in setback exemptions).

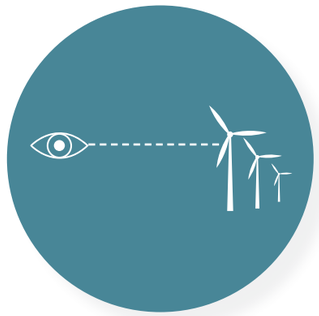
- The Turbine Setback for the Project is **1,800m** (based on 9°vertical field of view)
- **161** non-associated receivers were identified within the Turbine Setback.

Refer to Figure 02.



Turbine Setback =
1,800m

$$X = 285m \times \frac{\sin(81°)}{\sin(9°)}$$



Study Area =
8,160m Private Receivers & Public Viewpoints

$$X = 285m \times \frac{\sin(88°)}{\sin(2°)}$$

2.3 Study Area

Since the magnitude of wind turbines decreases over distance, there is a point at which they become inconsequential to the overall visual impact and become difficult to discern against the background. Consequently, any turbine that would be less than 2° in vertical field of view should not be counted when calculating magnitude.

As per the Guidelines, the Study Area for this Project based off the maximum turbine height is:

- **8,160m** for Private Receivers and Other Public Viewpoints (based on 2°vertical field of view)
- **1,723** non-associated receivers were identified within the Study Area

Refer to Figure 03.

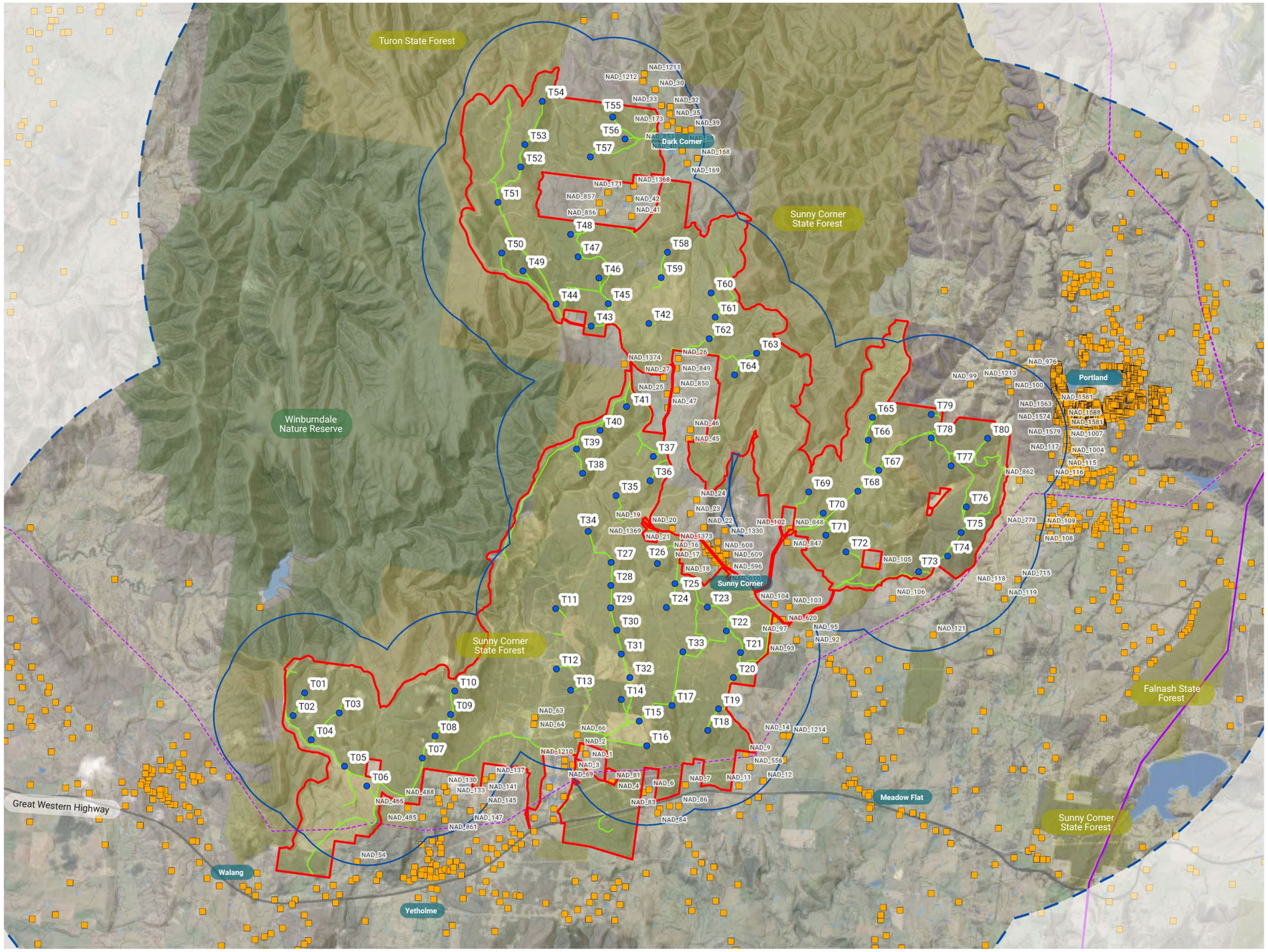
2.4 Existing Landscape Character

The Project is located within the South Eastern Highlands bioregion in Central NSW, approximately 1100m above sea level. The existing landscape surrounding the Study Area is made up of gentle to steep undulations with cleared pastoral farmlands, softwood plantations and native bushland. Small rural villages and the town of Portland dot the landscape.

The Project is located within the Sunny Corner State Forest which is made up of mainly *Pinus radiata*. It is adjacent to the Winburndale Nature Reserve, which supports a ridge system of conglomorate cliff lines, remnant wet and dry sclerophyll forests, grassy woodlands and sub-alpine vegetation.

Cement factories in Portland and remnants of gold and silver mining activities during the 19th century are present. Transmission lines run through the area, with infrastructure associated with Mt Piper Power Station visible from far distances.

Distant ridgelines associated with the Blue Mountains are visible to the east.



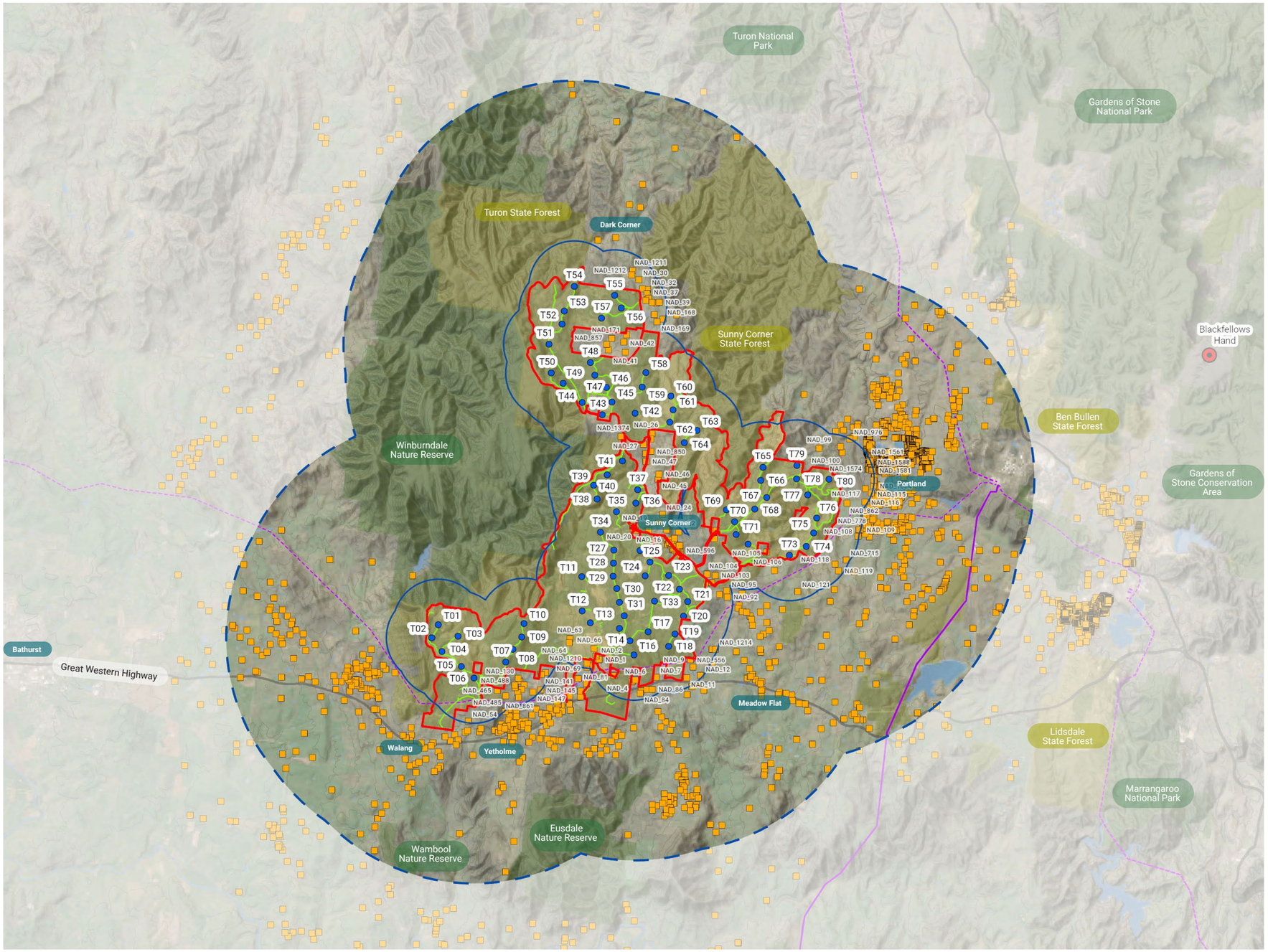
Turbine Setback

Refer to 2.2

LEGEND

- Project Boundary
- Setback (1,800 from nearest turbine)
- Study Area (8,160m from nearest turbine)
- Proposed 285m WTG
- Non-Associated Receiver
- Access Road
- Primary Road
- Existing 330 kV Transmission line
- Existing 500 kV Transmission line
- National Parks and Wildlife Service Estate
- State Forest
- Watercourse
- Contour 50m

Figure 02 Turbine Setback
Basemap Source - ESRI 2024



Study Area

Refer to 2.3

LEGEND

- Project Boundary
- Setback (1,800 from nearest turbine)
- Study Area (8,160m from nearest turbine)
- Proposed 285m WTG
- Non-Associated Receiver
- Access Road
- Existing 330 kV Transmission line
- Existing 500 kV Transmission line
- Primary Road
- Watercourse
- National Parks and Wildlife Service Estate
- State Forest
- Aboriginal Place
- Contour 50m

Figure 03 Study Area
Basemap Source - ESRI 2024

3.0 Viewshed Mapping

3.1 Viewshed Mapping Process

Moir have undertaken Viewshed Mapping (VSM) to determine the areas with potential visibility of the Project. The VSM has been prepared for the Project to illustrate the theoretical visibility based on topography alone. **Figure 05** presents the viewshed for the wind turbines based on the tip height of **285 m**.

The VSM represents the area over which a development can theoretically be seen, and is based on a Digital Terrain Model (DTM). It presents a bare ground scenario - ie. a landscape without screening, structures or vegetation, and is usually presented on a base map (Scottish Natural Heritage, 2017). Receivers that do not have a line of sight to the project (due to topography) are excluded from the assessment.

3.2 Viewshed Mapping Results

- Due to the undulating topographic character of the region, views range from filtered to open and, as identified in the VSM, are likely available across the entire Study Area.
- As per the VSM of the Project, all non-associated receivers within the Study Area (**8,160m**) are identified as having potential visibility.

It is important to restate a preliminary VSM is based on a worst case scenario where the assessment does not consider vegetation or structures. Ground truthing during field work will ascertain potential visibility from receivers taking into account structures and vegetation.

Refer to Figure 04 and Figure 05.

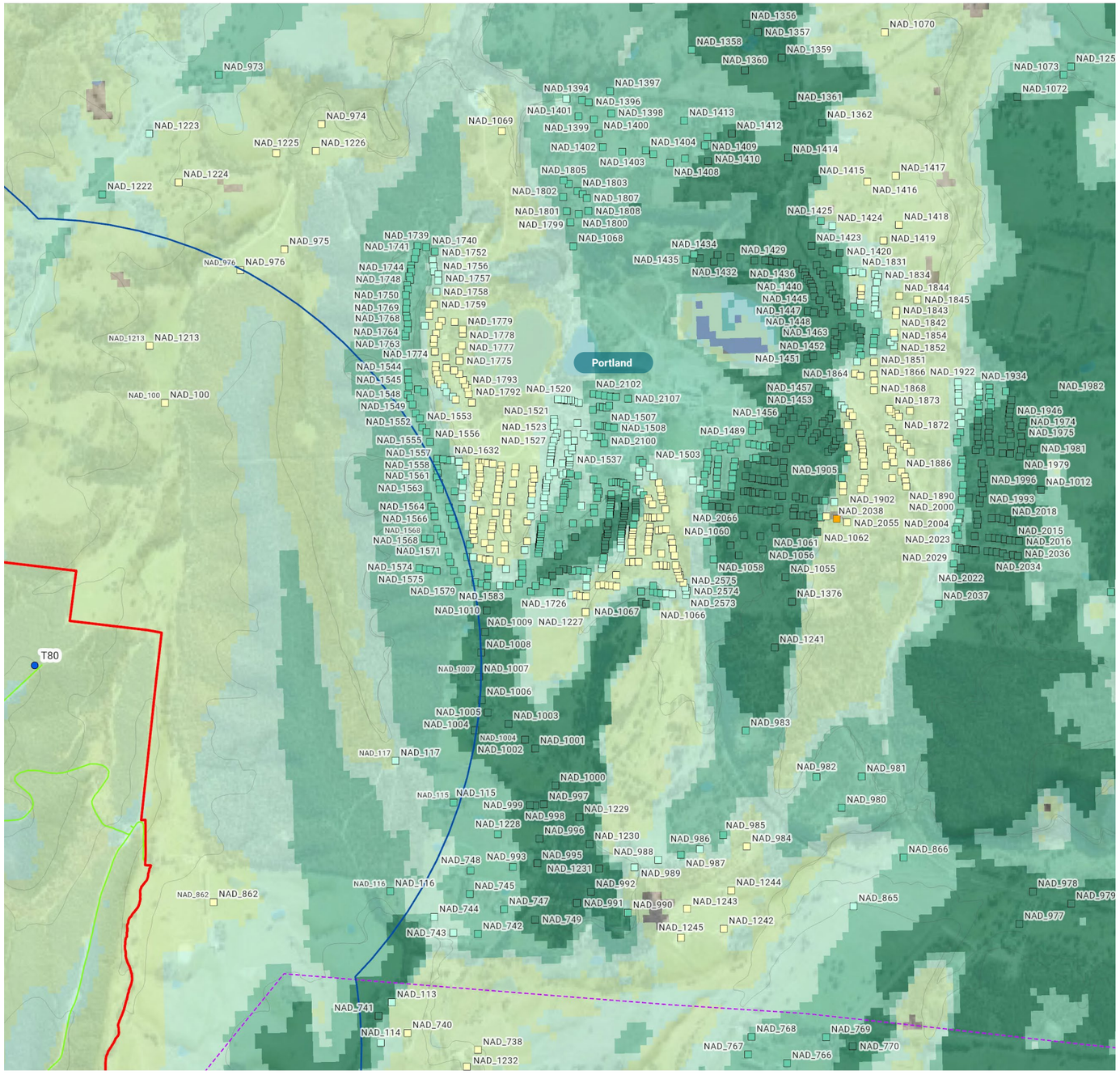


Figure 04 Viewshed Mapping Portland
Basemap Source - Esri 2024

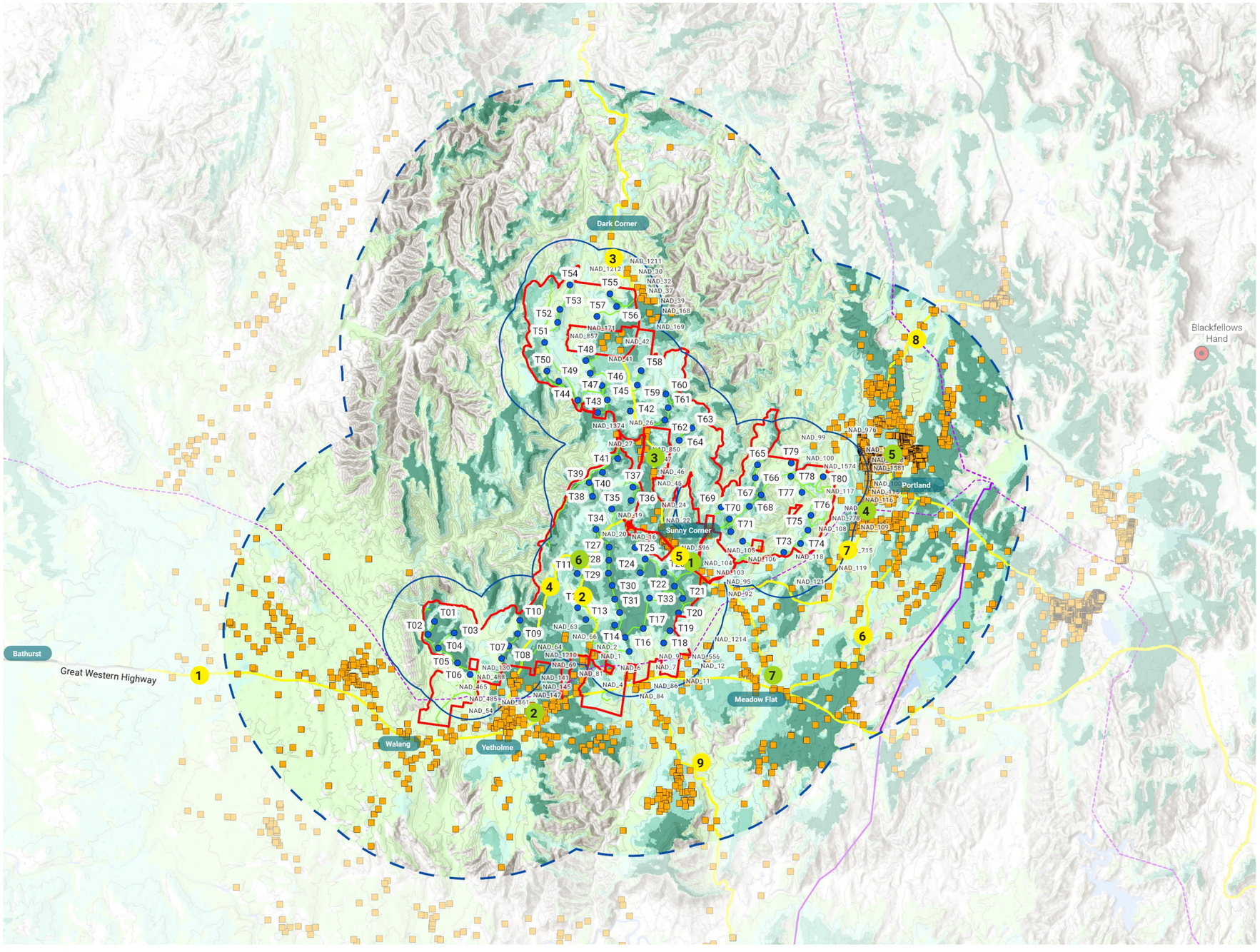


Figure 05 Viewshed Mapping
Basemap Source - ESRI 2024

Viewshed Mapping

Refer to 3.0 and 4.0

LEGEND

- Project Boundary
- Setback (1,800 from nearest turbine)
- Study Area (8,160m from nearest turbine)
- Proposed 285m WTG
- Non-Associated Receiver
- Access Road
- Existing 330 kV Transmission line
- Existing 500 kV Transmission line
- Primary Road
- Watercourse
- Aboriginal Place
- Public Viewing Corridors
- Contour 50m

Viewshed Mapping - 285m

- 1 - 20 visible turbines
- 21 - 40 visible turbines
- 41 - 60 visible turbines
- 61 - 80 visible turbines

Receptors

1. Great Western Highway
2. Sunny Corner Rd
3. Dark Corner Rd
4. Macabees Forest/Kirkconnell Rd
5. Bathurst St
6. Range Rd
7. Portland Sunny Corner Rd
8. Portland Cullen Bullen Rd
9. Diamond Swamp Rd

1. Sunny Corner Recreational Reserve
2. Yetholme Community Hall
3. Sunny Corner Cemetery
4. Portland Cemetery
5. Township of Portland
6. Kirkconnell Correctional Centre
7. Meadow Flat Public School

4.0 Receptors

4.1 Public Viewpoints

Key public viewing corridors identified include:

1. The Great Western Highway: Primary road that falls along the southern boundary of the Project. Runs in an eastwest direction.
2. Sunny Corner Road: Low use loop road that connects the Great Western Highway to Sunny Corner. Cuts through the south and centre of Project.
3. Dark Corner Road: Low use road that runs in a northsouth direction through north of Project
4. Macabee Forest/Kirkconnell Road: Low use road that connects Great Western Highway, Yetholme and Kirkconnell. Runs in a northsouth direction and cuts through south and centre of Project
5. Bathurst Street: Low use road through Sunny Corner village. Runs in an eastwest direction in the centre of Project.
6. Range Road: Low use road that connects Great Western Highway with Portland. Runs in a northsouth direction to the east of the Project
7. Portland Sunny Corner Road: low use road connection Sunny Corner to Portland. Runs in an eastwest direction from the centre to the east of Project.
8. Portland Cullen Bullen Road: Low use road connection Portland to Cullen Bullen. Runs in a northsouth direction to the east of Project.
9. Diamond Swamp Road: Low use road that connects the Great Western Highway to Tarana in a northsouth direction to the south of Project.

Key public viewpoints include:

1. Sunny Corner Recreational Reserve, Sunny Corner: 1.0km to nearest WTG, centre of Project.
2. Yetholme Community Hall: 2.6km to nearest WTG, south of Project.
3. Sunny Corner Cemetery, Sunny Corner: 1.3km to nearest WTG, centre of Project.
4. Portland Cemetery, Portland: 2.03km to nearest WTG, east of Project.
5. Township of Portland: 1.58 -4.1km to nearest WTG, east of Project.
6. Kirkconnell Correctional Centre, Kirkconnell: 1.16km from nearest WTG, centre of Project.
7. Meadow Flat Public School, Meadow Flat: 3.7km from nearest WTG, southeast of Project.

4.2 Private Receptors

- **3** non-associated receivers have been identified within the Project Area:
  - NAD 63, 64, and 66 associated with Kirkconnell Correctional Centre
- **161** non-associated receivers were identified within the Turbine Setback
- **1,723** non-associated receivers were identified within the Study Area

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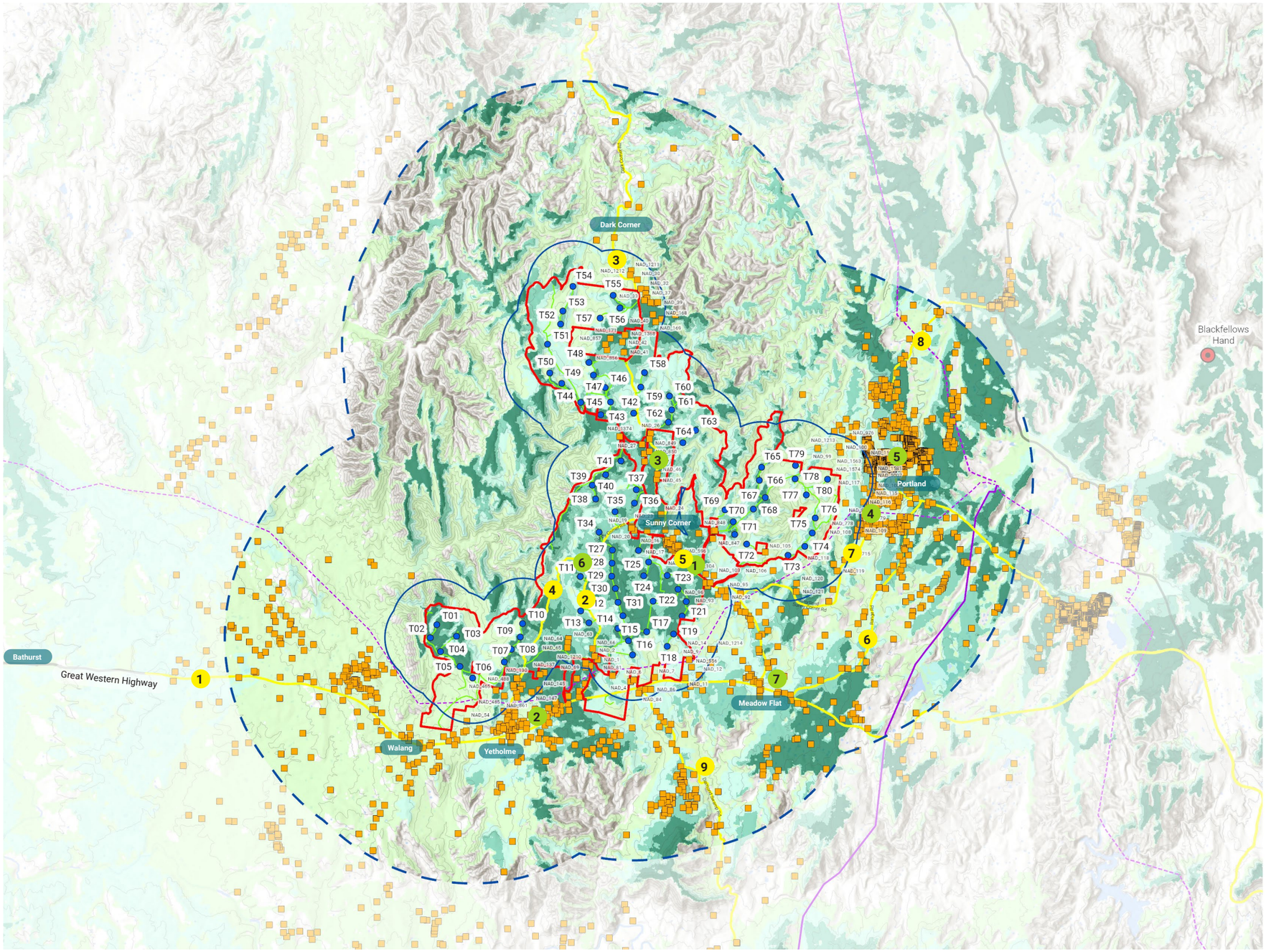

Sunny Corner Wind Farm Scoping Map
Basemap Source - ESRI 2024

0 2.5 5 10 km

Scoping Map

Sunny Corner Wind Farm

LEGEND

- Project Boundary
- Setback (1,800 from nearest turbine)
- Study Area (8,160m from nearest turbine)
- Proposed 285m WTG
- Non-Associated Receiver
- Access Road
- Existing 330 kV Transmission line
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- Primary Road
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Viewshed Mapping - 285m

- 1 - 20 visible turbines
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- 41 - 60 visible turbines
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Receptors

1. Great Western Highway
2. Sunny Corner Rd
3. Dark Corner Rd
4. Macabees Forest/Kirkconnell Rd
5. Bathurst St
6. Range Rd
7. Portland Sunny Corner Rd
8. Portland Cullen Bullen Rd
9. Diamond Swamp Rd

1. Sunny Corner Recreational Reserve
2. Yetholme Community Hall
3. Sunny Corner Cemetery
4. Portland Cemetery
5. Township of Portland
6. Kirkconnell Correctional Centre
7. Meadow Flat Public School

Appendix E
Preliminary Noise Impact Assessment

Sunny Corner Wind Farm

Preliminary Noise Assessment

S8278C2

December 2024

sonus.

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Document Title	: Sunny Corner Wind Farm Preliminary Noise Assessment
Client	: RPS Group
Document Reference	: S8278C2
Date	: December 2024
Author	: Simon Moore, MAAS

GLOSSARY

A-weighting	An adjustment to sound-level measurements to approximate the response of the human ear
Ambient noise level	The noise level of the existing noise sources in the environment (in the absence of the wind farm).
Applicant	MRP Someva ProjectCo Pty Ltd as trustee for the MRP Someva Project Trust 1 (Joint venture between Someva Pty Ltd and Mainstream Renewable Power Australia Pty Ltd)
Associated Residence	A residence on privately owned land in respect of which the owner has reached an agreement with the applicant about the development and management of impacts
Background noise level	The ambient noise level which excludes intermittent noise sources.
BESS	Battery and Energy Storage System
dB(A)	A-weighted noise or sound power level in decibels.
EIS	Environmental Impact Statement – A document prepared by or on behalf of the applicant to accompany a development application that includes a comprehensive assessment of the environmental, social and economic impacts of the project
EP&A Act	*Environmental Planning and Assessment Act 1979*
Equivalent noise level	Energy averaged noise level over a prescribed period of time
FTE	Full Time Equivalent
Guideline	*Wind Energy Guideline – (NSW Department of Planning, Housing and Infrastructure, November 2024)*
ISO 9613-2	International Standard *ISO 9613-2:1996 Acoustics – Attenuation of sound during propagation outdoors*
IOA Guide	Institute of Acoustics UK *A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise* May 2013
LGA	Local Government Area
National Park	An area of land that has been reserved for the protection and conservation of biodiversity, Australian native plants and animals, ecosystems, places of cultural significance and natural or geological features and protected by law under the National Parks and Wildlife Act 1974. It is separate to other types of protected areas such as Flora Reserves or State Conservation Areas

Non-associated Residence	A residence on privately-owned land in respect of which the owner has not reached an agreement with the applicant in relation to the development or A residence on privately-owned land in respect of which the owner has reached an agreement with the applicant in relation to the development, but the agreement does not cover the relevant impact or the performance measure under the agreement has been exceeded
O&M	Operations and Maintenance
Project	Sunny Corner Wind Farm
Residence	A lawful and permanent structure in a land use zone that permits residential use (or for which existing use rights under the Environmental Planning and Assessment Act 1979 apply), where a person or people permanently reside and is not, nor associated with, a commercial undertaking, such as caretakers' quarters, hotel, motel, transient holiday accommodation or caravan park
SA Guidelines	*Wind farms – environmental noise guidelines,* South Australian Environmental Protection Authority (issued July 2009, updated November 2021)
SEARs	Secretary's Environmental Assessment Requirements
Sound power level	A measure of the sound energy emitted from a source of noise.
SSD	State Significant Development
Technical Supplement	*Wind Energy Guideline Technical Supplement for Noise Assessment*
WTG	Wind Turbine Generator – Comprising a three bladed, upstream facing, horizontal axis turbine mounted on steel towers with a common set of generic design components comprising a foundation, tower, nacelle, hub, and blades

1 INTRODUCTION

1.1 Project Overview

Sonus Pty Ltd was engaged by MRP Someva ProjectCo Pty Ltd as trustee for the MRP Someva Project Trust 1 (Joint venture between Someva Pty Ltd and Mainstream Renewable Power Australia Pty Ltd) (the **Applicant**) to conduct a preliminary noise impact assessment to support the Scoping Report for the Sunny Corner Wind Farm (the **Project**).

The Project includes the construction, operation and decommissioning of up to a 600 MW wind farm and associated infrastructure largely within the Sunny Corner State Forest in NSW. The Forestry Corporation of NSW have awarded the Applicant an investigation permit to develop the project in Sunny Corner State Forest, which is located north of the Great Western Highway, between Bathurst and Lithgow in NSW.

The Project will supply electricity to the national electricity grid, largely via the existing electricity transmission network and if approved, would power approximately 300,000 homes annually.

The Scoping Report applies to the preliminary Project Area as shown on Figure 1 within both the Bathurst Regional Council and Lithgow City Council Local Government Areas (**LGAs**). The land within the Project Area is predominantly zoned RU1 Primary Production and RU3 Forestry.

The Project Area both historically and currently operates as a softwood timber pine plantation on NSW Forestry Corporation owned land which also supports a range of recreational uses. It is within a highly industrialised area in proximity to Mt Piper Power Station, and coal mining activities.

The Scoping Report supports a State Significant Development (**SSD**) Development Consent application under Part 4, Division 4.7 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**) and applies to the Project Area.

The following guidelines have been considered in this assessment:

- 'NSW Wind Energy Guideline for State Significant Wind Energy Development' (DPHI, 2024) (the **Guideline**), including the 'Technical Supplement for Noise Assessment' (the **Technical Supplement**)
- *Wind farms environmental noise guidelines* (SA EPA, 2021) (the **SA Guidelines**)

1.2 Project Description

The Project will involve the construction, operation and decommissioning of a wind farm, Battery Energy Storage System (**BESS**), electrical infrastructure, other infrastructure and ancillary activities generally including the following components:

- Up to 80 Wind Turbine Generators (**WTGs**);
- Electrical reticulation network:
    - One switching station;
    - Up to four substations and additional switch room and reactive plant;
    - On-site connection to existing 330 kV transmission line to the south of the Project Area (or other option to be confirmed in the EIS);
    - Internal electrical reticulation (both underground and overhead);
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- Other temporary and permanent infrastructure including:
    - Operations and Maintenance (**O&M**) facility and infrastructure including site office, storage facilities, car parking and fencing;
    - Concrete batching plant and laydown areas for construction of the Project;
    - Transmission infrastructure;
    - Water tank;
    - Internal access tracks;
    - Up to seven meteorological masts;
    - Construction and operational compounds;
    - Hardstands for WTGs and other infrastructure;
    - Internal access tracks and road turning head connecting Project infrastructure.
- Access road use and Project-required upgrades associated with:
    - Project Area access: approximately five access points;
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- Operational workforce of up to 35 Full Time Equivalent (**FTE**) and construction up to 475 FTE;
- Construction generally within standard hours and operations 24 hours per day 7 days per week; and
- Preliminary Project Area of up to 10,434 ha and a Preliminary Disturbance Footprint of up to 496 ha.

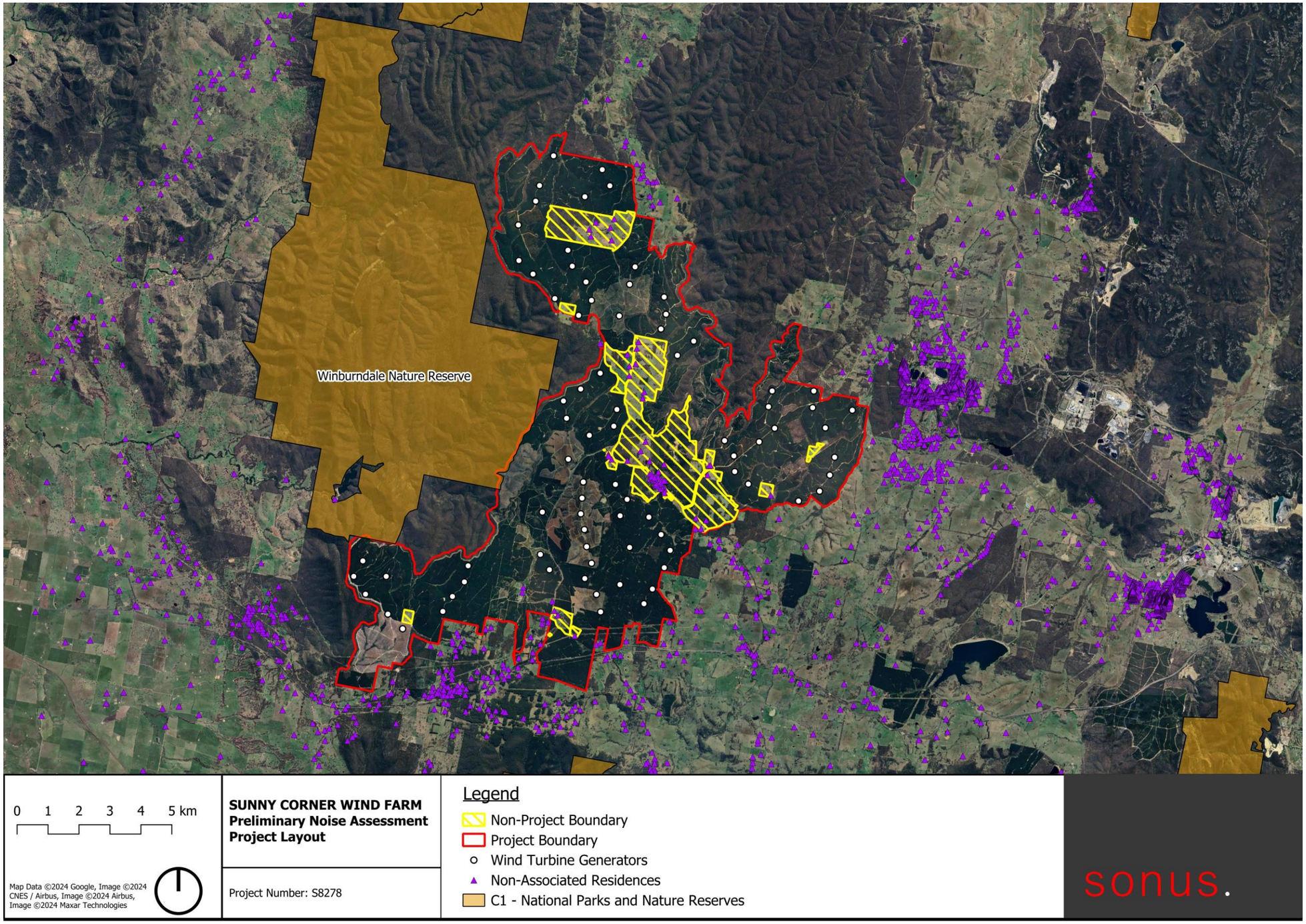


Figure 1: Project Layout

2 PRELIMINARY WIND TURBINE NOISE IMPACT ASSESSMENT

2.1 Methodology

The predictions of environmental noise from the Project have been based on the noise propagation model described by ISO 9613-2:1996 *"Acoustics — Attenuation of sound during propagation outdoors — Part 2: General method of calculation"* (**ISO 9613-2**)[1] and SoundPLAN noise modelling software. ISO 9613-2 is one of the recommended models under the SA Guidelines for the prediction of wind turbine noise. The noise propagation model considers the following:

- Sound power levels and noise source locations.
- Separation distances between noise sources and residences.
- Topography of the area.
- Influence of the ground.
- Air absorption.
- Meteorological conditions.

ISO 9613-2 provides a methodology for predicting noise levels at sensitive land uses under meteorological conditions favourable to noise propagation. Specifically, the ISO 9613-2 model predicts noise based on the assumption of downwind noise propagation (resulting in higher noise levels) from all WTGs to all noise sensitive receptors simultaneously, therefore representing a conservative approach.

The assessment includes predictions of the noise from wind turbines in accordance with the *Wind Energy Guideline* (the **Guideline**) and the *Wind Energy Guideline Technical Supplement for Noise Assessment* (the **Technical Supplement**), both published by the NSW Department of Planning, Housing and Infrastructure in November 2024. Both documents refer to the 2021 version of the South Australian document *Wind farms environmental noise guidelines* (the **SA Guidelines**).

[1] It is noted that an updated revision of ISO 9613-2 was released in 2024. This version of the standard has not been adopted for this assessment, as it is understood that the conditions and assumptions considered by the IOA Guide have not yet been validated for the 2024 version of the standard. Assessment of the noise using ISO 9613-2:2024 could be considered separately (if required, as part of the EIS) in addition to the approved methodology of the IOA Guide and ISO 9613-2:1996.

The preliminary noise impact assessment is based on the following information:

- Wind turbine generator (**WTG**) locations.
- Receiver locations, including the classification of the receiver, the distance to the nearest WTG.
- Local topographical contours.
- Noise level data for an indicative WTG with a maximum sound power level of 105 dB(A). Lower noise levels can be achieved with sound optimised modes (curtailment).
- The WTG being free of any excessive levels of tonality or any other special noise characteristics, when assessed at residences.

Inputs to the noise prediction model are in accordance with the Institute of Acoustics *"A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise"* (May 2013) (**IOA Guide**), which includes the following requirements:

- 10°C temperature.
- 70% relative humidity.
- Intermediate ground absorption (required by the IOA Guide, despite the pastoral nature of the land).
- Barrier attenuation of no greater than 2 dB(A) (required by the IOA Guide).
- Receiver point located 4m above ground level at the residence (required by the IOA Guide, despite receiver points being at a lower level than this).
- Application of a 3 dB(A) correction where a "concave" ground profile exists as defined by the IOA Guide.

The above inputs are generally in accordance with the recommendations of the SA Guidelines to provide conservative predictions of the noise level from turbine operation. The only exception is the assumption of intermediate ground absorption (in lieu of the hard ground recommended by the SA Guidelines); this assumption is recommended by the IOA Guide to avoid over-prediction of noise levels which can occur when a hard ground assumption is used. It is also noted that the SA Guidelines specifically references the IOA Guide as a suitable alternative to the modelling parameters.

2.2 Criteria

The Guideline and Technical Supplement provide criteria based on a baseline limit of 35 dB(A), or 5 dB(A) above the background noise level ($L_{A90,10min}$) at each integer wind speed (whichever is the greater) for non-associated residences. The preliminary assessment is based on the baseline limit, however background noise monitoring conducted as part of the EIS process may result in an increase to the criteria, above the baseline limit. It is noted that the criteria do not apply at associated residences.

There are national parks within the vicinity of the Project area. The Technical Supplement specifies that the noise from WTGs should not exceed 50 dB(A) in designated passive recreation areas within national parks (when in use) for a wind speed of 4 m/s or cut in speed, whichever is greater. It also states that projects will typically meet this criterion at setback distances of 500m (or greater).

2.3 Results

Based on the preliminary modelling, there are 80 residences that have a predicted noise level greater than 35 dB(A). The majority of the 80 residences with predicted noise levels over 35 dB(A) are within 3 dB(A) of the 35 dB(A) baseline criterion. The number of sensitive receivers with a greater than 3dB(A) exceedance is 20, while 3 sensitive receivers exceed the criteria by at least 5 dB(A). The predictions are summarised in Table 1. A list of noise sensitive receivers where the predicted noise level is greater than or equal to 35 dB(A), and their corresponding predicted noise levels, can be found in Appendix A.

Table 1: Predicted Noise Levels at Sensitive Receivers (Without Sound Optimisation)

Predicted Noise Level	Number of Sensitive Receivers
Between 30 dB(A) and 35 dB(A)	222
Above 35 dB(A)	80
Above 36 dB(A)	67
Above 37 dB(A)	59
Above 38 dB(A)	20
Above 39 dB(A)	7
Above 40 dB(A)	3

The highest predicted noise level at a national park (Winburndale) is 40 dB(A) when considering the sound power level at rated power from each WTG (i.e. the maximum sound emission level). This prediction would be reduced when considering wind speeds at 4m/s, or use of sound optimisation.

2.4 Mitigation

As the baseline criteria are not achieved at all non-associated noise sensitive receivers, the Preliminary Assessment has considered the effect of using sound optimised operational modes (curtailment) at key turbine locations to achieve the baseline criteria, as summarised in Table 2. The resulting predictions, shown in Appendix A, show that the current configuration can achieve the baseline criteria at all locations when including operation of some WTGs in sound optimised modes.

Table 2: Predicted Noise Levels at Sensitive Receivers (With Sound Optimisation)

Predicted Noise Level	Number of Sensitive Receivers
Between 30 dB(A) and 35 dB(A)	140
Above 35 dB(A)	0

The Project will be refined as part of the ongoing design process to seek to minimise noise impacts at all residences (where no agreement is in place). The following options will be further considered in the EIS process to ensure that compliance with relevant criteria at all residences is maintained:

- Modifications to the WTG layout or WTG selection
- Agreements with landowners
- Background noise monitoring
- Directional noise modelling

3 NOISE IMPACT ASSESSMENT

A detailed acoustic assessment will be prepared for inclusion in the EIS, addressing the following components:

- WTG noise in accordance with the Guideline and Technical Supplement.
- BESS and other ancillary infrastructure noise in accordance with the *Noise Policy for Industry, 2017.*
- Construction noise in accordance with the *Interim Construction Noise Guideline, 2009.*
- Traffic noise in accordance with the *NSW Road Noise Policy, 2011*.
- Vibration in accordance with *Assessing vibration: A Technical Guideline, 2006*.
- Cumulative noise impacts, considering other developments in the area.

The EIS will incorporate the following information to assist in considering the detailed assessment:

1. Background noise monitoring results.
2. Establishment of criteria in accordance with the background noise monitoring results.
3. Predictions which account for the sound power levels and locations of WTGs, BESS and ancillary infrastructure.
4. A construction noise assessment and framework for a management plan, if required.
5. A traffic noise assessment.
6. Commentary on vibration impacts.
7. Noise reduction measures where the relevant operational or construction assessment criteria are not achieved.

APPENDIX A: PREDICTIONS FOR NOISE SENSITIVE RECEIVERS

Table 3: Noise Sensitive Receivers with Predictions Above 35 dB(A)

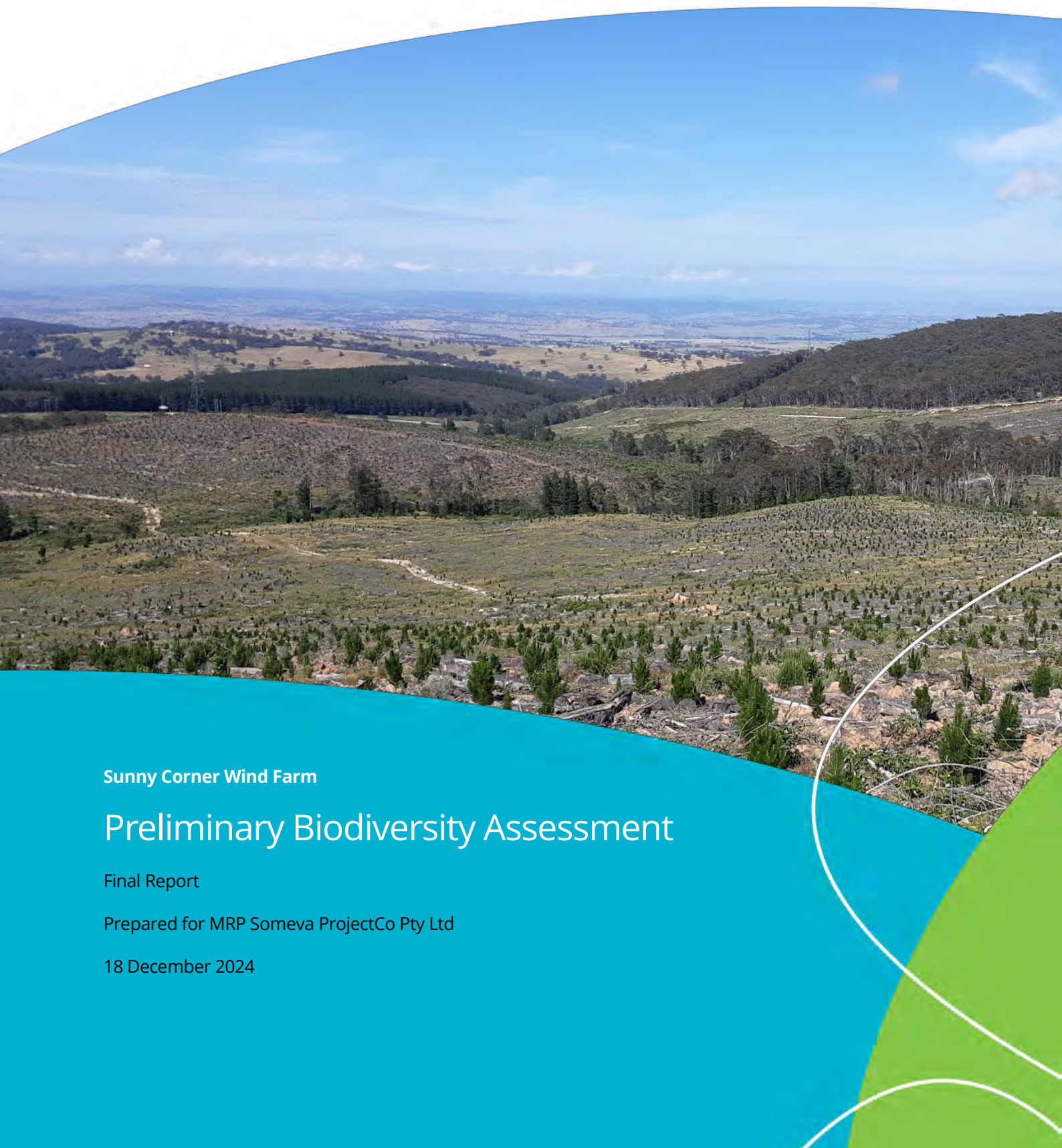
Noise Sensitive Receiver	WTG Predictions [dB(A)]	WTG Predictions using Sound Optimized Modes [dB(A)]
NAD_1	37	35
NAD_2	37	35
NAD_3	35	33
NAD_4	36	35
NAD_6	36	35
NAD_7	36	35
NAD_9	36	34
NAD_16	38	33
NAD_17	38	33
NAD_18	39	34
NAD_19	41	35
NAD_20	41	35
NAD_21	39	33
NAD_22	38	32
NAD_23	38	32
NAD_24	38	32
NAD_25	38	32
NAD_26	40	34
NAD_27	38	32
NAD_30	35	33
NAD_33	35	33
NAD_37	35	32
NAD_41	37	32
NAD_42	38	33
NAD_45	38	32
NAD_46	38	33

Noise Sensitive Receiver	WTG Predictions [dB(A)]	WTG Predictions using Sound Optimized Modes [dB(A)]
NAD_47	39	32
NAD_63	37	35
NAD_64	37	35
NAD_66	38	35
NAD_93	35	32
NAD_97	38	34
NAD_99	37	34
NAD_102	40	35
NAD_103	35	31
NAD_104	37	33
NAD_105	39	35
NAD_106	37	33
NAD_118	37	32
NAD_129	36	34
NAD_130	38	35
NAD_133	35	33
NAD_137	35	33
NAD_141	35	34
NAD_171	38	34
NAD_173	36	32
NAD_465	36	35
NAD_487	36	34
NAD_488	36	34
NAD_556	35	33
NAD_596	38	34
NAD_597	38	34
NAD_598	39	34
NAD_599	39	34
NAD_600	39	34

Noise Sensitive Receiver	WTG Predictions [dB(A)]	WTG Predictions using Sound Optimized Modes [dB(A)]
NAD_601	39	34
NAD_602	38	34
NAD_603	38	33
NAD_604	38	33
NAD_605	38	33
NAD_606	38	33
NAD_607	38	33
NAD_608	38	33
NAD_609	38	33
NAD_610	39	34
NAD_611	38	32
NAD_612	38	33
NAD_613	38	33
NAD_614	38	33
NAD_615	38	33
NAD_616	38	33
NAD_617	38	33
NAD_618	38	33
NAD_619	38	33
NAD_620	36	33
NAD_778	35	32
NAD_847	39	34
NAD_848	40	35
NAD_849	39	33
NAD_850	37	31
NAD_856	39	35
NAD_857	39	35
NAD_862	36	34
NAD_1212	35	33

Noise Sensitive Receiver	WTG Predictions [dB(A)]	WTG Predictions using Sound Optimized Modes [dB(A)]
NAD_1330	35	30
NAD_1367	38	32
NAD_1368	38	33
NAD_1369	41	35
NAD_1370	38	33
NAD_1372	38	33
NAD_1373	36	31
NAD_1374	39	33
NAD_3323	38	33

Appendix F
Preliminary Biodiversity Development Assessment Report



Sunny Corner Wind Farm

Preliminary Biodiversity Assessment

Final Report

Prepared for MRP Someva ProjectCo Pty Ltd

18 December 2024

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- NSW Department of Climate Change, Energy, the Environment and Water for access to the BioNet Atlas of NSW Wildlife.
- NSW Department of Primary Industries Fisheries for access to the predicted distribution maps for threatened species and fish communities.

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Biosis acknowledges the Aboriginal and Torres Strait Islander peoples as Traditional Custodians of the land on which we live and work.

We pay our respects to the Traditional Custodians and Elders past and present and honour their connection to Country and ongoing contribution to society.

Contents

Tables

Figures

Definitions

Applicant	MRP Someva ProjectCo Pty Ltd as trustee for the MRP Someva Project Trust (Joint venture between Someva Pty Ltd and Mainstream Renewable Power Australia Pty Ltd)
Application	Application for Development Consent under Part 4.7 of the EP&A Act; and Determination under Part 9 of the EPBC Act
BC Act	*Biodiversity Conservation Act 2016*
Biosecurity Act	*Biosecurity Act 2015*
BOS	Biodiversity Offsets Scheme
CEEC	Critically Endangered Ecological Community
CM Act	*Coastal Management Act 2016*
Cth DCCEEW	Australian Commonwealth Department of Climate Change, Energy, the Environment and Water
DBH	Diameter at breast height
Development corridor	Detailed study area within the project area / subject land within which the project will be largely constructed. This will be larger than the preliminary disturbance footprint to allow flexibility in placement of infrastructure during detailed design
DPI	Department of Primary Industries
EEC	Endangered Ecological Community
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
FCNSW	Forestry Corporation of New South Wales, primary landholder within Project Area
FM Act	*Fisheries Management Act 1994*
GIS	Geographic Information System
LEP	Local Environmental Plan
LGA	Local Government Area
LLS	Local Land Services
MNES	Matters of National Environmental Significance
NPW Act	*National Parks and Wildlife Act 1974*
NSW	New South Wales
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water
PCT	Plant Community Type
Preliminary Disturbance Footprint	Preliminary area of Project-related disturbance determined for use in Scoping Report phase, which will be refined for the EIS
Project	Sunny Corner Wind Farm
Project area	The land to which the Application applies
SEPP	NSW State Environmental Planning Policy

SIC	Significant Impact Criteria
SIS	Species Impact Statement
Subject land	Synonymous with the term 'project area' used herein to align the assessment with the BAM
TEC	Threatened Ecological Community
VEC	Vulnerable Ecological Community
VRZ	Vegetated Riparian Zone
WM Act	*NSW Water Management Act 2000*

1 Introduction

1.1 Project background

Biosis Pty Ltd (Biosis) was commissioned by MRP Someva ProjectCo Pty Ltd as trustee for the MRP Someva Project Trust 1 (Joint venture between Someva Pty Ltd and Mainstream Renewable Power Australia Pty Ltd) (the Applicant) to undertake a preliminary biodiversity assessment to support the Scoping Report for the Sunny Corner Wind Farm (the project).

The project includes the construction, operation and decommissioning of up to a 600 MW wind farm and associated infrastructure largely within the Sunny Corner State Forest in NSW. The Forestry Corporation of NSW have awarded the Applicant an investigation permit to develop the project in Sunny Corner State Forest, which t is located north of the Great Western Highway, between Bathurst and Lithgow in NSW.

The project will supply electricity to the national electricity grid, largely via the existing electricity transmission network and if approved, would power approximately 300,000 homes annually.

The Scoping Report applies to the subject land (syn. project area) as shown on Figure 1 within both the Bathurst Regional Council and Lithgow City Council Local Government Areas (LGAs). The land within the subject land is predominantly zoned RU1 Primary Production and RU3 Forestry.

The subject land both historically and currently operates as a softwood timber pine plantation on NSW Forestry Corporation owned land which also supports a range of recreational uses. It is within a highly industrialised area in proximity to Mt Piper Power Station, and coal mining activities.

The Scoping Report supports a State Significant Development (SSD) Development Consent application under Part 4, Division 4.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and applies to the subject land.

The following guidelines have been considered in this assessment:

- NSW Draft Wind Energy Guideline for State Significant Wind Energy Development' (DPHI 2024).
- 'State Significant Development Guidelines - Preparing a Scoping Report: Appendix A to the State Significant Development Guidelines' (DPIE 2022) (Scoping Report Guidelines).
- Guidelines for developments adjacent to National Parks and Wildlife Service lands (DPIE 2020)
- Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities (Working Draft) (DEC 2004b).
- Surveying threatened plants and their habitats NSW survey guide for the Biodiversity Assessment Method (DPIE 2020b).
- 'Species credit' threatened bats and their habitats: NSW survey guide for the Biodiversity Assessment Method (OEH 2018a).
- Survey guidelines for Australia's threatened bats (DEWHA 2010a).
- NSW survey guide for threatened frogs (DPIE 2020c).
- Determining native vegetation land categorisation for application in the Biodiversity Offsets Scheme (DPIE 2023).

- Unpublished South West Biodiversity and Conservation Division Draft Turbine Risk Assessment Guidance (NSW DCCEEW 2023a).
- Unpublished South West Biodiversity and Conservation Division Suggested BBUS Method (NSW DCCEEW 2023b).
- Wind Farms and Birds – Interim Standards for Risk Assessment' issued by the Australian Wind Energy Association (AusWEA 2005).
- Onshore Wind Farms – Interim guidance on bird and bat management (DAWE 2022).
- Commonwealth Offshore Wind Farm Guidance (Cth DCCEEW 2023a) .
- Best Practice Guidelines for Wind Energy Developments in Australia (Clean Energy Council 2018).

This preliminary biodiversity assessment report describes the biodiversity values and constraints associated with the project, within the subject land and preliminary disturbance footprint (approximate footprint of wind farm and associated infrastructure) as shown on Figure 1. The report will facilitate the preparation of the project's Scoping Report to obtain Secretary's Environmental Assessment Requirements (SEARs) and support an Application under Part 9 of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The objective of this preliminary biodiversity assessment report is to determine the potential presence of any threatened flora, fauna, populations or ecological communities (entities) listed under the EPBC Act, NSW *Biodiversity Conservation Act 2016* (BC Act) and *Fisheries Management Act 1994* (FM Act) within the subject land and preliminary disturbance footprint, and provide guidance on means of avoiding and minimising potential impacts to those entities.

Preliminary field investigations have confirmed that the majority of the subject land supports non-native softwood pine plantations with native vegetation restricted to areas such as; forest exclusion areas associated with riparian zones, patches of vegetation within private properties adjacent to, or surrounded by, the subject land, and land within the adjacent National Parks estate.

1.2 Project description

The project will involve the construction, operation and decommissioning of a wind farm, Battery Energy Storage System (BESS), electrical infrastructure, other infrastructure and ancillary activities generally including the following components:

- Up to 80 Wind Turbine Generators (WTGs) each with a rating of approximately 8 MW, and a tip height of up to 285 m and hub height of up to 185 m.
- Electrical reticulation network:
  - One switching station
  - Up to four substations and additional switch room and reactive plant
  - On-site connection to existing 330 kV transmission line to the south of the project area (or other option to be confirmed in the EIS)
  - Internal electrical reticulation (both underground and overhead)
  - Approximately 500 MW / 2000 MWh (4 hours) BESS
- Other temporary and permanent infrastructure including:
  - Operations and Maintenance (O&M) facility and infrastructure including site office, storage facilities, car parking and fencing
  - Concrete batching plant and laydown areas for construction of the project

  - Transmission infrastructure
  - Water tank
  - Internal access tracks
  - Up to seven meteorological masts
  - Construction and operational compounds
  - Hardstands for WTGs and other infrastructure
  - Internal access tracks and road turning head connecting project infrastructure.
- Access road use and project-required upgrades associated with:
  - Project area access: approximately five access points
  - Wind farm components access: Port of Newcastle (or other option to be confirmed in the EIS)
- Operational workforce of up to 35 Full Time Equivalent (FTE) and construction up to 475 FTE.
- Construction generally within standard hours and operations 24 hours per day 7 days per week.
- Preliminary project area of up to 10,434 ha and a Preliminary Disturbance Footprint of up to 496 ha.

The Applicant has adopted early strategies to avoid, minimise or offset the impacts of the project to the extent known at the scoping stage. These are detailed in Section 3.3 and Section 5.

1.3 Scope of assessment

The scope of this preliminary biodiversity assessment is to identify high level constraints and describe biodiversity values within the subject land. This preliminary assessment allows for recommendations to be provided in terms of avoidance, mitigation and/or further detailed assessment of biodiversity. Following a thorough review of publicly available information, previous environmental reports for the subject land, a rapid field investigation and spring bird and bat utilisation surveys (BBUS) in November 2024, the primary objectives are to:

- Describe the biodiversity values present within the subject land based on best available desktop and ground validated data.
- Identify potential constraints for a wind farm development with respect to collision risk with bird/bat species.
- Identify potential constraints for the project with respect to remnant vegetation, threatened ecological communities (TECs), threatened species habitat, potential turbine collision risk, and flow on effects on approvability and potential/likely impacts with respect to the NSW Biodiversity Offset Scheme (BOS).
- Provide details of any other high-risk issues that may be likely to arise in the EPBC Act referral / approvals process and the state-based planning regime more broadly.
- Provide recommendations on activities and an associated scope of work to support the SSD application and EPBC referral process with respect to biodiversity values.

1.4 Relevant terminology

The following terms are used throughout this assessment, within the scoping report and across other relevant specialist studies.

- Project area: Red boundary shown on key figures within the Scoping Report, and to which the Application applies.

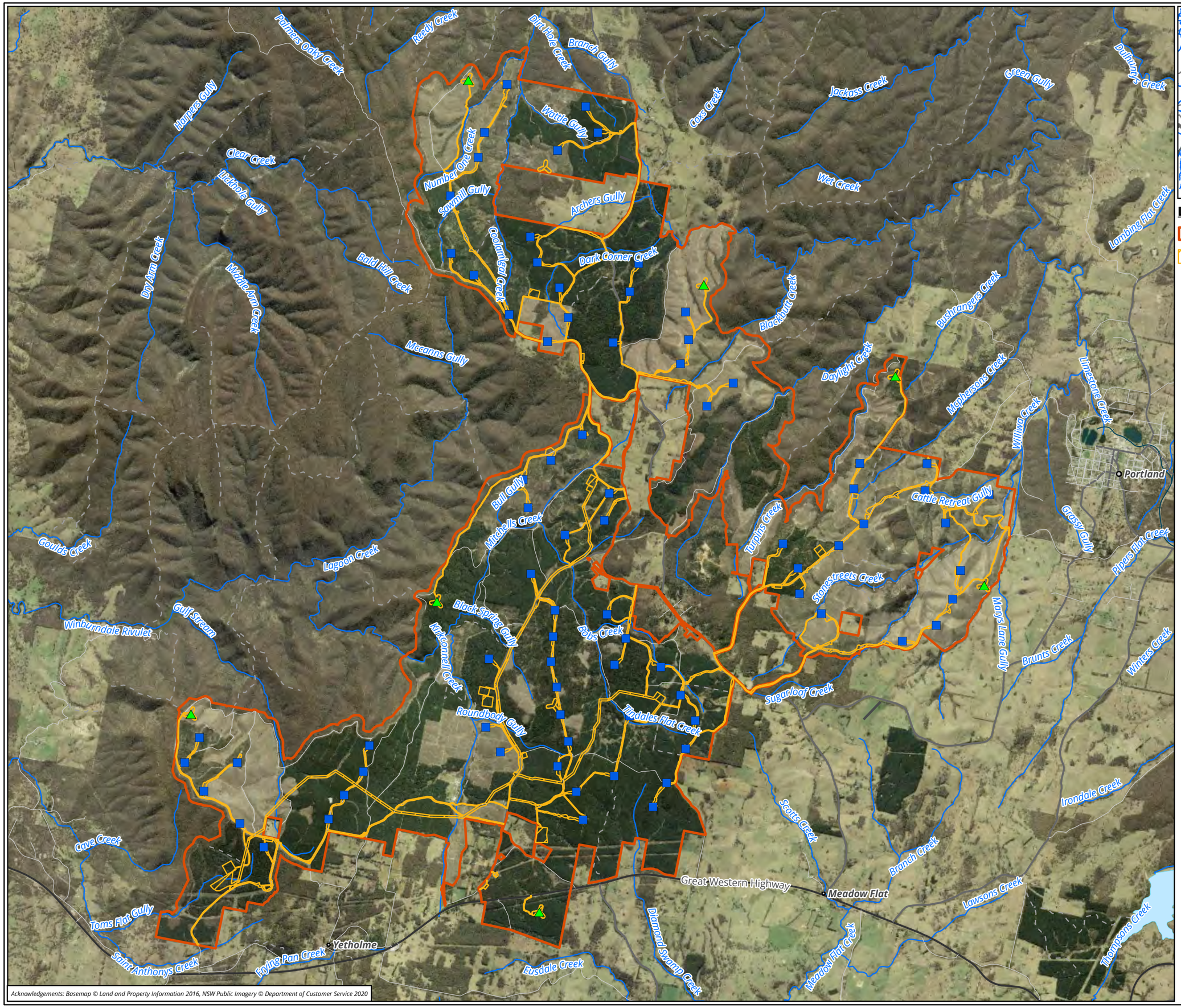
- Subject land: Synonymous with the term 'project area' and used in this Preliminary Biodiversity Assessment to align the assessment with the BAM. The subject land includes the preliminary disturbance footprint as well as areas that will not be subject to development, will remain subject to ongoing forestry management, however may be subject to indirect impacts associated with the project.
- Preliminary disturbance footprint: Preliminary area of project-related disturbance determined for use in this Scoping Report phase, which will be refined for the EIS and BDAR. The preliminary disturbance footprint sits within the project area and the subject land. (Figure 1).

1.5 Location of the subject land

Sunny Corner Wind Farm is located in the Central Tablelands region of NSW, halfway between Bathurst and Lithgow. The majority of the proposed subject land is located in approximately 10,000 hectares of softwood pine plantation in the Sunny Corner State Forest. Winburndale Nature Reserve borders the project to the west, in addition to a number of private landholders.

The subject land is within the:

- South Eastern Highlands Interim Biogeographic Regionalisation for Australia (IBRA) region and Hill End IBRA subregion.
- Bathurst Granites and Mount Horrible Plateau Mitchell landscapes.
- Central Tablelands Local Land Services (LLS) Management Areas.
- Lithgow and Bathurst Regional Local Government Areas (LGA).



Legend

- Subject land
- Development footprint
- Met mast location
- WTG

Figure 1 Subject land

0 750 1,500 2,250 3,000

Metres

Scale: 1:70,000 @ A3

Coordinate System: GDA2020 MGA Zone 55

N

biosis APEMGroup

Matter: 41213,
Date: 04 December 2024 ,
Prepared for: CW, Prepared by: OW, Last edited by: owilliams
Layout: 41213_F1_SubjectLand
Project: P:\41200s\41213\Mapping\41213_SunnyCornerWF_MetMast_BA.aprx

2 Legislative Context

2.1 Environmental Planning and Assessment Act 1979 and Biodiversity Conservation Act 2016

The project will be assessed under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and has a capital investment cost estimated at more than $30 million. Therefore, the project is "State Significant Development (SSD)" under Part 4 of the EP&A Act.

The BC Act relates to the conservation of biodiversity. The purpose of the BC Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community consistent with the principles of ecological sustainable development. The BC Act outlines biodiversity survey, assessment and offset methodologies. It also requires specific consideration of potential serious and irreversible impacts (SAII). The project will impact on areas native vegetation and biodiversity values, however the majority of the impacts will occur to non-native vegetation comprising softwood pine plantation forests. SSD projects must enter the Biodiversity Offset Scheme (BOS) and a Biodiversity Development Assessment Report (BDAR) will be required to assess biodiversity impacts following the Biodiversity Assessment Method (BAM).

This is likely to trigger biodiversity offset liabilities for the project in accordance with the BC Act (and potentially EPBC Act), with any offset obligations achieved by:

- Acquiring or retiring credits that are publicly available or setting up an onsite or offsite Biodiversity Stewardship Site under the BOS.
- Making payments into the Biodiversity Conservation Fund.
- Funding a biodiversity action that benefits certain threatened entities potentially impacted by the development.

Due to the largely non-native nature of the impacted vegetation, direct impacts to biodiversity values by the project, and any associated offsets of unavoidable residual impacts are expected to be relatively low, when compared to the overall size and scope of the project. Due to the patchy nature of the native vegetation present within the subject land further scope exists to continue to minimise impacts to biodiversity through future design stages.

2.2 Local Land Services Act 2016

Land subject to forestry operations is excluded from the application of the *Local Land Services Act 2016* (LLS Act). However, where applicable to do under the LLS Act (i.e. rural land), the potential for land to be mapped as Category 1 – Exempt land will be further evaluated via detailed review of the Draft Native Vegetation Regulatory Map. Preliminary review suggests the LLS Act may apply to small areas of land in localised areas within the south of the subject land, with some overlap with the preliminary disturbance footprint. Further evaluation will be undertaken as the preliminary disturbance footprint and project area is refined.

Locating impacts on land mapped as Category 1 – Exempt land is a good way to minimise impacts to biodiversity values, and confirmation of the relevant land categories relevant to the project will be included within the BDAR prepared to support the EIS.

2.3 Fisheries Management Act 1994

Key fish habitat is defined under the FM Act as aquatic habitat important to the maintenance of fish populations generally and the survival and recovery of threatened aquatic species. Key fish habitat, as mapped by the Department of Primary Industries (DPI) Fisheries Spatial data portal (DPI 2024), is located consistently across the subject land, within streams and waterways of Strahler order 3 and above within the subject land including Coolamigal Creek, Dark Corner Creek and Mitchells Creek. Habitat for the threatened Southern Purple Spotted Gudgeon *Mogurnda adspersa* (Endangered, FM Act), is also mapped for a small section of Coolamigal Creek that enters the very northern boundary of the subject land.

Waterway crossings as well as clearing and excavation near key fish habitat and threatened fish habitat must consider impacts on aquatic habitat, have pollution risks mitigated and be designed in accordance with the Policy and Guidelines for Fish Habitat Conservation and Management and the Policy and Guidelines for Fish Friendly Waterway Crossings.

2.4 National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act 1974* (NPW Act) establishes the fundamental functions of the NSW National Parks and Wildlife Service. These include the conservation of nature, objects, features, places and management of land reserved under the Act. Specifically, the conservation of nature includes:

- Landforms of significance, including geological features and processes.
- Landscapes and natural features of significance including wilderness and wild rivers.

Animal and plant provisions of the NPW Act have been repealed and replaced by the BC Act. *Guidelines for developments adjacent to National Parks and Wildlife Service lands* (DPIE 2020) are also relevant to the Project and will be considered; namely in relation to erosion control, storm and wastewater, pest and weed management, fire and access requirements including aerial and ground measures, visual, noise and other amenity impacts, connectivity impacts, impacts to groundwater dependant ecosystems and cultural heritage.

2.5 Forestry Act 2012

The *Forestry Act 2012* provides for the dedication, management and use of State forests and other Crown-timber land for forestry and other purposes such as construction and operation of renewable energy infrastructure within forest areas.

As outlined above land subject to forestry operations is excluded from the application of the LLS Act, therefore cannot be deemed Category 1 - Exempt land, and the BAM and BC Act applies to the project.

2.6 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act is administered by the Commonwealth Department of Climate Change, Energy, the Environment and Water (Cth DCCEEW). Under the EPBC Act, if the Minister determines that an action is a 'controlled action' which would have or is likely to have a significant impact on a Matter of National Environmental Significance (MNES) or Commonwealth land, then the action may not be undertaken without prior approval of the Minster.

The EPBC Act identifies the following nine MNES:

- World Heritage properties.

- National heritage places.
- Ramsar wetlands of international significance.
- Threatened species and ecological communities.
- Migratory species.
- Commonwealth marine areas.
- The Great Barrier Reef Marine Park.
- Nuclear actions (including uranium mining).
- Water resources (in relation to coal seam gas development and large coal mining development)

Further biodiversity assessments will confirm potential impacts to MNES, during the preparation of an EIS. However, given the potential nature and scale of the project, an EPBC Act referral on the basis of potential significant impacts threatened species threatened and migratory species (listed as MNES) is recommended.

3 Methods

3.1 Database and literature review

Prior to completing the field investigation, information provided by the Applicant as well as other key information was reviewed, including:

- Cth DCCEEW Protected Matters Search Tool for matters protected by the EPBC Act.
- NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) BioNet Atlas of NSW Wildlife, for items listed under the BC Act.
- The NSW Department of Primary Industries (DPI) Spatial Data Portal for FM Act listed threatened species, populations and communities
- NSW DPI *Biosecurity Act 2015* for Priority listed weeds for the Central Tablelands Local Land Services (LLS) area.
- State Vegetation Type Mapping (SVTM) of the subject land (NSW DCCEEW 2024c).
- Forestry operational GIS data including harvest schedules and environmental exclusion areas.

The implications for the project were assessed in relation to key biodiversity legislation and policy including:

- *Environment Protection and Biodiversity Conservation Act 1999*.
- *Environmental Planning and Assessment Act 1979*.
- *Biodiversity Conservation Act 2016*.
- *Local Land Services Act 2013*.
- *National Parks and Wildlife Act 1974*.
- *Forestry Act 2012*.
- *Water Management Act 2000* (WM Act).
- *Biosecurity Act 2015* (Biosecurity Act).
- Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities (Working Draft) (DEC 2004b).
- Surveying threatened plants and their habitats NSW survey guide for the Biodiversity Assessment Method (DPIE 2020b).
- 'Species credit' threatened bats and their habitats: NSW survey guide for the Biodiversity Assessment Method (OEH 2018a).
- Survey guidelines for Australia's threatened bats (DEWHA 2010a).
- NSW survey guide for threatened frogs (DPIE 2020c).
- Determining native vegetation land categorisation for application in the Biodiversity Offsets Scheme (DPIE 2023).
- Draft Wind Energy Guideline: Guidance for state significant wind energy development (DPE 2024).
- Unpublished South West Biodiversity and Conservation Division Draft Turbine Risk Assessment Guidance (NSW DCCEEW 2023a).

- Unpublished South West Biodiversity and Conservation Division Suggested BBUS Method (NSW DCCEEW 2023b).
- Wind Farms and Birds – Interim Standards for Risk Assessment' issued by the Australian Wind Energy Association (AusWEA 2005).
- Onshore Wind Farms – Interim guidance on bird and bat management (DAWE 2022).
- Commonwealth Offshore Wind Farm Guidance (Cth DCCEEW 2023a) .
- Best Practice Guidelines for Wind Energy Developments in Australia (Clean Energy Council 2018).

3.2 Field investigation and spring BBUS

To inform planning for the spring BBUS, an initial site visit was undertaken between 29-30 October 2024 to ground truth the suitability of pre-planned BBUS locations by Dr Caragh Heenan, Senior Zoologist, of Biosis. This work was undertaken to ensure that BBUS locations were established in areas that would effectively sample the stratified habitats within the subject land, and that locations selected via desktop assessment were logical and suitable for the 24 months of BBUS to be completed.

Initial desktop work included stratifying the subject land into broad habitat types suitable for use by bird and bat species, and include; native vegetation, forestry / native ecotone, forest cleared, forestry thinned, forestry un-planned. A total of 22 potential BBUS points were nominated, including both impact and future control points (to allow for establishment of a Before-After-Impact-Control study design), with 18 selected for ongoing monitoring. Desktop assigned and field validated points were located to meet the recommendations of Draft regulator guidance for wind farm projects published by the South-west Branch of the Biodiversity, Conservation and Science (BCS) group of NSW DCCEEW, which include locating BBUS points within 80 % of 3 kilometre x 3 kilometre grid squares, that include turbines when overlain over the subject land. Further detail on the BBUS method is provided below.

Following this initial site visit, Biosis undertook a rapid field validation survey of the subject land between 12-14 November 2024, with staff involved including Callan Wharfe (Principal Ecologist and BAM Accredited Assessor) and Liarni Rayment (Graduate Botanist). Preliminary mapping and validation of Plant Community Types (PCTs) and TECs was undertaken to ensure informed ongoing design decisions with biodiversity impacts avoided and minimised from the outset. The field investigations included:

- Preliminary vegetation mapping of PCTs across the subject land, including validation of the SVTM vegetation modelling.
- Mapping of any TECs listed under the BC Act and/or EPBC Act.
- Opportunistic surveys for threatened species considered to have the potential to occur within the subject land.
- Preliminary habitat assessment in accordance with the BAM to determine the potential for threatened species identified under the BAM as 'ecosystem credit species' and 'species credit species' to occur.
- Indicative mapping ecological constraints such as habitat trees, wetlands, waterways and nearby areas supporting potential habitat for threatened species.
- Flora and fauna species inventory.

3.2.1 Spring 2024 BBUS

Further to the above rapid field validation survey, Biosis completed the first seasonal replicate of the BBUS work that will inform further impact assessment, collision risk modelling (CRM) and ultimately the Bird and Bat Adaptive Management Plan (BBAMP) which will be required for the operational project. Surveys for the spring 2024 season were completed between 11 – 15 November 2024 by Biosis Zoologists Aleksei Atkin (Principal Zoologist) and Emma Heath (Zoologist).

Bird surveys

A total of 18 bird utilisation survey (BUS) points, comprising 14 impact points and 4 control points, were sampled over four replicates each, with impact / control points stratified and paired on the basis of habitat types aligned to vegetation classes present across the study area. One additional point was able to be sampled, but may not be included in the full BBUS program.

The BUS method involved fixed-point surveys, which included one observer stationed at each point for 20 minutes. Survey details including the date, start and end times, site location, weather conditions, direction of flight and habitat features of interest were recorded during each survey. During surveys, all observations within 360 degrees and up to 3 kilometres of the observer were recorded, including:

- Species observed taking flights.
- Count of individuals.
- Height of bird above ground when first detected, in 5 metre increments.
- Distance of bird from observer when first detected.
- Species behaviour, if relevant.
- Incidental bird observations were also recorded across the subject land.
- Flight direction.

Each fixed point was surveyed several times per survey, aiming for a minimum of once each at three different times of day:

- Morning (6:00 AM to 10:59 AM).
- Midday (11:00 PM to 13:59 PM).
- Afternoon (2:00 PM to 6:00 PM).

Incidental observations of birds were also made during BUS surveys, especially for raptors and threatened species at potential collision risk such as Gang-gang Cockatoo *Callocephalon fimbriatum* and South-eastern Glossy Black-Cockatoo *Calyptorhynchus lathami lathami*.

This method is aimed to capture seasonal and temporal changes, including migration and species behaviour.

The 15 fixed survey impact points and replicates obtained in spring equates to 60 replicates and around 1200 minutes (or a total of almost 20 hours) of targeted diurnal bird surveys. In addition, four fixed survey experimental control points and replicates obtained in spring equates to 16 replicates and around 320 minutes (over five hours) of reference surveys. This provides a total (impact and control) of 76 replicates across the 19 fixed survey points. This is not yet adequate to provide sufficient data for the Biosis CRM and is not yet within a reasonable survey tolerance from the draft guidance provided by South-West BCS for characterising wind farm impacts on birds. A further seven seasons of bird utilisation surveys will need to be completed and incorporated into a CRM for the project.

The following draft height (RSA height has been assumed) matrix was defined to classify bird height but will be subject to final turbine specifications for lower and upper blade tip height:

- Below Rotor Swept Area (RSA): <85 metres above ground level.
- Within RSA: 85 to 285 metres above ground level.
- Above RSA: >285 metres above ground level.

The following bird guilds were used to categorise species:

- Raptors.
- Grassland, shrubland and ground-dwelling birds.
- Waterbirds, seabirds and other aquatic foragers.
- Woodland birds (including parrots and songbirds).
- Exotic birds (introduced species).

The above guilds were applied to the BUS results to identify birds of concern for future collision risk modelling.

Microbat survey

Thirteen bat detectors were deployed at ground level from 11 November until 15 November 2024 resulting in a total of 51 detector nights (one unit recorded only three nights instead of the intended four nights). As a meteorological mast (met mast) is not currently installed on site, no "at-height" data was collected during this survey period.

Calls were recorded from dusk until dawn using Anabat Swift and Anabat Chorus ultrasonic bat detectors (Titley Scientific). Detectors were fitted with omnidirectional microphones. Each time a bat flies past a detector, its call is recorded as a digital file (defined here as a 'pass') that is saved directly onto a memory card in the detector unit. Files were recorded in full spectrum format (.wav). Data was viewed using Anabat Insight (version 2.1.1, licensed), Titley Scientific.

Files not containing bat calls (noise files) were filtered out using a standard "allbats" filter in Anabat Insight. These were labelled as 'trash', assumed not to contain bat calls, and not included in further analysis. A call (pass) was defined as a sequence of five or more consecutive pulses of similar frequency and shape. Passes containing less than five pulses were also removed from the analysis and not considered valid bat calls. A custom filter was used to separate calls with less than five pulses, and group calls into frequency bands for species identification and activity analysis.

3.3 Preliminary biodiversity constraints mapping

Table 1 below provides an overview and explanation of the preliminary biodiversity constraints parameters used to develop a site specific biodiversity constraints GIS model and GIS outputs. This constraints model has been used to undertake initial avoidance and minimisation of impacts, and will continue to form the basis for impact minimisation thought the design and assessment phases of the project. GIS outputs layers include specific 'WTG and powerline constraints' focussed on potential collision risk impacts, and 'Civil constraints' focussed on direct habitat removal, and have been developed based on the various parameters and specific project constraints and opportunities each presents to the different components.

Key biodiversity constraints of the subject land, which will require consideration throughout the project, and have formed inputs into the preliminary constraints model include, but are not limited to:

- NSW Parks and Wildlife estate.
- The occurrence, or potential occurrence, of BC Act and/or EPBC Act TECs (see Section 4.2):
  - *Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions* (Endangered, BC Act).
  - *Temperate Highland Peat Swamps on Sandstone* (Endangered, EPBC Act).
  - *Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions* (Endangered, BC Act)
- Native vegetation providing habitat for a range of threatened and non-threatened species.
- Threatened flora records within the subject land.
- Higher order watercourse.
- Waterbodies and wet areas providing amphibian and trawling bat habitat.

In order to assess the constraints of vegetation and habitat present within the subject land, areas were identified and mapped into the four categories outlined in Table 1 below. Landscape features and mapped biodiversity values present outside the subject land were considered to ensure the influence of any values beyond the site were captured. Various landscape habitat features and mapped biodiversity values are considered to result in different levels of constraint for potential wind developments (with highest constraints largely relating to potential turbine strike by birds and/or bats) as opposed to civil works which result in more direct impacts to habitats and species. As such, details of the constraints values relevant to each constraint category for both wind and civil project components are provided separately below.

The data input into the constraints model is based on best available desktop GIS data, combined with ground validated PCTs and habitats determined during the November 2024 rapid field surveys, as described above. The results of the preliminary biodiversity constraints mapping are presented as Figure 3.

Table 1 Preliminary biodiversity constraint model outputs definitions, justifications and management / mitigation approach

Constraint category	Definition	WTG and powerline constraints *(predominantly bird and bat collision risk)*	Civil constraints *(includes WTGs, site reticulation and access etc.)*	Suggested management / mitigation approach
Very high constraint (highest priority for avoidance)	Represent the areas most highly recommended for avoidance of impacts during project design. Impacts adjacent to NPWS estate or to SAII species habitat have the potential to impact regulatory approval of the project, prolong regulatory assessment timeframes, require future demonstration of impact avoidance/minimisation efforts, require detailed impact minimisation/mitigation measures at approval. Also represent fixed constraint locations that should remain a high priority for avoidance during all future project design stages.	• NPWS estate and a 200 m buffer representing higher potential collision risk for birds and bats	• NPWS Estate and a 200m buffer indicating areas where project infrastructure should be avoided. • BioNet threatened flora records (including SAII species) and associated habitat patches to minimise impacts to threatened species. • Mapped (potential) TECs	• Avoid placement of infrastructure in mapped Very high constraint areas. • Minor encroachment or access track upgrades may be acceptable within NDWS buffer, but increases the risk of future redesign and protracted approvals timeframes. • Ensure static constraints such as flora records (particularly SAII) and TECs remain high priority for avoidance through project design stages.
Higher risk areas (WTGs and power-lines)	Areas considered to represent a higher risk for collision for birds and bats with operational infrastructure, based on vicinity to habitat features. These higher risk areas are more likely to be subject to operational impact minimisation strategies for WTGs. Habitat features and thus areas of higher risk will be refined over the assessment phase of the project.	• Areas of native vegetation representing higher potential collision risk. • Areas within 300 m of native vegetation that represent higher potential collision risk and provide setbacks from parrot and raptor breeding habitat. • Areas within 200 m of higher order watercourses (Strahler order 3+) representing higher potential collision risk for birds and bat utilising riparian habitats.	• n/a	• Minimise project infrastructure in Higher risk areas to reduce direct and indirect impacts. • Operational WTGs within native vegetation or nominated setback buffers are most likely to be subject to mitigation strategies due to higher potential for collision risk. • Impacts minimisation strategies including maintenance of WTG-free zones (flyways) between habitat features will be employed during project design. • Operational WTGs are considered likely to be assessed as 'high risk' or 'moderate risk' and monitoring and adaptive management will be required to trigger suitable mitigation strategies.

Constraint category	Definition	WTG and powerline constraints *(predominantly bird and bat collision risk)*	Civil constraints *(includes WTGs, site reticulation and access etc.)*	Suggested management / mitigation approach
				• Implement measures in designing WTGs to dissuade perching and minimise the diameter of the rotor swept area.
High constraint (Civil works)	Areas where impacts should be avoided wherever possible, due to the presence of native vegetation representing threatened species habitats. Due to the localised patchy nature and overall low levels of native vegetation within the subject land, all native vegetation is considered a High constraint to civil work due to the legislative requirements to avoid and minimise impacts. Unavoidable residual impacts likely to be subject to impact minimisation/mitigation measures, and justification for impacts will be required in the BDAR.	• n/a	• Areas of native vegetation with potential impacts to threatened species habitat.	• Minimise project infrastructure in High constraint areas to reduce direct and indirect impacts. • Ensure all areas of native vegetation are considered for avoidance and minimisation of impacts through project design stages.
Moderate constraint	Spatially represent the same areas as those defined as 'Higher risk areas' for WTG and powerline constraints, however civil constraints relate to native vegetation only. Nominated buffer areas provide setbacks from areas supporting potential fauna breeding habitat features. *It should be noted that in the current biodiversity constraint model outputs no areas have been determined as Moderate constraint. However the constraint level is still valid and may become relevant during later iterations of the model.*	• n/a	• Areas within 300 m of native vegetation representing setbacks from parrot and raptor breeding habitat (native veg. only). • Areas within 200 m of higher order watercourses (Strahler order 3+) representing potential impacts within threatened frog and trawling bat species habitat (native veg. only).	• Minimise impacts in these areas to minimise direct and indirect impacts to threatened fauna species. • Consider the overall design requirements of the project and how that relates to impact minimisation from the outset.

Constraint category	Definition	WTG and powerline constraints *(predominantly bird and bat collision risk)*	Civil constraints *(includes WTGs, site reticulation and access etc.)*	Suggested management / mitigation approach
Low constraint	Best suited for development. These areas are unlikely to generate biodiversity credits (exotic/cultivated areas) or may have low biodiversity credit requirements per hectare.	• n/a	• Non-native vegetation	• Preferentially locate project infrastructure in areas of non-native vegetation. • Operational WTGs may still be considered to be higher risk if located in flyways or in proximity of other habitat features and monitoring and adaptive management may be required to trigger suitable mitigation strategies.

3.4 Limitations and assumptions of GIS modelling and future refinements

Biodiversity constraints outlined above are based on desktop assessment of best available spatial mapping data, with refinement during rapid ground validation surveys in November 2024 only. The constraints mapping contained herein is based on modelled interpretation of this data using the rulesets outlined Table 1 above using a GIS processing model, and no substantial interpretation of aerial imagery has been undertaken to determine any inconsistencies between the existing datasets and observable on-ground conditions. The above presented constraints relate to biodiversity values and related approvals only, and does not consider other environmental assessment requirements such as cultural heritage values, flooding or geotechnical constraints.

Further biodiversity surveys and assessments are required to provide additional detailed inputs into the constraints model, which will be updated periodically during the development of the BDAR and EIS. Future inputs may include items such as:

- Known populations of threatened flora species.
- Known or potential breeding habitat for threatened fauna species such as nesting hollows or stick nests. This may include within areas of non-native pine forests.
- Known or potential microbat roosting/breeding habitat represented by mine shafts and adits present throughout the subject land.
- Additional dams and waterbodies providing known or potential habitat to threatened fauna species.
- Buffers from areas of known or potential fauna habitat into areas of non-native pine forest where prescribed impacts may warrant assessment and potentially offsetting.
- Flyways between habitat features regularly utilised by bird and bat species.

4 Results

4.1 Vegetation communities

Initial desktop mapping and analysis confirmed 10 potential PCTs as being modelled as occurring within the subject land in the SVTM (NSW DCCEEW 2024c). The primary aim of the preliminary field investigation was to validate the PCTs (and TECs) present within, or in close proximity to, the preliminary disturbance footprint. Not all PCTs modelled as occurring within the broader subject land were able to be validated during the preliminary field investigation, and will be subject to future field assessment.

In addition to extensive areas of *Pinus radiata* (non-native pine plantations that do not represent a PCT), a total of six PCTs were preliminarily confirmed present during the field investigation, which ranged from freshwater and forested wetlands, to forests and grassy woodland. Details and descriptions are provided in Table 2 below, and the occurrence of PCTs, and non-native pine plantation, across the subject land are illustrated on Figure 2.

Vegetation condition ranged from high condition in areas less subject to historical negative pressures, such as nearby clearing or plantation activities, to thinner tracts of native vegetation, usually associated with waterways, fence lines, or forestry environmental exclusion areas, where edge effects such as non-native plant invasion, were evident.

Following completion of the preliminary field investigation a total of 13 PCTs remain mapped within the subject land, six of which have been preliminarily confirmed, with seven remaining modelled only.

A summary of PCTs within the subject land is provided in Table 2 below.

Table 2 Summary of modelled and ground validated PCTs within the subject land

PCT	Description (Rapid ground-truth and/or BioNet)	Distribution	Corresponding habitat type	BC Act	EPBC Act	SAII
3211: Central Tableland Montane Wet Forest	**Structure:** tall to mid-high Forest **Height:** to 25 m **Upper stratum:** Brown Barrel *Eucalyptus fastigata*, Mountain Gum *E. dalrympleana*, Ribbon Gum *E. viminalis*. **Mid stratum:** Black Wattle *Acacia melanoxylon*, Silver Wattle *A. dealbata*. **Ground stratum:** Snow Grass *Poa sieberiana*, Bracken *Pteridium esculentum*.	• Ground truthed. Recorded as small patches across much of the study area. • Also SVTM modelled	Forest	-	-	-
3294: Central Tableland Peppermint-Gum Montane Forest	**Structure:** tall to mid-high forest **Height:** to 25 m **Upper stratum:** Snow Gum *Eucalyptus pauciflora*, Broad-leaved Peppermint *E. dives*, Mountain Gum E. *dalrympleana*. **Mid stratum:** Black Wattle *Acacia melanoxylon*, Silver Wattle *A. dealbata*. **Ground stratum:** Sifton Bush *Cassinia Sifton*, Snow Grass *Poa sieberiana*, Bracken *Pteridium esculentum*, *Hibbertia obtusifolia*	• Ground truthed. The most widespread of recorded PCTs with some significant patches, particularly in the south-east. • Also SVTM modelled	Forest	-	-	-
3303: Central Tableland Ribbon Gum Sheltered Forest	**Structure:** tall to very tall moist forest **Height:** to 35 m **Upper stratum:** Ribbon gum *Eucalyptus viminalis,* Mountain Gum *E. dalrympleana,* Apple Box *E. bridgesiana*. **Mid stratum:** Black Wattle *Acacia melanoxylon*, Silver Wattle *A. dealbata*.	• SVTM modelled only, yet to be ground-truthed within subject land	Forest	Yes (outside subject land only), See Section 4.2	-	Yes (outside subject land only)

PCT	Description (Rapid ground-truth and/or BioNet)	Distribution	Corresponding habitat type	BC Act	EPBC Act	SAII
	Ground stratum: Sifton Bush *Cassinia Sifton*, Snow Grass *Poa sieberiana*, Bracken *Pteridium esculentum*, *Hibbertia obtusifolia*					
3347: Southern Tableland Creekflat Ribbon Gum Forest	**Structure:** tall to mid-high forest **Height:** to 20 m **Upper stratum:** Ribbon Gum *Eucalyptus viminalis,* Black Sally *E. stellulata*, **Mid stratum:** Black Wattle *Acacia melanoxylon*, Silver Wattle *A. dealbata.* **Ground stratum:** Snow Grass *Poa sieberiana*, Spiny-headed Mat-rush *Lomandra longifolia*, Weeping Grass *Microlaena stipoides*.	• Ground truthed. Widespread but in small patches. Generally associated with creek or drainage lines. • Also SVTM modelled	Forest/riparian forest	-	-	-
3367: Central Tableland Granites Grassy Box Woodland	**Structure:** tall to mid-high grassy woodland **Height:** to 20 m **Upper stratum:** Apple Box *Eucalyptus bridgesiana*, Ribbon Gum *E. viminalis*, Yellow Box *E. melliodora* **Mid stratum:** Black Wattle *Acacia melanoxylon*, Silver Wattle *A. dealbata.* **Ground stratum:** Snow Grass *Poa sieberiana*, Spiny-headed Mat-rush *Lomandra longifolia,* Weeping Grass *Microlaena stipoides*.	• SVTM modelled only, yet to be ground-truthed within subject land	Grassy woodland	-	-	-
3369: Central Tableland Ranges Peppermint-Gum Grassy Forest	**Structure:** tall open forest **Height:** to 25 m **Upper stratum:** Broad-leaved Peppermint *E. dives*, Brown Barrel *E. fastigata,* Ribbon Gum *Eucalyptus viminalis*, **Mid stratum:** Black Wattle *Acacia melanoxylon*, Silver Wattle *A. dealbata.*	• Ground truthed. Recorded as one patch in the central north of the study area. • Also SVTM modelled	Forest	-	-	-

PCT	Description (Rapid ground-truth and/or BioNet)	Distribution	Corresponding habitat type	BC Act	EPBC Act	SAII
	Ground stratum: Snow Grass *Poa sieberiana*, Spiny-headed Mat-rush *Lomandra longifolia,* Weeping Grass *Microlaena stipoides*.					
3534: Central West Stony Hills Stringybark-Box Forest	**Structure:** tall to mid-high open forest to woodland **Height:** to 20 m **Upper stratum:** Red Stringybark *Eucalyptus macrorhyncha*, Long-leaved Box *E. goniocalyx*, Red Box *E. polyanthemos* **Mid stratum:** Black Wattle *Acacia melanoxylon*, Silver Wattle *A. dealbata.* **Ground stratum:** Snow Grass *Poa sieberiana*, Spiny-headed Mat-rush *Lomandra longifolia,* Weeping Grass *Microlaena stipoides*.	• SVTM modelled only, yet to be ground-truthed within subject land	Forest	-	-	-
3734: Central Tableland Dry Slopes Stringybark-Box Forest	**Structure:** tall to mid-high dry open forest **Height:** to 20 m **Upper stratum:** Red Stringybark *Eucalyptus macrorhyncha*, Long-leaved Box *E. goniocalyx*, Apple Box E. bridgesiana **Mid stratum:** Black Wattle *Acacia melanoxylon*, Silver Wattle *A. dealbata.* **Ground stratum:** Snow Grass *Poa sieberiana*, Spiny-headed Mat-rush *Lomandra longifolia,* Weeping Grass *Microlaena stipoides*.	• SVTM modelled only, yet to be ground-truthed within subject land	Forest	-	-	-
3735: Central Tableland Peppermint Shrub-Grass Forest	**Structure:** tall to mid-high forest **Height:** to 25 m **Upper stratum:** Red Stringybark *Eucalyptus macrorhyncha*, Broad-leaved Peppermint *E. dives*, Mountain Gum E. *dalrympleana*.	• SVTM modelled only, yet to be ground-truthed within subject land	Forest	-	-	-

PCT	Description (Rapid ground-truth and/or BioNet)	Distribution	Corresponding habitat type	BC Act	EPBC Act	SAII
	Mid stratum: Black Wattle *Acacia melanoxylon*, Silver Wattle *A. dealbata*. **Ground stratum:** Snow Grass *Poa sieberiana*, Spiny-headed Mat-rush *Lomandra longifolia,* Weeping Grass *Microlaena stipoides*					
3747: Southern Tableland Western Hills Scribbly Gum Forest	**Structure:** tall to mid-high forest **Height:** to 25 m **Upper stratum:** Red Stringybark *Eucalyptus macrorhyncha*, Broad-leaved Peppermint *E. dives*, Mountain Gum E. *dalrympleana*, Inland Scribbly Gum *E. rossii* **Mid stratum:** Black Wattle *Acacia melanoxylon*, Silver Wattle *A. dealbata*. **Ground stratum:** Snow Grass *Poa sieberiana*, Spiny-headed Mat-rush *Lomandra longifolia,* Weeping Grass *Microlaena stipoides*	• SVTM modelled only, yet to be ground-truthed within subject land	Forest	-	-	-
3932: Central and Southern Tableland Swamp Meadow Complex	**Structure:** tall open forest **Height:** to 25 m **Upper stratum:** **Mid stratum:** *Leptospermum obovatum, Leptospermum juniperinum, Leptospermum lanigerum* **Ground stratum:** *Carex gaudichaudiana, Machaerina rubiginosa, Isachne globosa, Phragmites australis, Poa labillardierei* var. *labillardierei, Lomandra longifolia, Juncus sarophorus, Eleocharis gracilis, Lepyrodia anarthria, Hydrocotyle sibthorpioides, Geranium neglectum, Gratiola peruviana, Hypericum*	• Ground truthed (potential). Recorded as two small patches, one in the north and one in the centre of the subject land. • Further assessment of the presence of this PCT is required.		Yes, see Section 4.2	Yes, see Section 4.2	

PCT	Description (Rapid ground-truth and/or BioNet)	Distribution	Corresponding habitat type	BC Act	EPBC Act	SAII
	japonicum, Ranunculus inundatus, Stellaria angustifolia					
4063: Central and Southern Tableland River Oak Forest	**Structure:** tall riparian forest **Height:** to 20 m **Upper stratum:** River Oak *Casuarina cunninghamia* **Mid stratum:** Silver Wattle Acacia dealbata, Blackthorn *Bursaria spinosa* **Ground stratum:** *Microlaena stipoides Lomandra longifolia, Poa labillardierei* var. *labillardierei, Carex appressa, Asplenium flabellifolium, Adiantum aethiopicum, Pellaea falcata, Pteridium esculentum, Dichondra repens, Urtica incisa, Acaena novae-zelandiae, Hydrocotyle laxiflora, Rumex brownii*.	• Ground truthed. Recorded as one patch in low condition in the centre of the study area. • Also SVTM modelled	Riparian forest	-	-	-
4134: Mount Canobolas Rockplate Shrubland	**Structure:** low open woodland to shrubland **Height:** to 12m **Upper stratum:** *Eucalyptus canobolensis*, Long-leaved, Long-leaved Box *E. goniocalyx* **Mid stratum:** Common fringe-myrtle *Calyrix tetragona*, *Kunzea parviflora*. **Ground stratum:** Snow Grass *Poa sieberiana*, *Rytidosperma erianthum*, Variable sword-sedge *Lepidosperma laterale*.	• SVTM modelled only, yet to be ground-truthed within subject land	Forest or shrubland	Yes (outside subject land only), See Section 4.2.	-	Yes (outside subject land only)

4.2 Threatened ecological communities

No TECs were recorded within the preliminary disturbance footprint. One PCT preliminarily recorded within the subject land, PCT 3932, is associated with two TECs listed under the BC Act and EPBC Act (NSW DCCEEW 2024a):

- Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions (Endangered, BC Act), and
- Temperate Highland Peat Swamps on Sandstone (Endangered, EPBC Act).

At this stage of assessment, both TECs are considered to be potentially present, however will not be directly impacted by the preliminary disturbance footprint.

PCTs 3303 and 4134 are both modelled as occurring within the subject land by the SVTM and are associated with the BC Act listed TEC *Mt Canobolas Xanthoparmelia Lichen Community*. However, the final determination for this TEC states the community occurs at Mt Canobolas in central-western New South Wales, on rock faces and soils of the Mt Canobolas Tertiary volcanic complex, which occurs approximately 80 kilometres west of the subject land. Accordingly, this TEC is considered not to occur.

Within 500 metres of the subject land, the BC Act listed TEC *Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions* is also modelled (SVTM) as occurring. However, at this stage of assessment, this TECs associated PCTs have not been recorded within the subject land.

4.3 Aquatic habitats

Hydrological features occur within the subject land including channels, creeks, drainage lines and dams. The aquatic ecological communities within the subject land and broader locality are typified by highly modified watercourses, altered flow regimes, channel formation, diversions and removal or modification of riparian vegetation. Nevertheless, during peak periods and overflow, parts of subject land and surrounds may provide habitat for a diverse range, and large number of species.

Aquatic and riparian areas provide a valuable and often essential resource for fauna and flora species. Within the subject land, aquatic habitats are considered to be in poor to moderate condition state generally, and provide sub-optimal to optimal habitat for aquatic species.

As outlined above Key Fish Habitat, as mapped by the Department of Primary Industries (DPI) Fisheries Spatial data portal (DPI 2024), is located across the subject land, within streams and waterways of Strahler order 3 and above, including Coolamigal Creek, Dark Corner Creek and Mitchells Creek. Habitat for the threatened Southern Purple Spotted Gudgeon, is also mapped for a small section of Coolimagal Creek that enters the very northern boundary of the subject land.

Waterway crossings and associated impacts near key fish habitat (and threatened fish habitat) will consider impacts in accordance with the FM Act. These areas will be subject to impact avoidance/minimisation strategies, and will be designed in accordance with the Policy and Guidelines for Fish Habitat Conservation and Management and the Policy and Guidelines for Fish Friendly Waterway Crossings.

4.4 Threatened species

Background searches identified 28 threatened flora species and 76 threatened fauna species recorded (NSW DCCEEW 2024b) or predicted to occur (Cth DCCEEW 2024) within 10 kilometres of the subject land. Furthermore, based on the PCTs confirmed present within the subject land, a total of 32 BAM candidate species credit species and 36 BAM predicted ecosystem credit species, have been generated as potentially occurring within the subject land.

4.4.1 BAM species credit species

Table 3 below provides a summary of candidate species credit species generated by the BAM Calculator based on ground validated vegetation mapping. Two species, Regent Honeyeater *Anthochaera phrygia* (Critically Endangered, BC Act and EPBC Act) and Swift Parrot *Lathamus discolor* (Endangered, BC Act and Critically Endangered, EPBC Act), have been removed from further assessment as the subject land does not intersect important area mapping for either species.

Based on background research and field investigation completed to date, a minimum of 32 candidate species are considered to require further assessment. Of these 32, four species were recorded within the subject land in November 2024:

- Little Eagle *Hieraaetus morphnoides* (Vulnerable, BC Act).
- South-eastern Glossy Black Cockatoo *Calyptorhynchus lathami lathami* (Vulnerable, BC Act and EPBC Act).
- Gang-gang Cockatoo *Callocephalon fimbriatum* (Endangered, BC Act and EPBC Act).
- Large Bent-winged Bat *Miniopterus orianae oceanensis* (Vulnerable, BC Act).

A number of ecosystem credit species were also recorded:

- Scarlet Robin *Petroica boodang* (Vulnerable, BC Act).
- Brown Treecreeper (eastern subspecies) *Climacteris picumnus victoriae* (Vulnerable, BC Act and EPBC Act).
- Greater Broad-nosed Bat *Scoteanax rueppellii* (Vulnerable, BC Act).
- Eastern False Pipistrelle *Falsistrellus tasmaniensis* (Vulnerable, BC Act).

Section 5.2.2 of the BAM states that if any past surveys have recorded the presence of a threatened species, the species must be assessed, regardless of if the species was generated as a potential candidate species by the BAM calculator. In this instance, Robertson's Peppermint *Eucalyptus robertsonii* subsp. *hemisphaerica* (Vulnerable, BC Act and EPBC Act) has been added to the list of potential candidates on these grounds, based on the presence of two recent (2004, 2017) records of the species within the subject land.

Table 3 Preliminary assessment of potential candidate species credit species within the subject land

Species name	Common name	BC Act	EPBC Act	Target survey month for future assessment												SAII
				J	F	M	A	M	J	J	A	S	O	N	D	
Aprasia parapulchella	Pink-tailed Legless Lizard	V	V									x	x	x		
Burhinus grallarius	Bush Stone-curlew	E		x	x	x	x	x	x	x	x	x	x	x	x	
Callocephalon fimbriatum*	Gang-gang Cockatoo	V	E	x									x	x	x	
Calyptorhynchus lathami lathami*	Sth-eastern Glossy Black-Cockatoo	V	V				x	x	x	x	x					
Cercartetus nanus	Eastern Pygmy-possum	V		x	x	x							x	x	x	
Chalinolobus dwyeri	Large-eared Pied Bat	V	E	x										x	x	Yes
Eucalyptus aggregata*	Black Gum	V	V	x	x	x	x	x	x	x	x	x	x	x	x	
Eucalyptus cannonii*	Capertee Stringybark	V		x	x	x	x	x	x	x	x	x	x	x	x	
Eucalyptus pulverulenta	Silver-leafed Gum	V	V	x	x	x	x	x	x	x	x	x	x	x	x	
Eucalyptus robertsonii* subsp. *hemisphaerica*	Robertson's Peppermint	V	V	x	x	x	x	x	x	x	x	x	x	x	x	Yes
Haliaeetus leucogaster	White-bellied Sea-Eagle	V								x	x	x	x	x	x	
Hieraaetus morphnoides	Little Eagle	V									x	x	x			
Leucochrysum albicans* subsp. *tricolor	Hoary Sunray	E	E	x	x	x	x					x	x	x	x	
Litoria aurea	Green and Golden Bell Frog	E	V	x	x	x								x	x	
Litoria booroolongensis	Booroolong Frog	E	E										x	x	x	
Litoria castanea	Yellow-spotted Tree Frog	CE	CE											x	x	Yes
Lophoictinia isura	Square-tailed Kite	V		x								x	x	x	x	
Miniopterus orianae oceanensis*	Large Bent-winged Bat	V		x	x										x	Yes
Myotis macropus	Southern Myotis	V		x	x	x							x	x	x	

Species name	Common name	BC Act	EPBC Act	Target survey month for future assessment												SAII
				J	F	M	A	M	J	J	A	S	O	N	D	
Ninox connivens	Barking Owl	V		x	x	x	x	x	x	x	x	x	x	x	x	
Ninox strenua*	Powerful Owl	V		x	x	x	x	x	x	x	x	x	x	x	x	
Paralucia spinifera*	Purple Copper Butterfly	E	V									x	x		x	
Persoonia marginata*	Clandulla Geebung	V	V	x	x	x										
Petauroides volans*	Southern Greater Glider	E	E	x	x	x	x	x	x	x	x	x	x	x	x	
Petaurus norfolcensis	Squirrel Glider	V		x	x	x	x	x	x	x	x	x	x	x	x	
Phascogale tapoatafa	Brush-tailed Phascogale	V		x	x	x	x	x	x						x	
Phascolarctos cinereus*	Koala	E	E	x	x	x	x	x	x	x	x	x	x	x	x	
Polytelis swainsonii	Superb Parrot	V	V									x	x	x		
Pteropus poliocephalus	Grey-headed Flying-fox	V	V										x	x	x	
Tympanocryptis mccartneyi	Bathurst Grassland Earless Dragon	CE	CE			x	x	x								Yes
Tyto novaehollandiae	Masked Owl	V		x	x	x	x	x	x	x	x	x	x	x	x	
Veronica blakelyi	Veronica blakelyi	V		x	x										x	

*** Denotes a species that has either been recorded by Biosis or has BioNet records within the subject land and/or one kilometre of the subject land.**

4.4.2 Bird and bat species with potential collision risk

The subject land is located within a highly modified environment dominated by softwood pine plantation within the Sunny Corner State Forest. Native vegetation, and the habitat it provides, predominantly occurs within riparian corridors or as small to medium size patches adjacent large swathes of plantation. A high number of named waterways (creeks) are present, as well as ephemeral and more permanent water bodies such as dams. The habitat provided by the above features is considered suitable for a number of threatened fauna, migratory listed species, raptors (such as Little Eagle) and large forest/woodland inhabiting threatened such as the recorded South-eastern Glossy Black Cockatoo and Gang-gang Cockatoo.

Aerial species may be subject to a higher risk from the project due to WTG collision and movement corridor impacts, and areas of potential habitat have been subject to avoidance and minimisation from the outset of project design. Species with a higher risk of being impacted by wind farms are considered to be those with potential for ongoing population impacts during operation, such as:

- Raptors which may manoeuvre close to turbine blades to prey on carrion below. These species can be at low density in the landscape and removal of even one breeding pair may be significant at a local level.
- Flocking birds e.g. Superb Parrot.
- Migrating or nomadic waterbirds, which may be less able to manoeuvre around operational turbine blades, and operational WTGs may also affect breeding viability, inclusive of large colonial nesting events.
- Resident or colonial roosting bats that may fly within the rotor swept area.

Generally, most woodland birds and bats forage and move within or just above canopies, at lower than turbine height, and are considered at a generally lower risk of collision. Impacts to more sedentary species are more likely able to be avoided early in the project design or assessed thoroughly to confirm that losses are negligible, or at the very least, of low risk to the species or local populations. Migratory and nomadic species represent an increased risk as one migratory movement through an operational wind farm may have a local population-level impact on the species. Ongoing collisions may affect the population as a whole.

A preliminary assessment of the bird and bat species likely to occur within the subject land, based on habitat values recorded during the preliminary biodiversity assessment is provided in Table 4, along with each species' potential collision risk based on known flight characteristics. This assessment is based on the spring BBUS results, species recorded within 10 kilometres of the subject land within the NSW BioNet Atlas and preliminary Candidate and Predicted BAM-C species. The assessment is precautionary in nature to ensure sufficient consideration is given to species that may be at risk from the project. Further assessment, including a detailed Collision Risk Model is yet to be undertaken around the significance of any potential collisions for each species, and this will be completed as part of the BDAR following the collection of multiple seasons of BBUS data, and the aerial fauna of the subject land and wider locality is better understood.

Threatened and migratory species known or predicted to occur within the subject land, or within 10 kilometres of the subject land, have been preliminarily determined to be most at-risk, where they have a moderate or greater likelihood of occurrence, combined with a predicted high collision risk (Table 4).

The list provided in Table 4 below is not exhaustive, with non-threatened species preliminarily determined to be at a low risk of impacts having been excluded from the table. Further detailed assessment of all relevant species will be provided in the project's BDAR.

Table 4 Preliminary assessment of collision risk for aerial species

Common Name	Scientific Name	EPBC Act	BC Act	BAM Credit type	SAII	Migratory / Nomadic / Vagrant	Likelihood of occurrence	Risk rating
Birds								
Australian Hobby	*Falco longipennis*					Seasonal Migrant	Moderate	Moderate
Australian Painted Snipe	*Rostratula australis*	EN	EN	Ecosystem		Nomadic/Partial Migrant	Low-Moderate	Moderate
Australian Raven	*Corvus coronoides*					Sedentary	Present	Moderate
Barking Owl	*Ninox connivens*		VU	Candidate		Sedentary	Low-Moderate	Moderate
Black Falcon	*Falco subniger*		VU	Ecosystem		Nomadic/Dispersive/ Seasonal Migrant	Moderate	Moderate
Black Kite	*Milvus migrans*					Nomadic	Moderate	Moderate
Black-shouldered Kite	*Elanus axillaris*					Sedentary	Moderate	Moderate
Blue-billed Duck	*Oxyura australis*		VU	Ecosystem		Nomadic	Low-Moderate	Moderate
Blue-winged Parrot	*Neophema chrysostoma*	VU	VU	Ecosystem		Seasonal Migrant	Low-Moderate	Moderate
Brown Falcon	*Falco berigora*					Sedentary/Dispersive	Moderate	Moderate
Brown Goshawk	*Accipiter fasciatus*					Nomadic	Present	Moderate
Brown Treecreeper (eastern)	*Climacteris picumnus victoriae*	VU	VU	Ecosystem		Sedentary	Present	Low-Moderate
Collared Sparrowhawk	*Accipiter cirrocephalus*					Nomadic	Moderate	Moderate
Common Sandpiper	*Actitis hypoleucos*	Mi				Migratory	Low-Moderate	Moderate
Curlew Sandpiper	*Calidris ferruginea*	CE, Mi	CR	Candidate/Ecosystem	Yes	Migratory	Low-Moderate	Moderate
Diamond Firetail	*Stagonopleura guttata*	VU	VU	Ecosystem		Sedentary	Low-Moderate	Low
Dusky Woodswallow	*Artamus cyanopterus cyanopterus*		VU	Ecosystem		Nomadic/Seasonal Migrant	Low-Moderate	Low-Moderate
Eastern Barn Owl	*Tyto javanica*					Nomadic	Moderate	Moderate

Common Name	Scientific Name	EPBC Act	BC Act	BAM Credit type	SAII	Migratory / Nomadic / Vagrant	Likelihood of occurrence	Risk rating
Flame Robin	*Petroica phoenicea*		VU	Ecosystem		Seasonal Migrant	Moderate	Low
Fork-tailed Swift	*Apus pacificus*	Mi				Migratory	Moderate	Moderate-High
Freckled Duck	*Stictonetta naevosa*		VU	Ecosystem		Nomadic	Low-Moderate	Moderate
Gang-gang Cockatoo	*Callocephalon fimbriatum*	EN	EN	Candidate		Nomadic/Seasonal Migrant	Present	Moderate-High
Grey Falcon	*Falco hypoleucos*	VU	VU	Ecosystem		Nomadic	Moderate	Moderate
Grey Goshawk	*Accipiter novaehollandiae*					Sedentary	Present	Moderate
Grey-crowned Babbler (eastern subspecies)	*Pomatostomus temporalis temporalis*		VU	Ecosystem		Sedentary	Low-Moderate	Low
Latham's Snipe	*Gallinago hardwickii*	VU, Mi	VU			Migratory	Low-Moderate	Moderate
Little Eagle	*Hieraaetus morphnoides*		VU	Candidate/Ecosystem		Nomadic	Moderate	Moderate
Little Lorikeet	*Glossopsitta pusilla*		VU	Ecosystem		Nomadic	Low-Moderate	Moderate
Little Raven	*Corvus mellori*					Nomadic	Present	Moderate
Magpie Goose	*Anseranas semipalmata*		VU	Ecosystem		Nomadic/Seasonal Migrant	Low-Moderate	Moderate
Masked Owl	*Tyto novaehollandiae*		VU	Candidate		Sedentary	Low-Moderate	Moderate
Nankeen Kestrel	*Falco cenchroides*					Nomadic/Dispersive/ Seasonal Migrant	Present	Moderate
Osprey	*Pandion haliaetus*	Mi	VU			Migratory	Low-Moderate	Moderate
Painted Honeyeater	*Grantiella picta*	VU	VU	Ecosystem		Nomadic	Low-Moderate	Moderate
Pectoral Sandpiper	*Calidris melanotos*	Mi				Migratory	Low-Moderate	Moderate
Peregrine Falcon	*Falco peregrinus*					Sedentary	Moderate	Moderate
Pied Currawong	*Strepera graculina*					Sedentary	Present	Moderate
Pilotbird	*Pycnoptilus floccosus*	VU	VU	Ecosystem		Sedentary	Low-Moderate	Low

Common Name	Scientific Name	EPBC Act	BC Act	BAM Credit type	SAII	Migratory / Nomadic / Vagrant	Likelihood of occurrence	Risk rating
Powerful Owl	*Ninox strenua*		VU	Candidate		Sedentary/Dispersive	Low-Moderate	Moderate
Red-tailed Tropicbird	*Phaethon rubricauda*	Mi	VU	Candidate		Migratory	Moderate	Moderate
Regent Honeyeater	*Anthochaera phrygia*	CE	CR	Candidate/Ecosystem	Yes	Nomadic	Low	Low
Satin Flycatcher	*Myiagra cyanoleuca*					Migratory	Moderate	Low-Moderate
Scarlet Robin	*Petroica boodang*		VU	Ecosystem		Seasonal Migrant	Present	Low
Sharp-tailed Sandpiper	*Calidris acuminata*	VU, Mi				Migratory	Low-Moderate	Moderate
Sooty Owl	*Tyto tenebricosa*		VU	Candidate	Yes	Sedentary	Low-Moderate	Moderate
South-eastern Glossy Black-Cockatoo	*Calyptorhynchus lathami lathami*	VU	VU	Candidate /Ecosystem		Nomadic/Seasonal Migrant	Low-Moderate	Moderate
South-eastern Hooded Robin	*Melanodryas cucullata cucullata*	EN	EN	Ecosystem		Nomadic	Low-Moderate	Low
Southern Boobook	*Ninox novaeseelandiae*					Sedentary	Low-Moderate	Moderate
Southern Whiteface	*Aphelocephala leucopsis*	VU	VU	Ecosystem		Sedentary	Low-Moderate	Low
Speckled Warbler	*Chthonicola sagittata*		VU	Ecosystem		Sedentary	Low-Moderate	Low
Spotted Harrier	*Circus assimilis*		VU	Ecosystem		Sedentary	Moderate	Moderate
Square-tailed Kite	*Lophoictinia isura*		VU	Candidate /Ecosystem		Nomadic	Moderate	Moderate
Sulphur-crested Cockatoo	*Cacatua galerita*					Sedentary	Present	Low-Moderate
Superb Parrot	*Polytelis swainsonii*	VU	VU	Candidate /Ecosystem		Migratory	Moderate	Moderate
Swamp Harrier	*Circus approximans*					Seasonal Migrant	Moderate	Moderate
Swift Parrot	*Lathamus discolor*	CE	EN	Candidate/Ecosystem	Yes	Migratory	Low	Low
Turquoise Parrot	*Neophema pulchella*		VU	Ecosystem		Nomadic	Low-Moderate	Moderate

Common Name	Scientific Name	EPBC Act	BC Act	BAM Credit type	SAII	Migratory / Nomadic / Vagrant	Likelihood of occurrence	Risk rating
Varied Sittella	*Daphoenositta chrysoptera*		VU	Ecosystem		Sedentary	Low-Moderate	Low
Wedge-tailed Eagle	*Aquila audax*					Sedentary	Present	High
Whistling Kite	*Haliastur sphenurus*					Nomadic	Moderate	Moderate
White-bellied Sea-Eagle	*Haliaeetus leucogaster*		VU	Ecosystem		Sedentary/Dispersive	Low	Low-Moderate
White-fronted Chat	*Epthianura albifrons*		VU	Ecosystem		Nomadic	Low-Moderate	Low-Moderate
White-necked Heron	*Ardea pacifica*					Seasonal Migrant	Present	Low-Moderate
White-throated Needletail	*Hirundapus caudacutus*	VU, Mi	VU	Ecosystem		Migratory	Moderate	Moderate-High
Yellow Wagtail	*Motacilla flava*	Mi				Migratory	Low-Moderate	Moderate
Yellow-tailed Black-Cockatoo	*Zanda funerea*					Nomadic	Present	Moderate
Bats								
Corben's Long-eared Bat	*Nyctophilus corbeni*	VU	VU			Nomadic	Moderate	Low
Eastern Coastal Free-tailed Bat	*Micronomus norfolkensis*		VU	Ecosystem		Partial Migrant	Moderate	Moderate
Eastern False Pipistrelle	*Falsistrellus tasmaniensis*		VU	Ecosystem		Sedentary	Moderate	Moderate
Greater Broad-nosed Bat	*Scoteanax rueppellii*		VU	Ecosystem		Seasonal Migrant	Moderate	Moderate
Grey-headed Flying-fox	*Pteropus poliocephalus*	VU	VU	Ecosystem		Seasonal Migrant	Moderate	Moderate
Large Bent-winged Bat	*Miniopterus orianae oceanensis*		VU	Ecosystem	Yes	Partial Migrant	Moderate	Moderate
Large-eared Pied Bat	*Chalinolobus dwyeri*	EN	EN	Candidate	Yes	Sedentary	Moderate	Moderate
Little Red Flying-fox	*Pteropus scapulatus*					Nomadic	Moderate	Moderate
White-striped Freetail-bat	*Austronomus australis*					Nomadic	Moderate	Moderate
Yellow-bellied Sheathtail-bat	*Saccolaimus flaviventris*		VU			Partial Migrant	Moderate	Moderate

4.5 Matter of National Environmental Significance

Based on the results of a Protected Matters Search Tool and the findings of the preliminary field investigations and spring BBUS, MNES potentially of relevance to the project are provided in Table 5 below.

Table 5 MNES of relevance to the Project

MNES	Relevance to the Project
World Heritage Properties	Not identified within the subject land or a 10 km radius.
National Heritage Places	Not identified within the subject land or a 10 km radius.
Wetlands of International Importance (Ramsar Wetlands)	There are no Wetlands of International Importance within the subject land or 10 km buffer. The closest Ramsar Wetlands, based on a PMST search include: • Banrock Station Wetland Complex (800 – 900 km downstream). • The Coorong, and Lakes Alexandrina and Albert Wetland (900 – 1000 km downstream). • Riverland (800 – 900 km downstream) • The Macquarie marches (300 – 400 km downstream)
Great Barrier Reef Marine Park	Not identified within the subject land or a 10 km radius.
Commonwealth Marine Area	Not identified within the subject land or a 10 km radius.
Listed Threatened Ecological Communities	Two Commonwealth listed TECs are predicted to occur within the subject land and/or 10 km buffer. These TECs are: • Natural Temperate Grassland of the South Eastern Highlands. • White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland Natural Temperate Grassland is considered not to occur within the subject land, and no evidence of White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland was recorded during the preliminary field investigation. Vegetation potentially representing Temperate Highland Peat Swamps on Sandstone was recorded during the preliminary field investigation, and the presence of this EPBC Act listed TEC will be confirmed through further detailed field investigation.
Listed Threatened Species	A total of 61 listed threatened species MNES are predicted to occur within the subject land and 10km buffer. Those considered most likely to occur include: • Black Gum (Vulnerable) – BioNet record within the subject land • Brown Treecreeper (Vulnerable) – recorded during BBUS • Clandulla Geebung (Vulernable) – BioNet record adjacent to the the subject land • Gang-gang Cockatoo (Endangered) – recorded during BBUS • Large-eared Pied Bat (Vulnerable) • Purple Copper Butterfly (Vulnerable) – BioNet records within the subject land • Robertson's Peppermint (Vulnerable) – BioNet record within the subject land • South-eastern Glossy Black Cockatoo (Vulnerable) – recorded during BBUS • Southern Greater Glider (Endangered) – BioNet records within the subject land

MNES	Relevance to the Project
	• Koala (Endangered) – BioNet records within the subject land
Listed Migratory Species	A total of 8 listed threatened species are predicted to occur within the subject land and 10 km buffer. None have been recorded thus far, however, those considered most likely to occur include: • White-throated Needletail • Fork-tailed Swift • Yellow Wagtail

The MNES listed above, along with any other MNES recorded or predicted as likely to occur within the subject land, will require consideration as part of ongoing ecological assessments. A referral of the project to Cth DCCEEW is planned and will provide a determination as to whether the project is considered a Controlled Action under the EPBC Act. The above listed MNES will form the basis of potential impacts included in the Referral.

4.6 Spring 2024 BBUS

Bird survey results

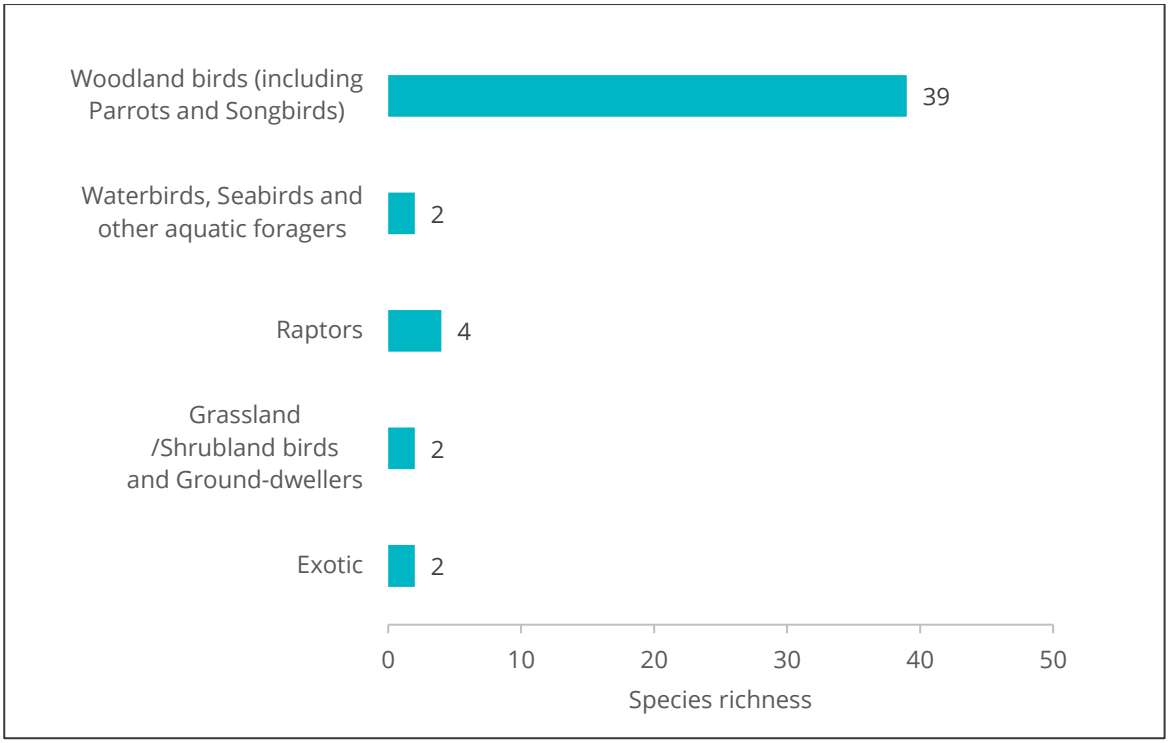
A total of 49 bird species were recorded during the spring BUS surveys. The total list of species is provided in Appendix 2. Of the 49 bird species recorded during BUS; four were raptor species, and five were threatened species. Threatened species consisted of:

- Gang-Gang Cockatoo (Endangered, EPBC Act and BC Act).
- South-eastern Glossy Black-Cockatoo (Vulnerable, EPBC Act and BC Act).
- Scarlet Robin (Vulnerable, BC Act).
- Little Eagle (Vulnerable, BC Act).
- Brown Treecreeper (Vulnerable, EPBC Act and BC Act).

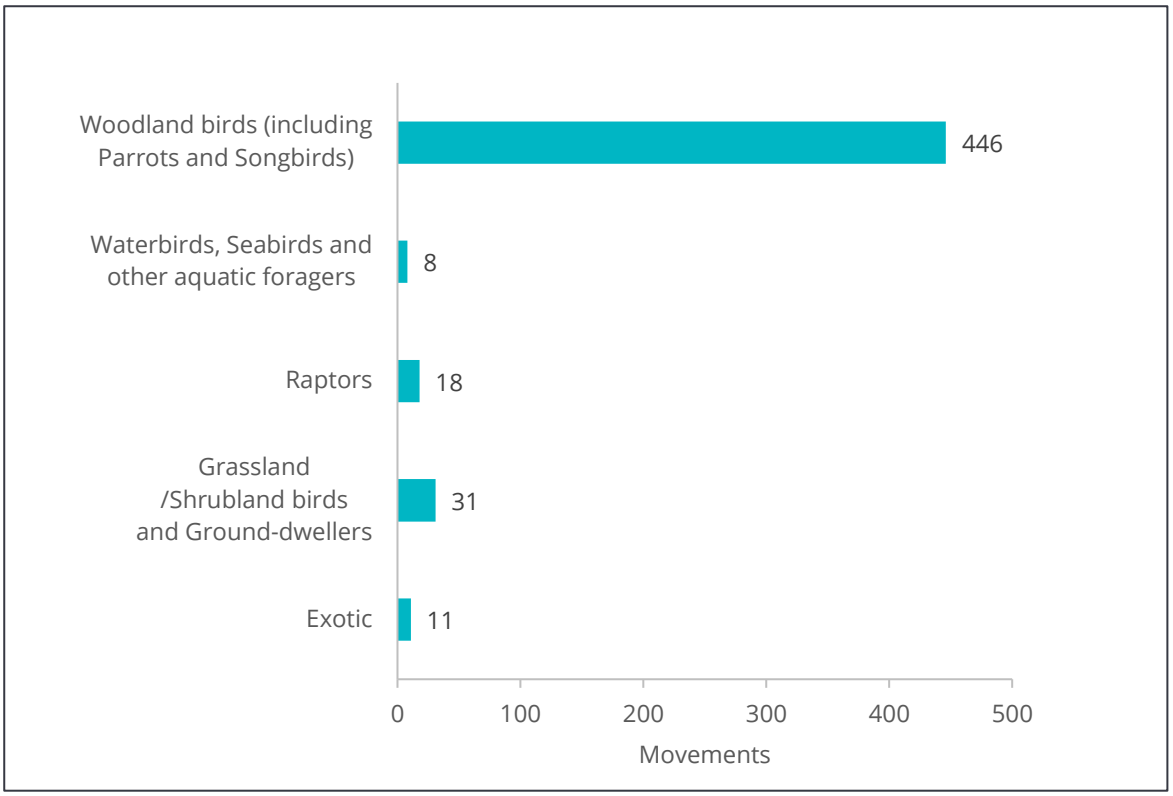
The most common species recorded in the subject land were Crimson Rosella *Platycercus elegans*, Grey Fantail *Rhipidura albiscapa,* Australian Raven *Corvus coronoides,* Silvereye *Zosterops lateralis* and Brown Thornbill *Acanthiza pusilla* with 89, 53, 26, 22 and 22 observations, respectively. These five bird species make up 58 % of all bird movement observations.

Of the 49 bird species recorded during BUS, nine species were only recorded once, and 21 species were recorded less than 10 times. The most diverse guild of birds were the woodland birds which made up about 80 % of all species observed, with a total of 39 species recorded. Four raptor species were recorded, namely; Australian Nankeen Kestrel, Brown Goshawk, Grey Goshawk, Wedge-tailed Eagle, which comprised the second-most recorded group (8 % of all species observed) (Graph 1 and Graph 2).

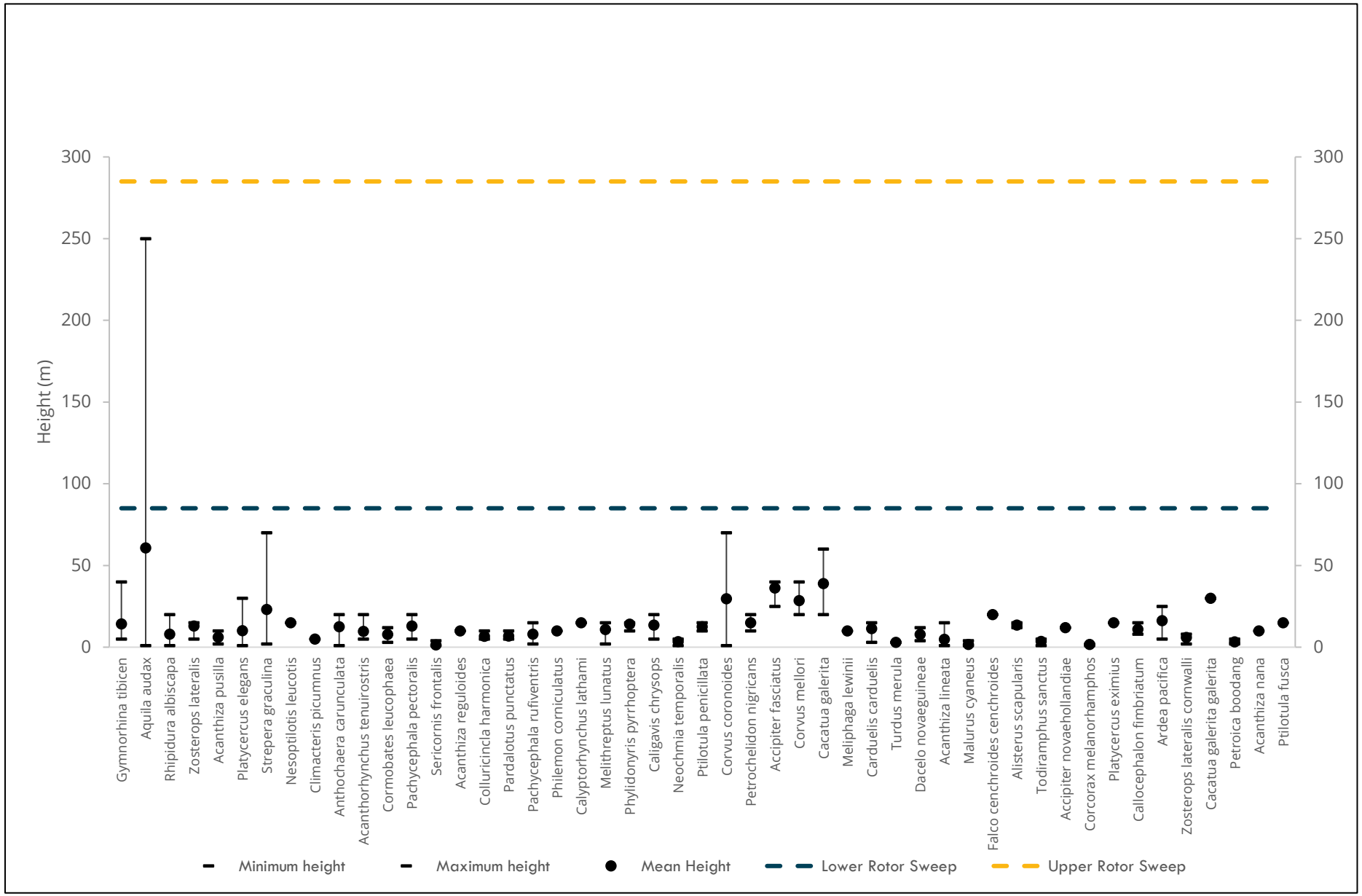
The majority of the birds recorded during BUS were observed below RSA height at both the impact and control survey points. Only one species, the Wedge-tailed Eagle *Aquila audax*, was observed flying within RSA. While this species is a non-threatened raptor, collisions with turbines by the species have been recorded in NSW. No species were recorded flying above RSA (Graph 3).



Graph 1 Species richness across guilds for spring 2024 season



Graph 2 Number of movements across guilds for spring 2024 season



Graph 3 Average flight heights for bird species recorded during BUS at all sites for the spring 2024 survey

Microbat survey results

A total of 9,261 files were recorded over a total of 51 detector nights. Of these files 5,165 were considered to be valid bat calls (56%), approximately 54% of which were manually reviewed.

Analysis of spring recordings positively identified 12 microbat species (Almost Certain or Probable) of the 21 species of microbat predicted to occur within the study area (Table 6).

Up to four additional species may also have been recorded however reliable identification to species level was not possible due to similarity of call characteristics between species.

Table 6 Bat species diversity recorded during the spring 2024 BBUS

Species name	Common name	Foraging guild	BC Act	EPBC Act	Spring 2024
Austronomus australis	White-striped Free-tailed Bat	Aerial	-	-	C
Chalinolobus gouldii	Gould's Wattled Bat	Open/edge	-	-	C
Chalinolobus morio	Chocolate Wattled Bat	Below canopy	-	-	C
Miniopterus orianae oceanensis	Eastern Bent-winged Bat	Open/edge	V	-	C
Ozimops ridei	Ride's Free-tailed Bat	Open/edge	-	-	C
Rhinolophus megaphyllus	Eastern Horseshoe Bat	Below canopy	-	-	C
Scoteanax rueppellii*	Greater Broad-nosed Bat	Open/edge	V	-	C
Vespadelus darlingtoni	Large Forest Bat	Below canopy	-	-	C
Vespadelus regulus	Southern Forest Bat	Below canopy	-	-	C
Falsistrellus tasmaniensis	Eastern False Pipistrelle	Below canopy	V	-	PR
Ozimops planiceps	South-eastern Free-tailed Bat	Open/edge	-	-	PR
Vespadelus vulturnus	Little Forest Bat	Below canopy	-	-	PR
Nyctophilus geoffroyi	Lesser Long-eared Bat	Below canopy	-	-	SG
Nyctophilus gouldi	Gould's Long-eared Bat	Below canopy	-	-	SG
Scotorepens balstoni	Inland Broad-nosed Bat	Open/edge	-	-	SG
Scotorepens greyii	Little Broad-nosed Bat	Open/edge	-	-	SG
Chalinolobus dwyeri	Large-eared Pied Bat	Open/edge	V	V	X
Myotis macropus	Southern Myotis	Below canopy	-	V	X
Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Aerial	V	-	X
Scotorepens orion*	South-eastern Broad-nosed Bat	Open/edge	-	-	X
Vespadelus troughtoni	Eastern Cave Bat	Below canopy	V	-	X

*** The site occurs just outside the known distribution range of the species however, given survey effort is probably low in these regions, it's possible that it may extend beyond the current known range.**

C –Almost certain, PR – Probable, SG – Species Group, X – Not Detected.

Bat activity was found overall to be relatively low, with several sites recorded very low activity (less than 10 passes) over multiple nights. Activity was highest at sites within, or in close proximity to, native vegetation. The data collected in spring suggests that cleared and thinned forestry sites show the lowest bat activity, with established forestry sites also showing low activity. This observation is consistent with what would be expected, given that insect and habitat diversity (including roost availability) is likely to be higher in areas of native vegetation than in forestry areas containing low species and structural diversity.

Threatened bat species or species potentially at-risk from collision

Three threatened bat species were positively identified (probable or almost certain) from the spring data:

- Eastern False Pipistrelle (Vulnerable, BC Act).
- Large (Eastern) Bent-winged Bat (Vulnerable, BC Act).
- Greater Broad-nosed Bat (Vulnerable, BC Act).

No calls showing diagnostic features for were found for other threatened species predicted to occur in the area including:

- Large-eared Pied Bat (Vulnerable, BC Act
- Southern Myotis (Vulnerable, BC Act).
- Yellow-bellied Sheathtail-bat (Vulnerable, BC Act and Endangered, EPBC Act).
- Eastern Cave Bat (Vulnerable, BC Act).

It should be noted that Yellow-bellied Sheathtail-bat may be a seasonal migrant and if present within the area, is mostly likely to occur between summer and autumn.

The Large (Eastern) Bent-winged Bat is listed as Vulnerable under the NSW BC Act and is considered a species credit species under the BAM specifically in relation to the species' breeding habitat. This breeding habitat is defined in TBDC (DPIE 2022) as any:

> *'Cave, tunnel, mine, culvert or other structure known or suspected to be used for breeding including species records with microhabitat code "IC – in cave;" observation type code "E nest-roost;" with numbers of individuals >500 or from the scientific literature'.*

Eastern Bent-winged Bat is also a species likely to be at increased risk of turbine collision as it is known to fly at height, and undertake long-distance and migratory movements. Unlike most Australian bats, which roost in trees, Eastern Bent-winged Bats rely on caves to roost and raise their young (Mills & Pennay 2017). They have also been recorded roosting in abandoned mines, military or railway tunnels and very large stormwater drains. The species forms discrete populations centred on roosts with individuals returning to the same cave to birth and rear young (DPIE 2021). Every year the entire female population of the species is concentrated in these maternity roosts to give birth and raise their young (Mills & Pennay 2017).

Following breeding, individuals disperse to wintering roosts within about a 300 kilometre range of the maternity cave (DPIE 2022). There are three large maternity colonies of Eastern Bent-winged Bats known in NSW (Mills 2020). Two of these, Church Cave in the Wee Jasper Nature Reserve and Drum Cave near Bungonia are 100-200 kilometres southwest and south of the subject land while the third, Willi Willi Cave is further north near Kempsey. A more recent maternity roost has also been described in an abandoned mine adit in the Mugii Murum-ban State Conservation Area, approximately 30 kilometres northeast of the subject land (Williams 2020). The proximity of these known Eastern Bent-winged Bat maternity roosts to the subject land is displayed on xx below.

Plate 1 Proximity of known Eastern Bent-winged Bat maternity roosts (yellow stars) to the subject land (red polygon)

Large Bent-winged Bat was recorded at several sites within the subject land. The site is well within the commuting distance of this species from three known nearby maternity caves as well as over-wintering caves at Borenore, Wellington, Wombeyan and Kanangara Boyd. It is possible that Large Bent-winged Bats either pass through the area when moving between maternity and overwintering caves, or undertake nightly foraging movements from nearby caves to within the study area.

When undertaking impact assessment for this species, it will be fundamental to understand the following:

- Are there any suitable roost sites within or in close proximity to the subject land?
- Are any suitable roost sites occupied by Large Bent-winged Bat or other cave-roosting species?
- Is occupation by bats ongoing or seasonal?
- How many bats are using the roosts at different times of year?
- How does activity of Large Bent-winged Bat change seasonally across the subject land?

To inform the above, it is recommended that the following survey work be undertaken:

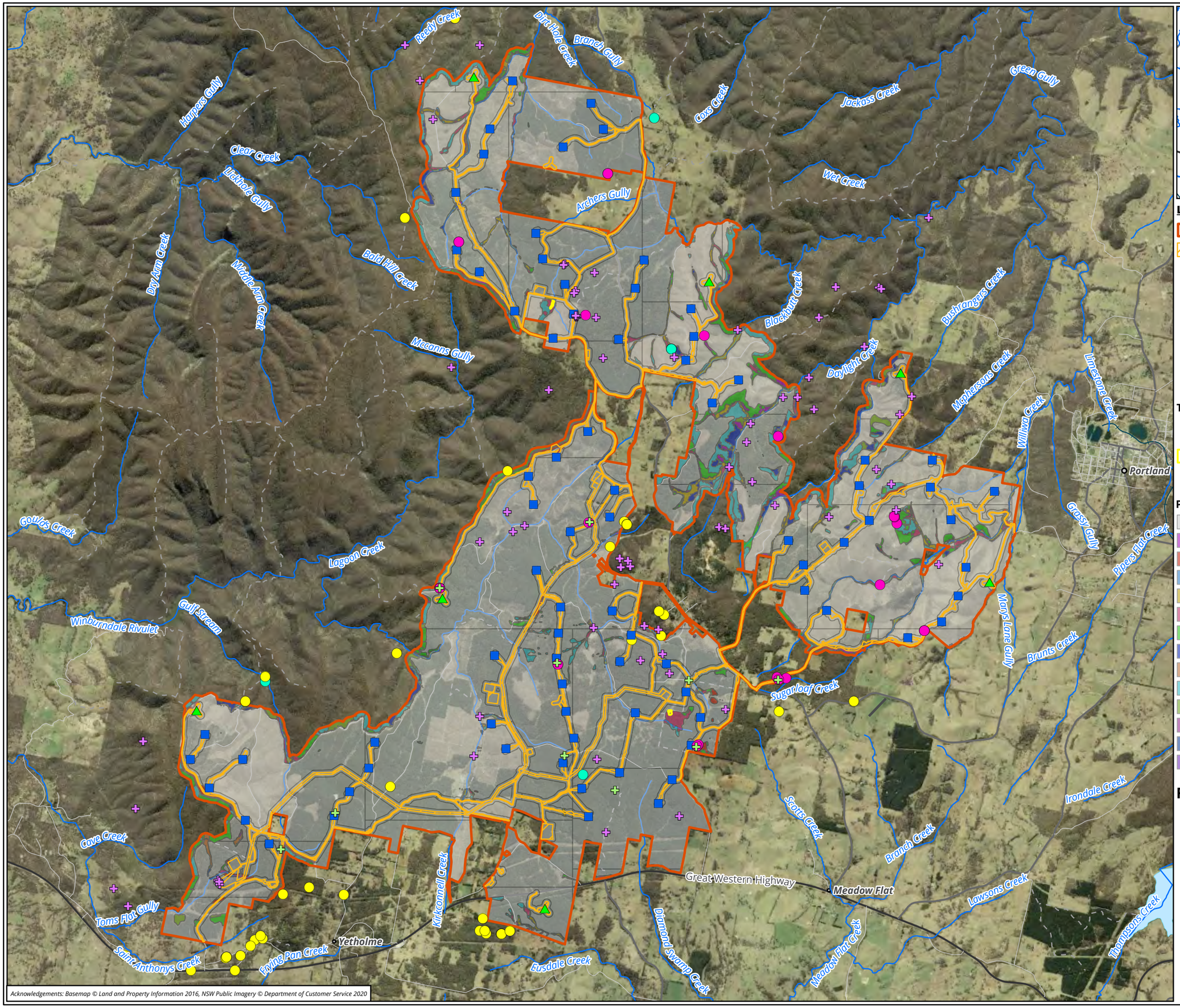
- Ground-truth the large number of historic mining work locations within and in close proximity to the subject land (Figure 2), to determine use by bats through visual observation of bats or other signs (guano, urine staining) or through the use of bat detectors or stag-watches. Large, unobstructed mine shafts and adits are the most likely sites to represent roosting habitat. Understanding which (if any) are occupied by bats will inform likely flight paths and areas to avoid when it comes to turbine placement.

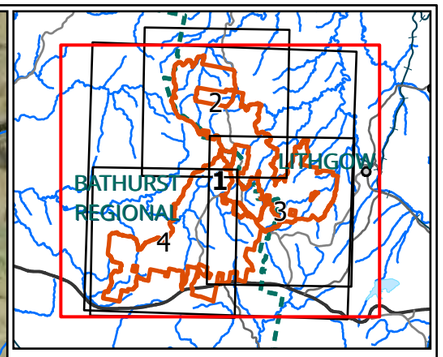
Sites in proximity to ultrasonic records of Eastern Horseshoe Bat and Large Bent-winged Bat would be the first sites to target.

- Where any likely bat roosts are identified, further monitoring to determine species and population size may include fly-out watches, thermal counts, long-term ultrasonic monitoring and harp trapping.

Understanding the possible impacts of the wind farm will require seasonal studies not just of the activity of this species within the site, but also a detailed investigation of possible roosting locations and potential long-term monitoring to estimate the size of the population that may be present within the subject land at different stages in its life cycle. The species is likely to be of high concern to regulators, and a thorough assessment of presence and distribution at the site will be required.

Detailed survey of potential roosts for Eastern Bent-winged Bat will also be valuable in assessing habitat and impacts for two other threatened cave-dwelling species that may occur at the site but which were not recorded during the current data: Large-eared Pied Bat and Eastern Cave Bat. These species are less likely to be at risk of turbine collisions as they are not thought to be high-flying like the Large Bent-winged Bat however, determining presence and distribution within the subject land, particularly of roosting habitat, will be important for meeting the avoid and minimise principles of the BAM with respect to impacts to threatened bats.





Legend

- Subject land
- Development footprint
- Met mast location
- Mineshaft - potential microbat habitat
- WTG
- BBUS Site
- BioNet - threatened fauna record
- BioNet - threatened flora record
- Biosis - threatened fauna record (Nov 2024)

Threatened Ecological Communities

- Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions (potential)

Plant community types

- Non-native / cleared
- 3211
- 3294
- 3303
- 3347
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- 3369
- 3534
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- 3735
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- 3932
- 4063
- 4134

Figure 2.1 Biodiversity values

0 800 1,600 2,400 3,200

Metres

Scale: 1:70,000 @ A3

Coordinate System: GDA2020 MGA Zone 55

N

biosis APEMGroup

Matter: 41213,
Date: 04 December 2024 ,
Prepared for: CW, Prepared by: OW, Last edited by: owilliams
Layout: 41213_F2_BioValues
Project: P:\41200s\41213\Mapping\
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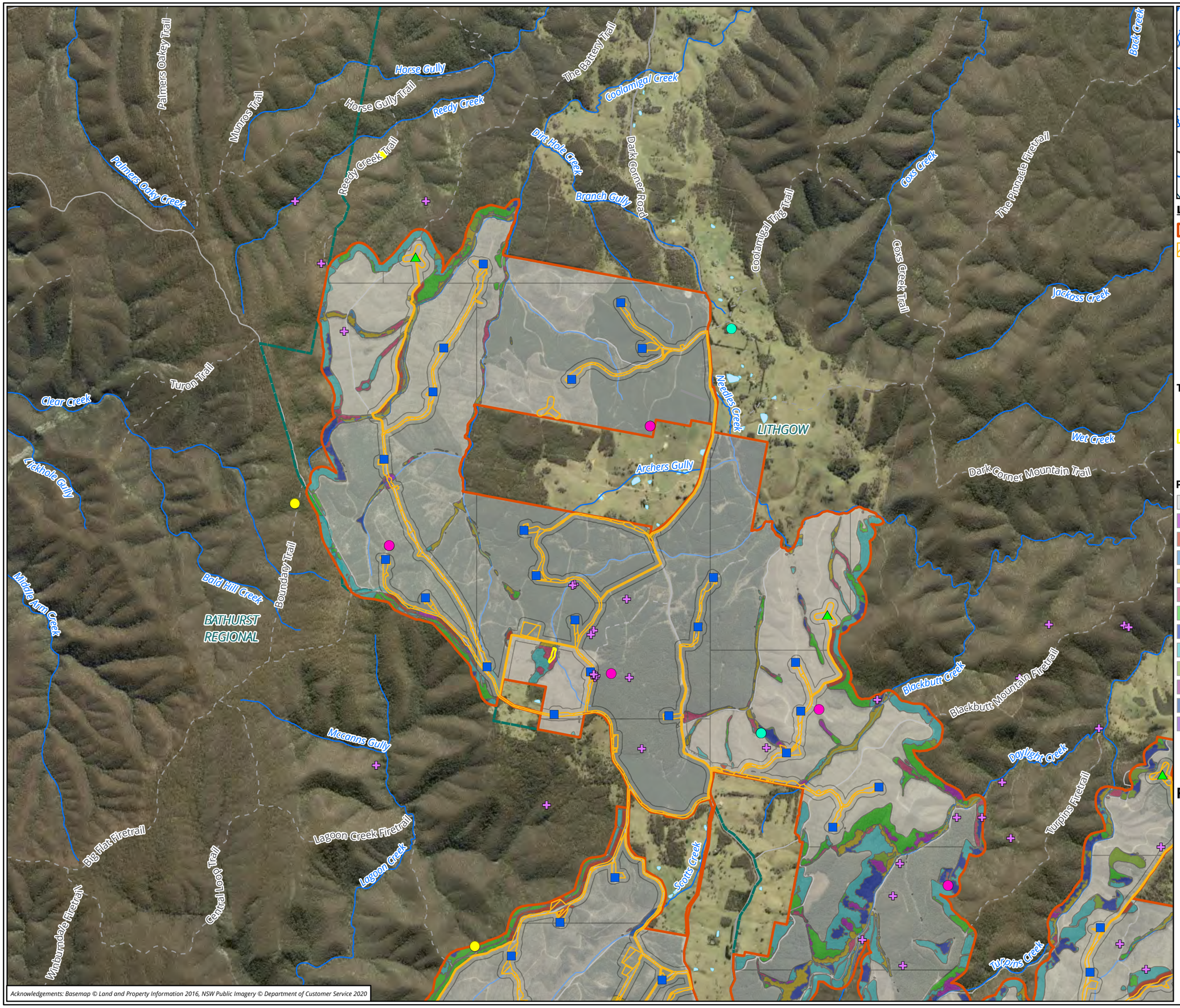

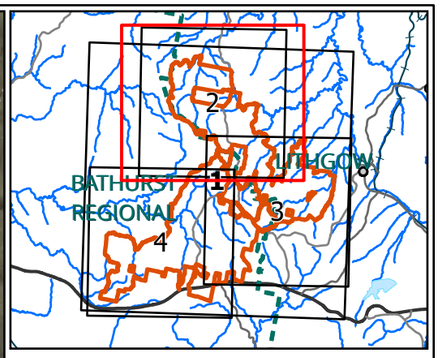

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- 4134

Figure 2.2 Biodiversity values

0 450 900 1,350 1,800

Metres

Scale: 1:40,000 @ A3

Coordinate System: GDA2020 MGA Zone 55

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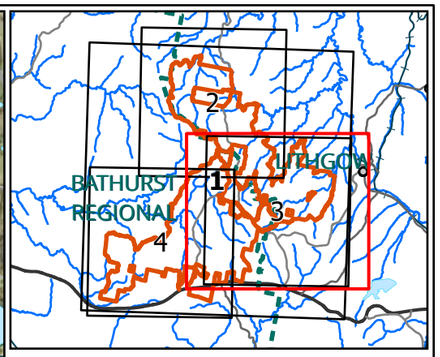

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Figure 2.3 Biodiversity values

0 450 900 1,350 1,800

Metres

Scale: 1:40,000 @ A3

Coordinate System: GDA2020 MGA Zone 55

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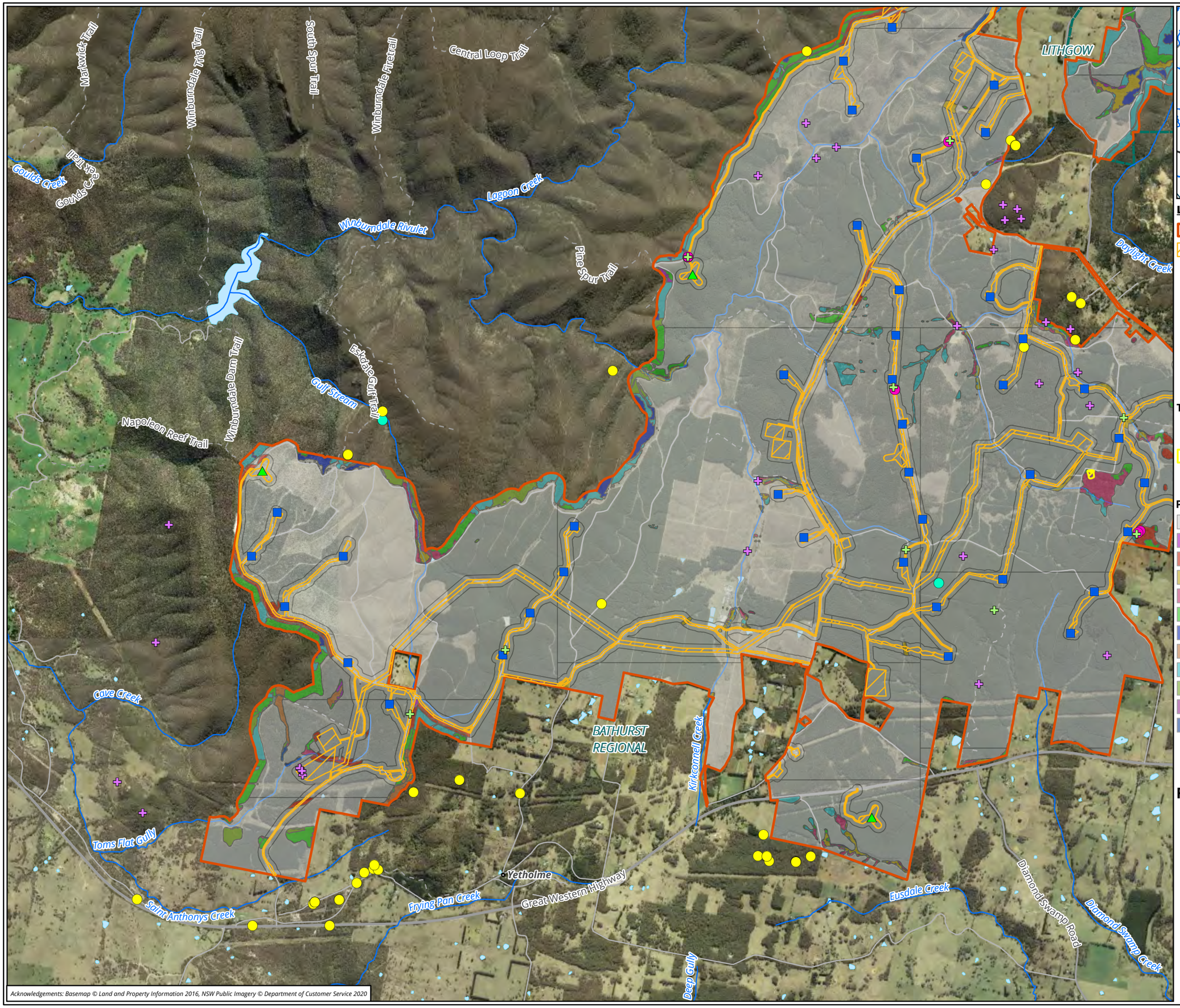

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Figure 2.4 Biodiversity values

0 450 900 1,350 1,800

Metres

Scale: 1:40,000 @ A3

Coordinate System: GDA2020 MGA Zone 55

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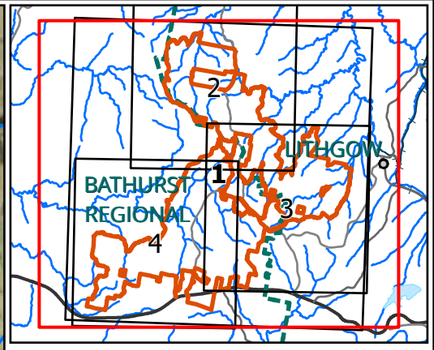

Legend

- Subject land
- Development footprint
- Met mast location
- WTG

WTG, powerline constraints

- Very high constraint
- Higher risk area

Civil constraints

- Very high constraint
- High constraint
- Low constraint

Portland

Meadow Flat

Great Western Highway

Yetholme

Figure 3.1 Preliminary biodiversity constraints mapping

0 800 1,600 2,400 3,200

Metres

Scale: 1:70,000 @ A3

Coordinate System: GDA2020 MGA Zone 55

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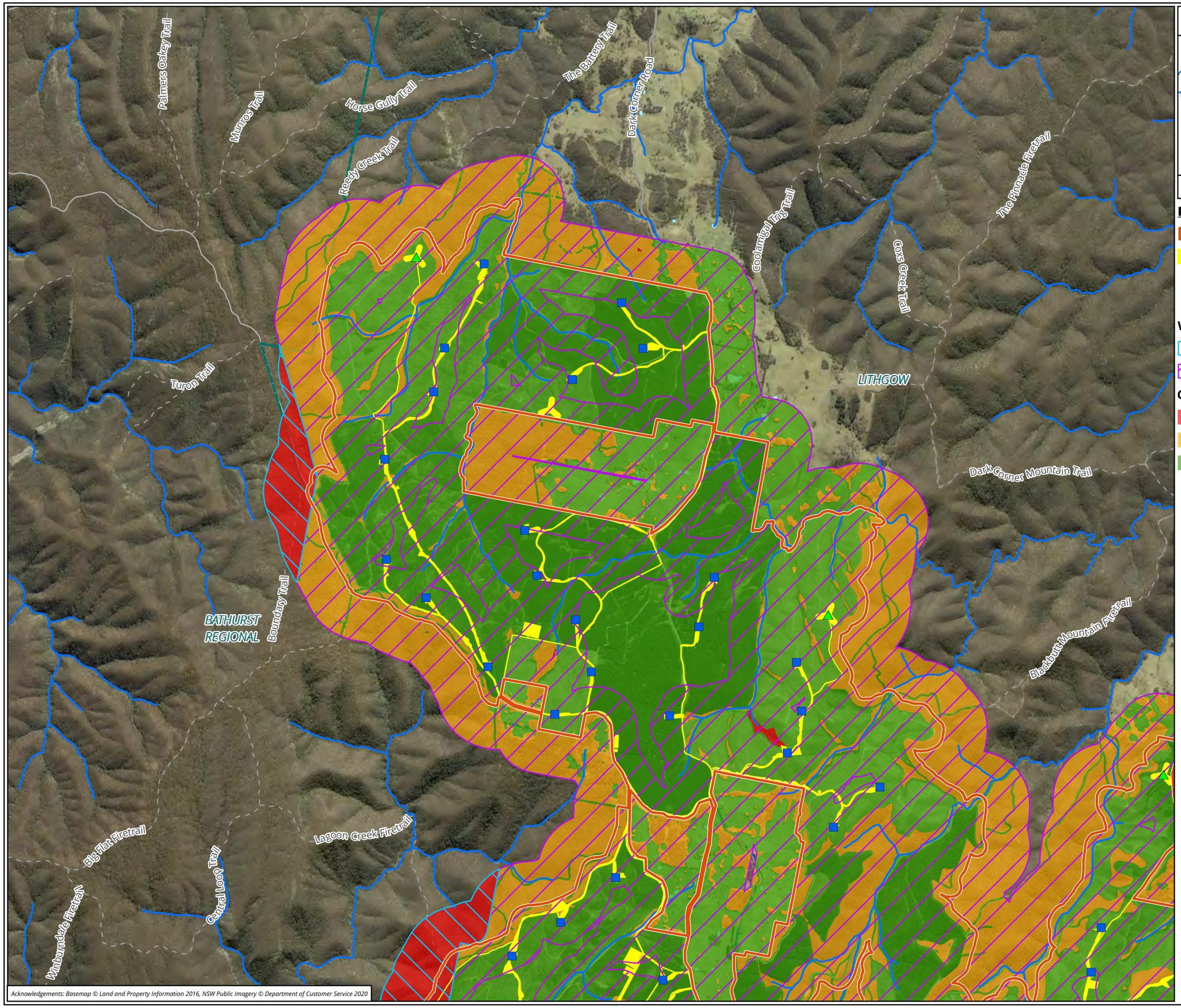

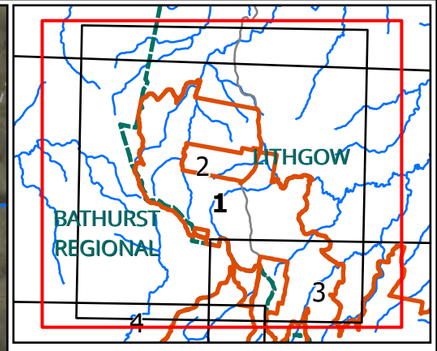

Legend

- Subject land
- Development footprint
- Met mast location
- WTG

WTG, powerline constraints

- Very high constraint
- Higher risk area

Civil constraints

- Very high constraint
- High constraint
- Low constraint

Figure 3.2 Preliminary biodiversity constraints mapping

0 460 920 1,380 1,840

Metres

Scale: 1:40,000 @ A3

Coordinate System: GDA2020 MGA Zone 55

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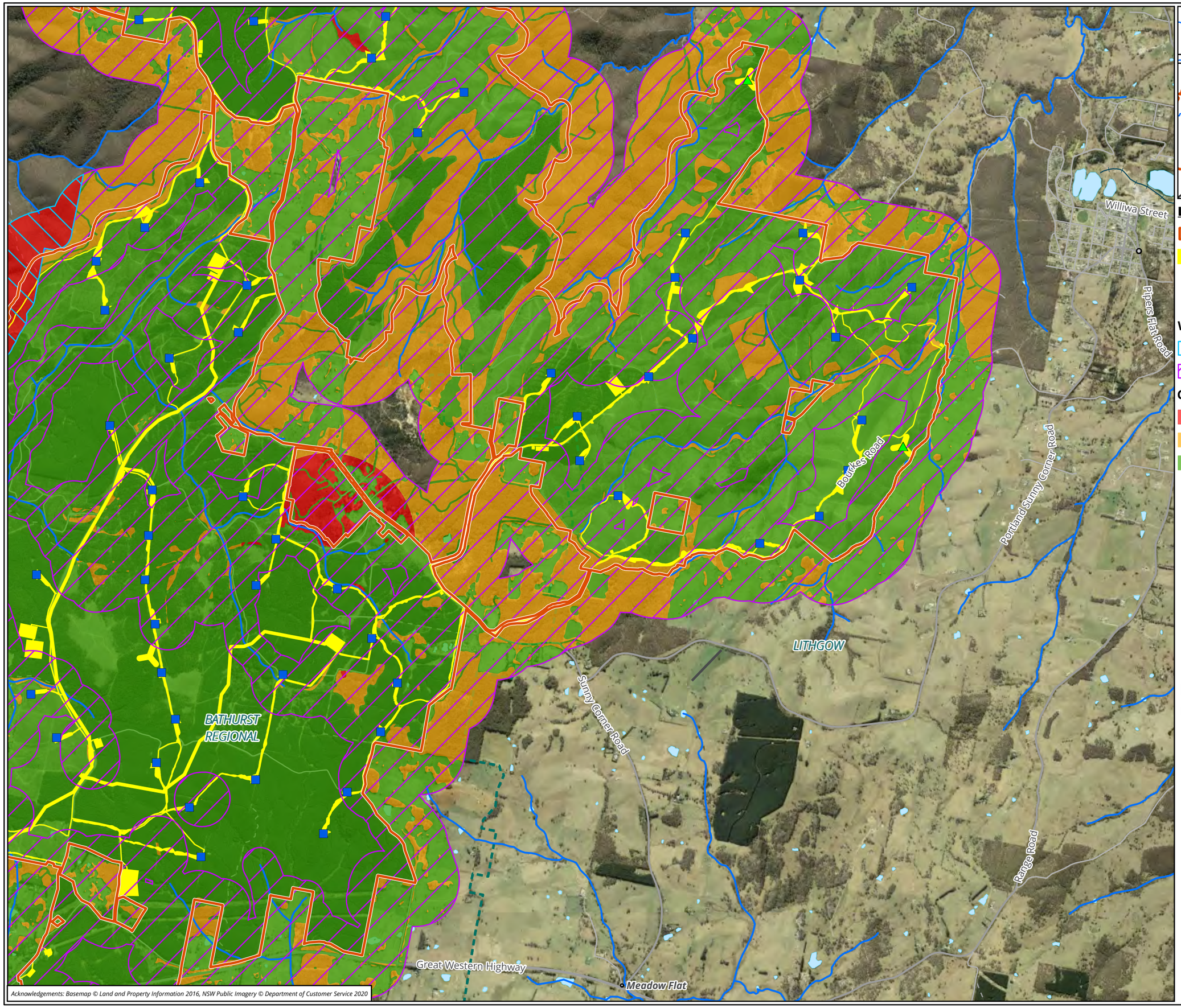

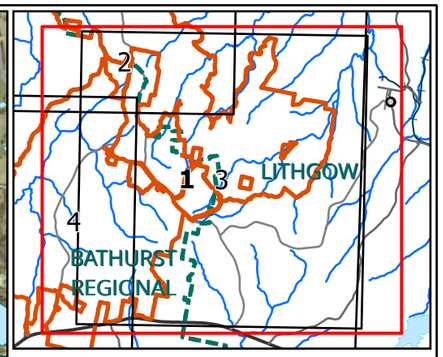

Legend

- Subject land
- Development footprint
- Met mast location
- WTG

WTG, powerline constraints

- Very high constraint
- Higher risk area

Civil constraints

- Very high constraint
- High constraint
- Low constraint

Figure 3.3 Preliminary biodiversity constraints mapping

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Metres

Scale: 1:40,000 @ A3

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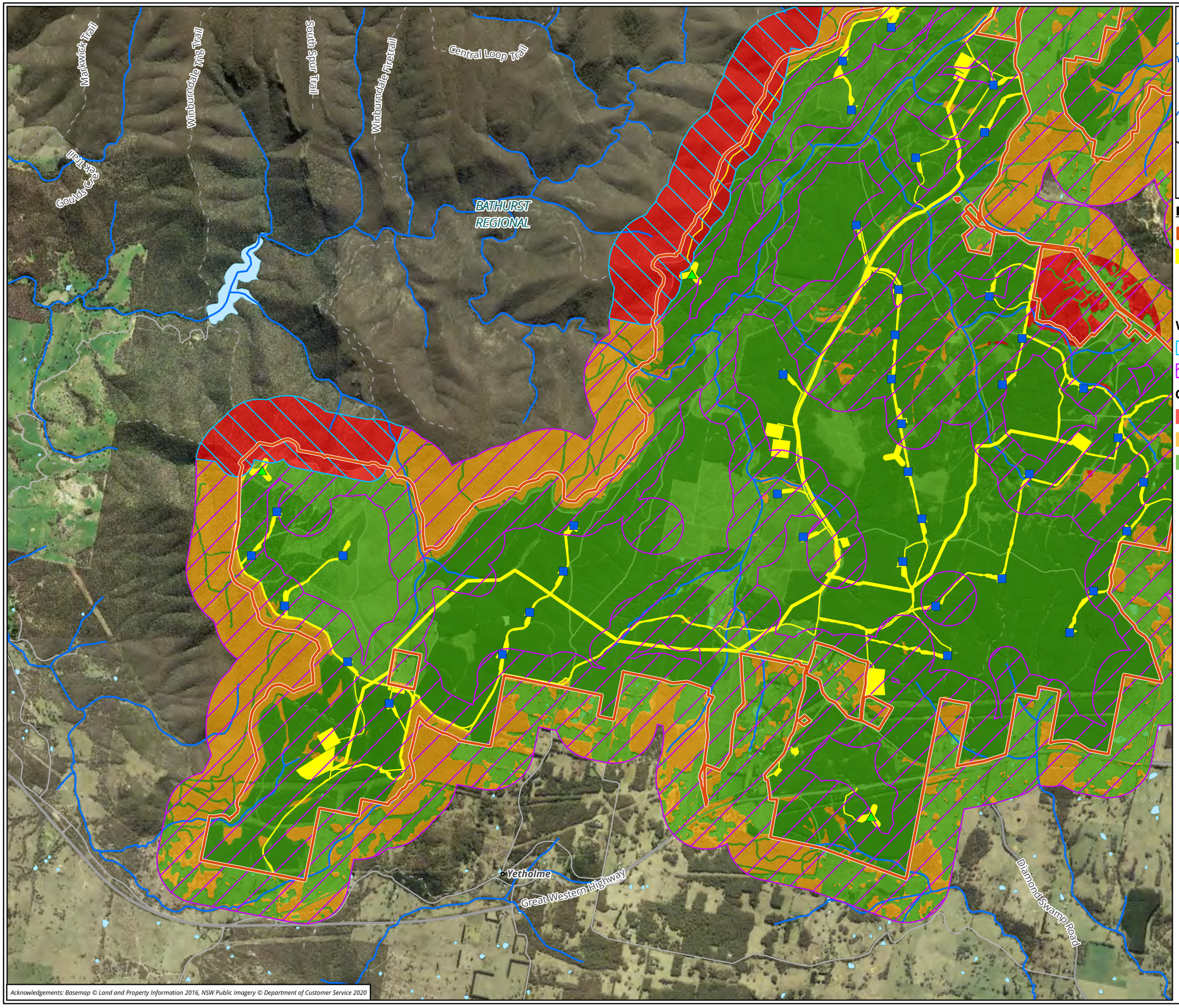

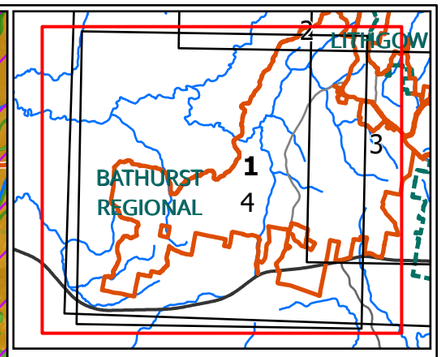

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- Development footprint
- Met mast location
- WTG

WTG, powerline constraints

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Civil constraints

- Very high constraint
- High constraint
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Figure 3.4 Preliminary biodiversity constraints mapping

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Metres

Scale: 1:40,000 @ A3

Coordinate System: GDA2020 MGA Zone 55

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5 Preliminary impact assessment and next steps

5.1 Biodiversity values and potential impacts

Biodiversity values and potential impacts presented herein are based largely on the ground validated results of the field investigations completed in November 2024, with areas of the subject land outside the preliminary disturbance footprint, subject to assessment and constraints based on modelled vegetation (SVTM) only. Despite being located within Sunny Corner State Forest and being dominated by soft wood pine plantation, the study area supports a range of biodiversity values and habitat for threatened species, a small number of which have been recorded to date.

Areas dominated by pine plantation are considered to be of lower risk of impact, whereas higher risk areas are associated with higher condition, wooded PCTs associated with remnant vegetation and existing creeklines. Ongoing application of the principles of avoid, minimise and mitigate will be essential in development of a project design with further detailed surveys to be completed as part of the BDAR.

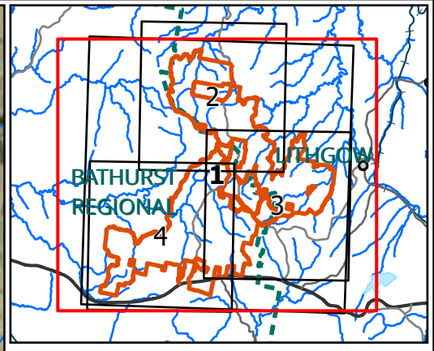
There are, however, ample opportunities to locate project infrastructure, particularly WTGs, in areas considered to be of lower risk to biodiversity values, and this has been the focus of the preliminary disturbance footprint designed to date. Impacts to native vegetation and higher quality habitats would largely be restricted to linear infrastructure such as reticulation and transmission. Risks associated with WTG and powerline collisions are expected to be relatively uniform in terms of their occurrence over the life of the operation of the wind farm.

Biodiversity constraints have been presented on a worst-case scenario basis to allow for consideration of impact minimisation over the life of the project, and strategies are likely to be able to be developed that balance impact minimisation with maximising the benefits a project of this nature can provide.

Forestry operations

One further consideration is the operational nature of the forestry activity within the subject land, with 18 % of the preliminary disturbance footprint (90.4 hectares of a total 499.1 hectares) 23 % of the broader subject land (2,391.7 hectares of a total 10,434 hectares) to be scheduled to be subject to either clear felling or thinning between 2023 (having already occurred) and 2028 (Figure 4). Operations are expected to continue into the foreseeable future and over the life of the operational wind farm.

This cycle of disturbance is like to have the effect of regular negative impacts to the habitat value of the pine plantations within the subject land, and will form a key consideration during the project's impact assessment. It is acknowledged that the cycle of forestry harvesting is relatively long-term, and that species may utilise these non-native habitats for various life-cycle components, however where areas have been recently cleared, or are scheduled to be cleared prior to, and potentially immediately post, construction of the project, these areas will be assessed on the basis of this disturbance for the level of biodiversity impact directly relating to the project, where appropriate to do so.



Legend

- Subject land
- Development footprint
- Environmental exclusion area

Harvest schedule

- Clear Felling - Fin Year 2023
- Clear Felling - Fin Year 2024
- Clear Felling - Fin Year 2025
- Clear Felling - Fin Year 2026
- Clear Felling - Fin Year 2027
- Clear Felling - Fin Year 2028
- Thinning - Fin Year 2023
- Thinning - Fin Year 2024
- Thinning - Fin Year 2025
- Thinning - Fin Year 2026
- Thinning - Fin Year 2027
- Thinning - Fin Year 2028

Plant community types

- Non-native / cleared
- 3211
- 3294
- 3303
- 3347
- 3367
- 3369
- 3534
- 3734
- 3735
- 3747
- 3932
- 4063
- 4134

Figure 4.1 Forestry operations

0 800 1,600 2,400 3,200

Metres

Scale: 1:70,000 @ A3

Coordinate System: GDA2020 MGA Zone 55

N

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Layout: 41213_F4_ForestryOperations
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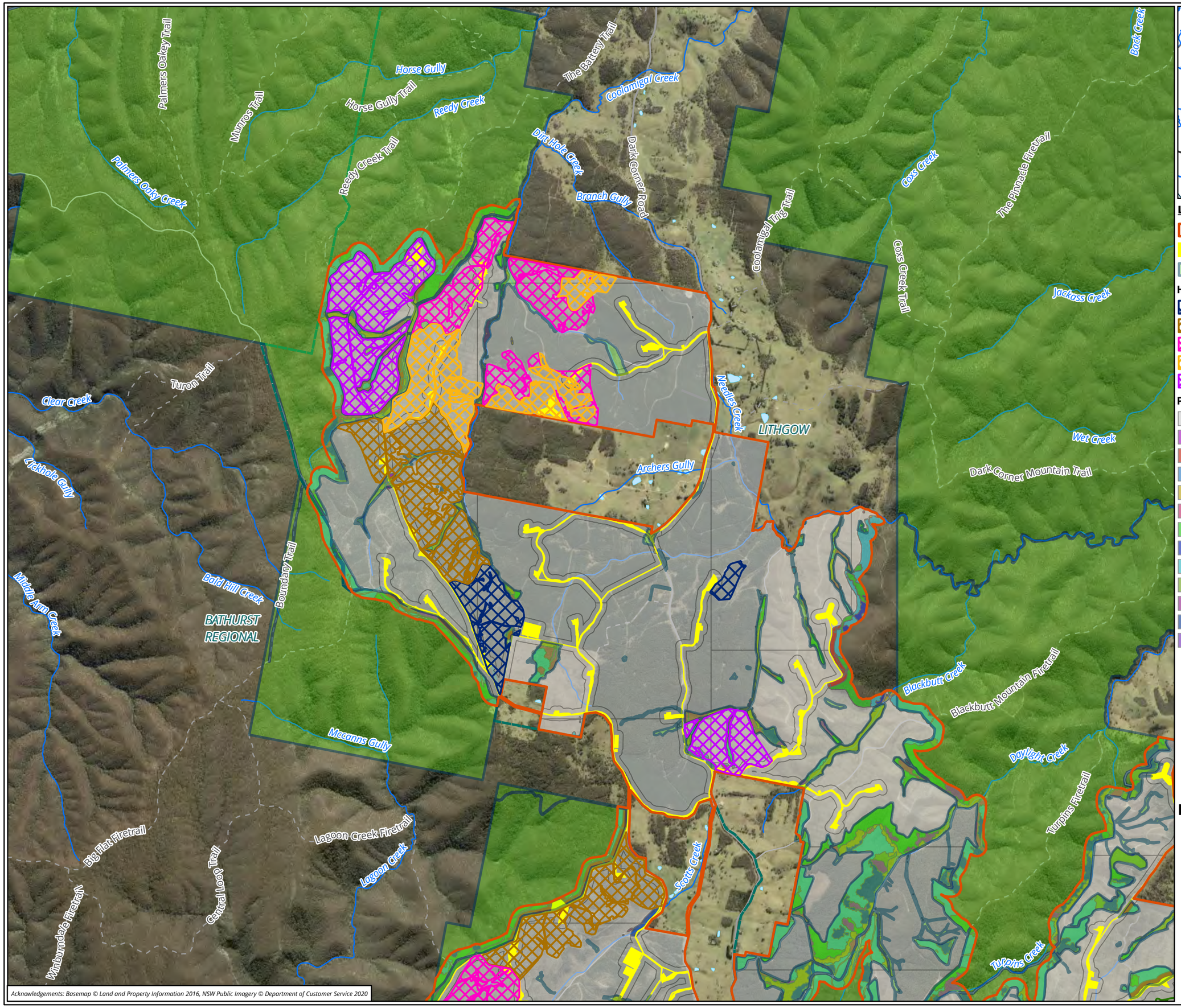

Legend

- Subject land
- Development footprint
- Environmental exclusion area

Harvest schedule

- Thinning - Fin Year 2023
- Thinning - Fin Year 2024
- Thinning - Fin Year 2025
- Thinning - Fin Year 2026
- Thinning - Fin Year 2028

Plant community types

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- 3211
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Figure 4.2 Forestry operations

0 450 900 1,350 1,800

Metres

Scale: 1:40,000 @ A3

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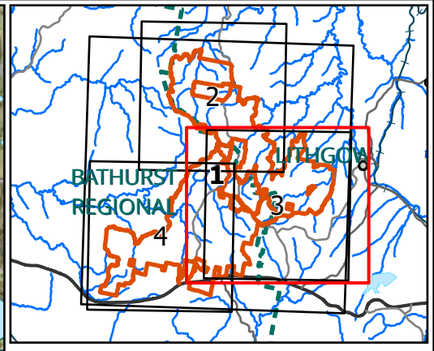

Legend

- Subject land
- Development footprint
- Environmental exclusion area

Harvest schedule

- Clear Felling - Fin Year 2023
- Clear Felling - Fin Year 2024
- Clear Felling - Fin Year 2025
- Clear Felling - Fin Year 2026
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Figure 4.3 Forestry operations

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Metres

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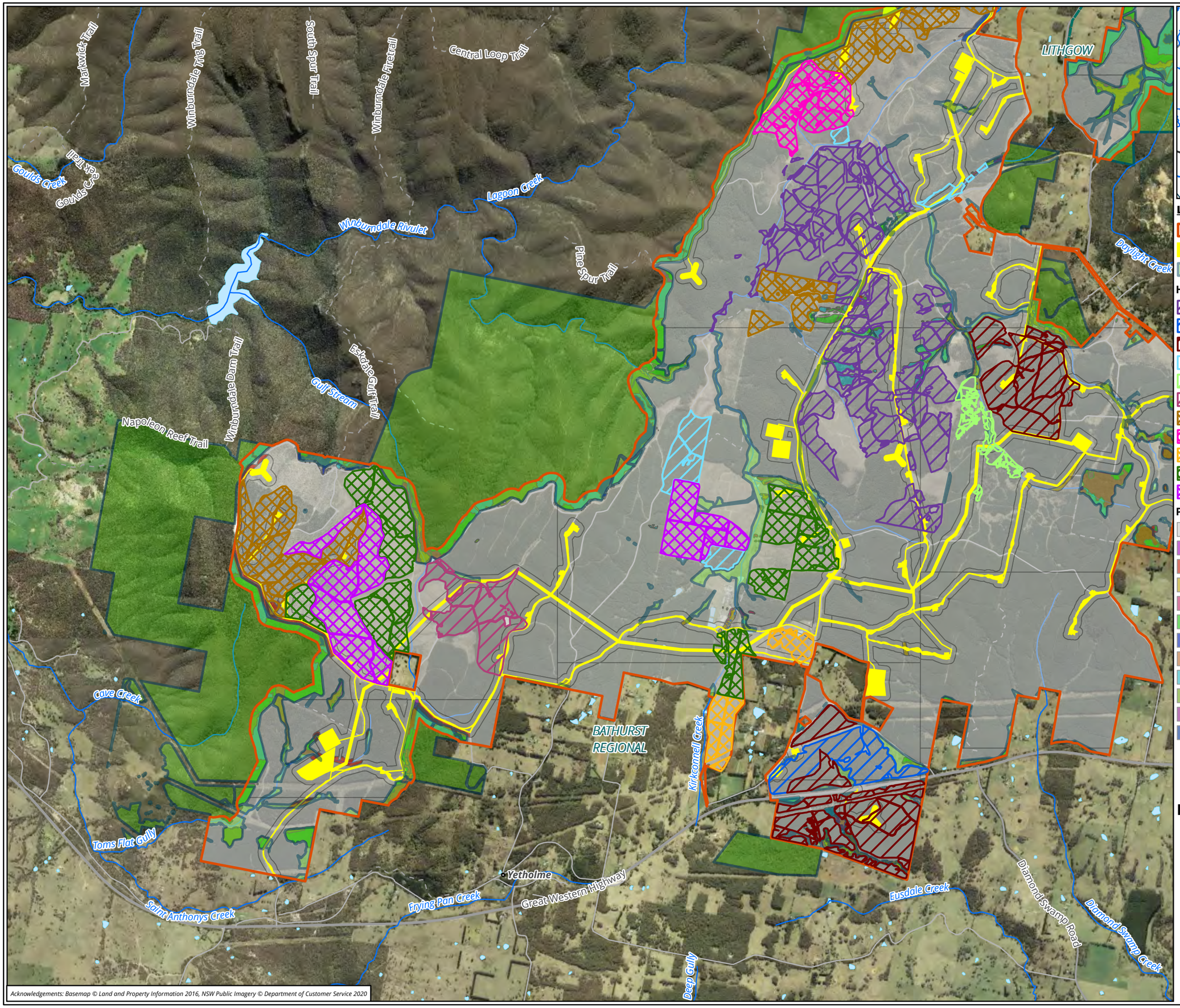

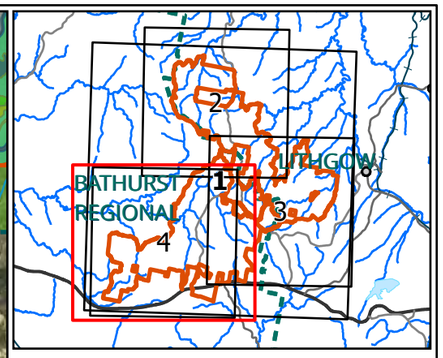

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Metres

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Wind and powerline and civil works constraints

Modelled biodiversity constraints for the project have been developed in accordance with the hierarchy and method outlined in Table 1 and are illustrated on Figure 3 above. Higher level constraints for wind farm projects, generally relate to the risk of impact associated with turbine strike and overhead powerline collisions, particularly for threatened and protected bird and bat species. Impacts of this nature are generally considered to be significant by regulators, and have been, and will continue to be, avoided and minimised by the Project.

Areas of higher risk within the subject land, in relation to fauna collision impacts, are associated with native vegetation and riparian areas providing habitat for aerial species and 200 metre to 300 metre buffers on these areas where activity with rotor swept area is likely to be higher form species moving into or out of habitats. Project infrastructure will be minimised in these areas to the fullest extent possible, to minimise the potential for impacts such as loss of breeding opportunities, and potential collision with WTGs or overhead powerlines by protected species. Areas of additional higher risk occur in areas where activity is considered likely to be higher with birds and bats moving between habitats as part of regular flights, or areas where the operation of WTGs has the potential to result in ongoing disturbance to breeding or other important habitats. These areas are yet to be determined and will form part of ongoing efforts to avoid and minimise impacts of the project. WTG exclusion areas will be implemented where possible. In excluding or minimising WTGs from these areas, it will be ensured that the minimum setback will also remain free from turbine blades. This impact minimisation measure is noted as a material item of feedback from BCS on other wind farm projects BDAR, and is an important means of minimising impacts of the project. WTGs placed within higher risk areas may be more likely to be subject to seasonal, or event-based, curtailments (or similar).

Modelled biodiversity constraints for civil works associated with the project have been developed in accordance with the hierarchy and method outlined in Table 1 and are illustrated on Figure 3 above. Higher level constraints for civil works (i.e. roads, hardstands, WTG and transmission line towers, ancillary facility etc.), generally relate to direct and indirect impacts to TECs, threatened species populations and habitats, and areas of native vegetation.

Due to the low levels of native vegetation within the subject land, all areas are considered a high constraint to the project to ensure all efforts to avoid and minimise impacts are undertaken. This is due to the legislative requirements to avoid and minimise impacts, and the potential for threatened species to occur. Threatened flora records exist within the subject land, including the serious and Irreversible impacts (SAII) species Robertson's Peppermint, and all efforts should be made from the outset to avoid impacts to these known records, and further assessment will be undertaken to assess the subject land and disturbance footprint for this and other threatened flora during the development of the BDAR.

Locating project infrastructure within areas of moderate and low constraints is considered most suitable and is likely to result in the least amount impacts to biodiversity values. In locating project infrastructure in these areas, the potential for more significant or substantial impacts will be minimised and the operational phase of the wind farm is less likely to be subject to ongoing impact minimisation measures, such as curtailment strategies. Assessment of collision risk is required, however the potential for significant risk and impact will be reduced and mitigated against.

5.2 SAII species and communities

Serious and Irreversible impacts (SAII) are defined by the BC Act as an impact that a consent authority considers likely to significantly increase the extinction risk of a threatened species or ecological community. Under section 9.1 of the BAM, the consent authority is responsible for determining if a SAII impact is likely to occur. This assessment includes:

- Identifying every potential SAII entity that may occur.
- Evaluating the nature of the impact on each entity.
- Documenting efforts to avoid and minimise impacts on biodiversity in accordance with the assessment criteria.

The BAM assessment pathway will determine the presence of SAII species and communities within the subject land. SAII species and communities have the potential to occur within the subject land. These include:

- Bathurst Grassland Earless Dragon *Tympanocryptis mccartneyi* (Critically Endangered, BC Act and EPBC Act).
- Large Bent-winged Bat *Miniopterus orianae oceanensis* (Vulnerable, BC Act)
- Large-eared Pied Bat *Chalinolobus dwyeri* (Vulnerable, BC Act and Endangered, EPBC Act)
- Robertson's Peppermint *Eucalyptus robertsonii* subsp. *hemisphaerica* (Vulnerable, BC Act and EPBC Act)
- Yellow-spotted Tree Frog *Litoria castanea* (Critically Endangered, BC Act and EPBC Act)

The potential for SAIIs will be further investigated as part of the preparation of a BDAR. Of particular importance will be the determination of potential breeding habitat supported by, among other items, disused mine shafts and adits for Large Bent-winged Bat (recorded within the subject land), Large-eared Pied Bat and potential Eastern Cave Bat *Vespadelus troughtoni* (both considered to potentially occur within the subject land). Impacts within 100 metres of known/potential breeding habitat will be considered a potential SAII under the BAM.

As noted in Section 4.2, PCTs 3303 and 4134 are both modelled by the SVTM as occurring within the subject land and are associated with the BC Act listed TEC *Mt Canobolas Xanthoparmelia Lichen Community* which is an SAII entity. However, this TEC is not considered to be present, therefore a potential SAII to this community is not considered possible.

5.3 Estimated direct impacts to biodiversity values

The preliminary disturbance footprint has been developed following initial efforts to avoid and minimise impacts to biodiversity values as outlined above, with the estimated direct impacts associated with the project outlined in Table 7 below.

Table 7 Estimated direct impacts of the project

Biodiversity value	Estimated impacts
Native vegetation and habitats	
• 8 PCTs (rapid ground-validated) • Non-native vegetation	• 38.65 ha • 460.41 ha
TECs	
• Montane Peatlands and Swamps (BC Act and EPBC Act) (Potential)	• No direct impacts expected to occur
Potential SAII candidate species habitat	
• Bathurst Grassland Earless Dragon • Large Bent-winged Bat* • Large-eared Pied Bat* • Robertson's Peppermint • Yellow-spotted Tree Frog	• 0.83 ha of potential habitat • 38.65 ha of native vegetation • 38.65 ha of native vegetation • 0.21 ha of potential habitat • 25.72 ha of potential habitat

*** SAII relates to impacts within 100 m of known/potential breeding habitat only**

5.4 Collison risk modelling and Bird/Bat operational management plans

The overall objectives of a Bird and Bat adaptive Management Plan (BBAMP) is to provide an effective monitoring program and strategy to manage and mitigate operational issues relating to bird and bat impacts for the wind farm. Guided by the collision risk modelling and assessment as well as the WTG risk assessment, and importantly, additional baseline data, a detailed BBAMP will be developed, in consultation with relevant agencies, to inform adaptive management measures around the potential for collision mortality, barrier effects and behavioural displacement of resident, nomadic and migratory bird and bat species.

The BBAMP would include baseline data on threatened bird and bat species as well as those considered at moderate risk surrounding the development that could potentially be affected. One of the key objectives for the collection of detailed baseline data is to gather adequate information that can be replicated on the existing bird and bat species abundance prior to commencement of construction of the wind farm. This includes the setup of impact zones and control zones that would be monitored pre-construction and upon operation for an agreed amount of time. The data collected will be utilised to detect changes in the species use (including changes in activity patterns such as avoidance) of the site post-construction and during operation of the wind farm and allow for stringent mitigation measures to be implemented as and when they are required to be.

Bird and bat utilisation surveys commenced in November 2024 with the collection of the initial spring season data that will be required to inform the biodiversity impacts assessment and preparation of the BBAMP.

Construction and operational management plans will all contain an adaptive management component. Adaptive management strategies will be receptive to any new and relevant data that may arise through ongoing assessment and monitoring and is key to the successful implementation of crucial objectives yet also allow flexibility to changing dynamics and ongoing feedback and results. This includes measures to monitor predicted and uncertain impacts which will trigger adaptive management actions and allow for effective and quick responses.

An overall Environmental Management Strategy (EMS) would need to be developed with site specific sub management plans that will entail an adaptive management strategy component. Those sub management plans in relation to biodiversity should include but are not limited to a Biodiversity Management Plan (BMP) and BBAMP.

5.5 Indirect, prescribed and uncertain impacts

Targeted surveys will be undertaken for each of the candidate species as to assess all impacts, inclusive of indirect, prescribed and uncertain impacts. The targeted survey will:

- Use methods appropriate for the species being targeted.
- Be performed at times of the year appropriate for identifying the species.
- Be based on a repeatable method for inclusion in any ongoing monitoring program post-approval.

Based on the outcomes of the targeted survey the BDAR will include:

- Maps of the predicted and habitual flight paths for nomadic and migratory species likely to fly over the subject land.
- Maps of the likely habitat for resident threatened aerial and raptor species.

As the proposed project is a wind farm, prescribed impacts listed for collision risk in Section 6.1.5 of the BAM applies. During the preparation of the BDAR, a candidate list of species that may use the subject land as a flyway or migration route will be identified including:

- Resident threatened aerial species.
- Resident raptor species.
- Nomadic and migratory species that are likely to fly over the project area or periodically breed win the locality.

The survey requirements pre-construction require the collection of baseline data and the ongoing requirements through operation can be intensive and could form a component of the biodiversity management of an approved wind farm project.

6 Recommendations

The result of preliminary and future field surveys will be used to continue to guide the design for the project. Avoiding and minimising impacts to biodiversity will be considered further during detailed design revisions and will be developed in consultation with relevant stakeholders and agencies. Specific considerations will include:

- Avoidance and minimisation of impacts to potential SAII entities.
- Clearing of native vegetation to the minimum extent necessary.
- Maximising project infrastructure outside high constraint and higher collision risk areas to reduce direct and indirect impacts.
- Development of impacts minimisation strategies including maintenance of WTG-free buffer zones (flyways) through the subject land, between habitat features during project design.
- Minimisation of impacts in areas of good condition native vegetation and habitats.
- Avoidance of areas of greater collision risk to resident birds and bats and migrating species.
- Development of measures in designing WTGs to dissuade perching and minimise the diameter, and maximising the height, of the rotor swept area.
- Cross reference with other site/value-based constraints – e.g. Aboriginal cultural heritage values and flood prone areas.

Further recommendations relating to the assessment of impacts to birds and bats includes:

- Seasonal monitoring will continue to capture a full 24 month period of pre-construction surveys, totalling two surveys per season. This is consistent with expectations from the Commonwealth and NSW governments.
- Application of set-back buffers from woodland habitats to blade tip are recommended for turbine locations, and suitable buffers also for powerline exclusion, due to increased risk of bird and bat collision. Such setbacks will also minimise impacts to potential bird and bat breeding/roosting habitat supported by wooded areas.
- Turbine and powerline development could occur in these buffer areas but collision risk would be increased which may affect approvals and wind farm operations (e.g. mitigation and potential curtailment requirements). Civil works (such as roads and trenching) are likely to be acceptable in these buffers except for places identified as high constraint (e.g. threatened species/community habitat).
- Continuous (or long-term semi-continuous around other field visits) monitoring at height will be required for capturing any migratory movements of Yellow-bellied Sheathtail-bat and Large (Eastern) Bent-winged Bat that may be occurring through the subject land. This will occur using the project's met mast(s) once established.
- The presence of cave dwelling microbat species such as the Eastern Horseshoe Bat and Large (Eastern) Bent-winged Bat indicate that suitable roosting habitat for cave-roosting species is likely to be present in the broader locality. More information and ground truthing is required, including the identification of mineshafts and caves within, and in close proximity to, the subject land to assess whether these represent suitable roosting/breeding habitat for threatened cave-roosting bats and if so, estimate the number of individuals likely to use them, and whether the habitat is being used for breeding.

A number of the above impact minimisation strategies have already been implemented during initial project design, and further work will continue as the assessment stage of the project progresses, and the BDAR is developed.

As part of a BDAR, detailed ecological surveys, investigations and assessment will be undertaken including:

- Further detailed mapping of PCTs and ecological condition states to develop vegetation zones.
- Collection of floristic plot data.
- Confirmation of presence/extent of any TECs.
- Targeted surveys for candidate flora and fauna species.
- Full 24 months bird and bat utilisation surveys.
- Assessment of all direct, indirect and prescribed impacts.
- Offset planning for unavoidable residual impacts.

On-site survey effort by suitability qualified ecologists will be undertaken to further ground truth vegetation types, associations with TECs and associations with threatened species habitats. Field surveys in relation to the BDAR will be grouped together into optimal surveys windows to address the requirements of the BAM, most likely within spring and summer. Surveys required for future operational requirements in the way of BBUS for collision risk modelling will require field data capture across all seasons and across a minimum 24 month survey period.

Further consultation will be undertaken over the duration of the project with BCS and Cth DCCEEW to ensure the assessment aligns with regulator expectations and provides sufficient information and assessment to demonstrate impacts have been accurately described and suitably assessed.

As the project may significantly impact MNES, EPBC Act assessment requirements are also considered likely, and would need to be addressed with an EPBC referral and assessed under the NSW bilateral agreement if deemed a Controlled Action.

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Appendices

Appendix 1 Flora

Flora species recorded during November 2024 rapid field assessments

Notes to tables:

Status – EPBC Act: CE – Critically Endangered EN – Endangered VU – Vulnerable	**Status – BC Act:** E1 – endangered species (Part 1, Schedule 1) E2 – endangered population (Part 2, Schedule 1) E4 – presumed extinct (Part 4, Schedule 1) E4A – critically endangered V – vulnerable (Part 1, Schedule 2)

Table 8 Flora species recorded from the study area

Scientific name	Common name	Commonwealth status	NSW status
Native species			
Acacia dealbata	Silver Wattle		
Acacia melanoxylon	Blackwood		
Arrhenechthites mixta	Purple Fireweed		
Boronia pinnata			
Bursaria spinosa	Native Blackthorn		
Cassinia sifton			
Cassinia uncata	Sticky Cassinia		
Daviesia latifolia	Bitter-pea		
Eucalyptus dalrympleana	Mountain Gum		
Eucalyptus dives	Broad-leaved Peppermint		
Eucalyptus fastigata	Brown Barrel		
Eucalyptus pauciflora	White Sally		
Eucalyptus rubida	Candlebark		
Eucalyptus stellulata	Black Sally		
Eucalyptus viminalis	Ribbon Gum		
Exocarpos cupressiformis	Cherry Ballart		
Gahnia spp.			
Geranium solanderi	Native Geranium		
Hibbertia obtusifolia	Hoary Guinea Flower		
***Juncus* sp.**	A Rush		
Lagenifera stipitata	Blue Bottle-daisy		
Lomandra filiformis	Wattle Matt-rush		
Lomandra longifolia	Spiny-headed Mat-rush		

Scientific name	Common name	Commonwealth status	NSW status
Lomandra multiflora* subsp. *multiflora	Many-flowered Mat-rush		
Lomatia myricoides	River Lomatia		
Luzula densiflora	Woodrush		
Mirbelia platylobioides			
Monotoca scoparia			
Olearia erubescens	Pink-tip Daisy-bush		
Oxalis perennans			
Oxylobium oxylobioides	Mountain Oxylobium		
Poa meionectes			
Poa sieberiana	Snowgrass		
Poranthera microphylla	Small Poranthera		
Poranthera microphylla	Small Poranthera		
Pteridium esculentum	Bracken		
Rhytidosporum procumbens			
Wahlenbergia communis	Tufted Bluebell		
Exotic species			
Conyza bonariensis	Flaxleaf Fleabane		
Erodium cicutarium	Common Crowfoot		
Gamochaeta calviceps	Cudweed		
Lysimachia arvensis	Scarlet Pimpernel		
Pinus radiata	Radiata Pine		
Rubus fruticosus sp. agg.	Blackberry complex		
Senecio spp.	Fireweed		
Sonchus oleraceus	Common Sowthistle		
Taraxacum officinale	Dandelion		

Appendix 2 Fauna

Fauna species recorded during November 2024 rapid field assessments and BBUS

Notes to table:

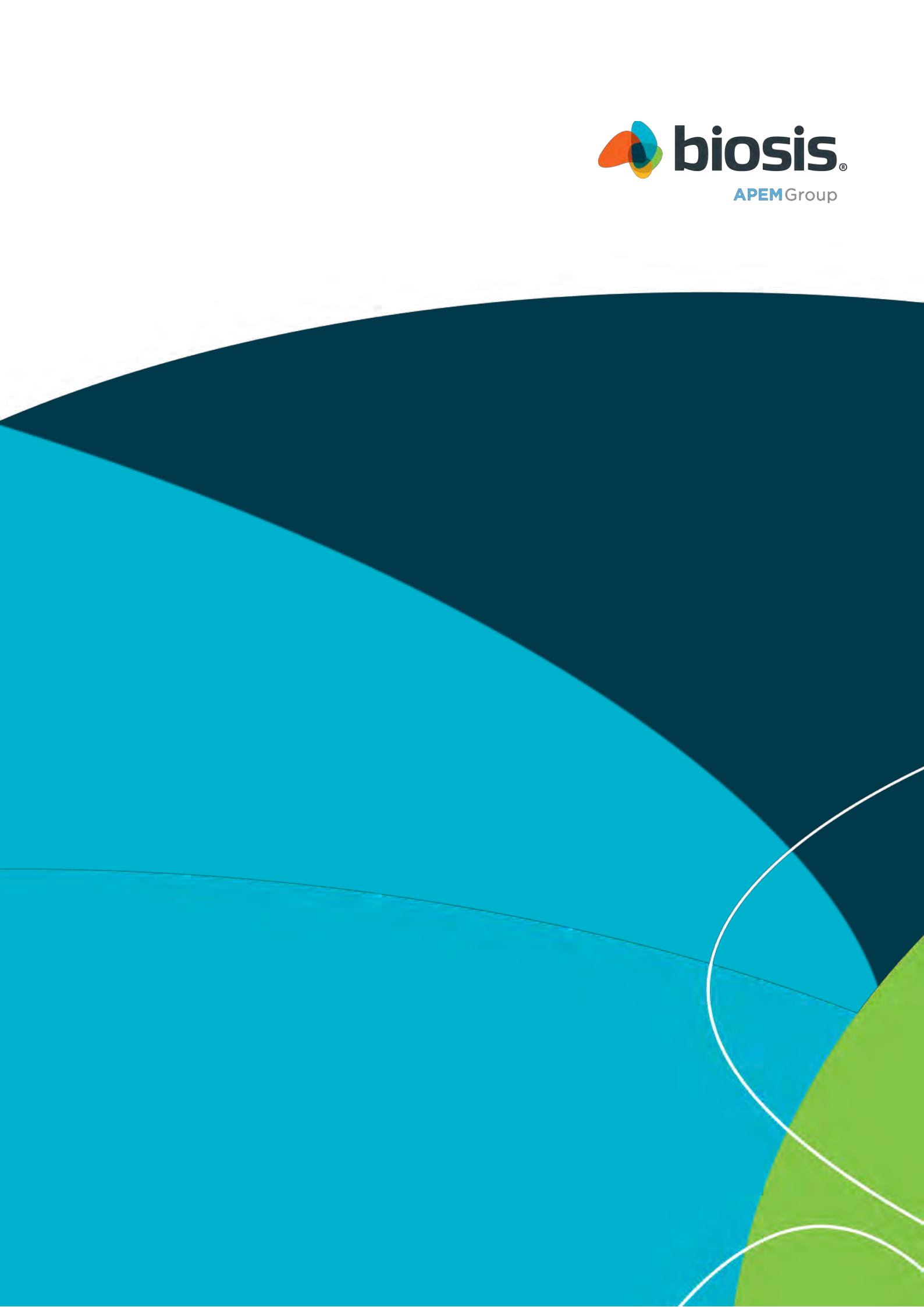
Status – EPBC Act:	**Status – BC Act:**
CE – Critically Endangered	E1 – endangered species (Part 1, Schedule 1)
EN – Endangered	E2 – endangered population (Part 2, Schedule 1)
VU – Vulnerable	E4 – presumed extinct (Part 4, Schedule 1)
	E4A – critically endangered
	V – vulnerable (Part 1, Schedule 2)

Table 9 Vertebrate fauna recorded from the study area (current assessment)

Common name	*Scientific name*	Commonwealth status	NSW status
Birds			
Australian King Parrot	*Alisterus scapularis*		
Australian Magpie	*Gymnorhina tibicen*		
Australian Raven	*Corvus coronoides*		
Australian Reed-Warbler	*Acrocephalus australis*		
Black-faced Cuckoo-shrike	*Coracina novaehollandiae*		
Brown Goshawk	*Accipiter fasciatus*		
Brown Thornbill	*Acanthiza pusilla*		
Brown Treecreeper	*Climacteris picumnus*		
Buff-rumped Thornbill	*Acanthiza reguloides*		
Common Blackbird	*Turdus merula*		
Crescent Honeyeater	*Phylidonyris pyrrhoptera*		
Crimson Rosella	*Platycercus elegans*		
Eastern Rosella	*Platycercus eximius*		
Eastern Silvereye	*Zosterops lateralis cornwalli*		
Eastern Spinebill	*Acanthorhynchus tenuirostris*		
Eastern Whipbird	*Psophodes olivaceus*		
European Goldfinch	*Carduelis carduelis*		
Fan-tailed Cuckoo	*Cacomantis flabelliformis*		
Fuscous Honeyeater	*Ptilotula fusca*		
Gang-gang Cockatoo	*Callocephalon fimbriatum*	En	En
Glossy Black-Cockatoo	*Calyptorhynchus lathami*	Vu	Vu
Golden Whistler	*Pachycephala pectoralis*		
Greater Sulphur-crested Cockatoo	*Cacatua galerita galerita*		

Common name	*Scientific name*	Commonwealth status	NSW status
Grey Fantail	*Rhipidura albiscapa*		
Grey Goshawk	*Accipiter novaehollandiae*		
Grey Shrikethrush	*Colluricincla harmonica*		
Hardhead	*Aythya australis*		
Indian Peafowl	*Pavo cristatus*		
Laughing Kookaburra	*Dacelo novaeguineae*		
Lewin's Honeyeater	*Meliphaga lewinii*		
Little Eagle	*Hieraaetus morphnoides*	Vu	
Little Raven	*Corvus mellori*		
Nankeen Kestrel	*Falco cenchroides*		
Noisy Friarbird	*Philemon corniculatus*		
Pied Currawong	*Strepera graculina*		
Red Wattlebird	*Anthochaera carunculata*		
Red-browed Finch	*Neochmia temporalis*		
Red-necked Wallaby	*Macropus rufogriseus*		
Rufous Whistler	*Pachycephala rufiventris*		
Sacred Kingfisher	*Todiramphus sanctus*		
Scarlet Robin	*Petroica boodang*		
Silvereye	*Zosterops lateralis*		
Spotted Pardalote	*Pardalotus punctatus*		
Striated Thornbill	*Acanthiza lineata*		
Sulphur-crested Cockatoo	*Cacatua galerita*		
Superb Fairy-wren	*Malurus cyaneus*		
Tree Martin	*Petrochelidon nigricans*		
Wedge-tailed Eagle	*Aquila audax*		
White-browed Scrubwren	*Sericornis frontalis*		
Mammals			
Chocolate Wattled Bat	*Chalinolobus morio*		
Common Wombat	*Vombatus ursinus*		
Deer	*Cervus sp.*		
Eastern Bent-winged Bat	*Miniopterus orianae oceanensis*		
Eastern False Pipistrelle	*Falsistrellus tasmaniensis*	Vu	
Eastern Horseshoe Bat	*Rhinolophus megaphyllus*		
Fox	*Vulpes vulpes*		
Gould's Long-eared Bat	*Nyctophilus gouldi*		
Gould's Wattled Bat	*Chalinolobus gouldii*		

Common name	*Scientific name*	Commonwealth status	NSW status
Greater Broad-nosed Bat	*Scoteanax rueppellii*	Vu	
Inland Broad-nosed Bat	*Scotorepens balstoni*		
Large Bent-winged Bat	*Miniopterus orianae oceanensis*	Vu	
Large Forest Bat	*Vespadelus darlingtoni*		
Lesser Long-eared Bat	*Nyctophilus geoffroyi*		
Little Broad-nosed Bat	*Scotorepens greyii*		
Little Forest Bat	*Vespadelus vulturnus*		
Ride's Free-tailed Bat	*Ozimops ridei*		
South-eastern Free-tailed Bat	*Ozimops planiceps*		
Southern Forest Bat	*Vespadelus regulus*		
White-striped Free-tailed Bat	*Austronomus australis*		
Reptiles			
Red-bellied Black Snake	*Pseudechis porphyriacus*		
Frogs			
Eastern Banjo Frog	*Limnodynastes dumerilii*		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Appendix G
Preliminary Social Impact Assessment Report

Lecroma
Shaping a resilient future

Sunny Corner Wind Farm

Preliminary Social Impact Assessment Report

November 2024

Acknowledgment of Country

Lecroma Pty Ltd (Lecroma) would like to acknowledge the traditional custodians of the country on which we work and pay respect to their cultural heritage, beliefs, and continuing relationship with the land. We pay our respect to the Elders and traditional owners – past, present, and emerging.

Disclaimer

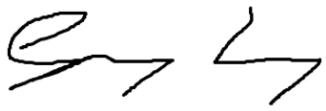
Front cover image: Photo montage of wind turbines at Sunny Corner State Forest, NSW

Document title	**Sunny Corner Wind Farm Preliminary Social Impact Assessment**
Date	28 November 2024
Version	3.0
Authors and credentials	**Greg Ley** – Bachelor of Arts in Pacific Security Analysis, and post graduate degree in National Security Policy. Member of the Australian Evaluation Society. More than a decade of experience working in Australian Federal Government and the private sector delivering complex stakeholder engagement processes, including for Australian foreign policy, international strategy, and program design and evaluation activities. **Clea Farrow** – Master of Environmental Law, Bachelor of Arts in Politics and Graduate Certificates in Environmental Studies and Journalism. Over fifteen years of experience in sustainability and biodiversity conservation both in Australia and internationally. Specialties include grant management and environmental law and policy development. Worked in both non-government organisations and state and national government agencies across Australia, the Pacific and Indonesia. The team has a strong background in community engagement activities with culturally and linguistically diverse groups. Significant combined experience in delivering a range of qualitative and quantitative research methods to understand complex problems across a range of industries. Their experience includes leading community and stakeholder engagement for several wind and solar farm developments in regional New South Wales.
Client name	MRP Someva ProjectCo Pty Ltd as trustee for the MRP Someva Project Trust 1 (Joint venture between Someva Pty Ltd and Mainstream Renewable Power Australia Pty Ltd)

Signature Page

Sunny Corner Wind Farm

Preliminary Social Impact Assessment



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Document History					
Version	**Revision**	**Author**	**Reviewed by**	**Date**	**Comments**
First draft	01	Clea Farrow	Greg Ley	7 Oct 2024	First draft for client team review and quality assurance alongside other technical reports prior to finalisation for EIS submission.
Final draft	02	Clea Farrow	Greg Ley	5 Nov 2024	Final draft for Scoping Report submission.
Final	03	Clea Farrow	Greg Ley	28 Nov 2024	Final for Scoping Report submission.

Table of Contents

Tables and Figures

Terminology List

Term	Definition
ABS	Australian Bureau of Statistics
Applicant	MRP Someva ProjectCo Pty Ltd as trustee for the MRP Someva Project Trust 1 (Joint venture between Someva Pty Ltd and Mainstream Renewable Power Australia Pty Ltd)
Application	Application for Development Consent under Part 4.7 of the EP&A Act; and Determination under Part 9 of the EPBC Act
BESS	Battery Energy Storage System
FCNSW	Forestry Corporation of New South Wales, primary landholder within Project Area
FTE	Full time equivalent
LALC	Local Aboriginal Land Council
Preliminary Disturbance Footprint	Preliminary area of Project-related disturbance determined for use in Scoping Report phase, which will be refined for the EIS
PSIA	Preliminary social impact assessment
Project	A wind farm as described in **Section 2** to which this Application applies
Project Area	Red boundary shown on key figures to which the Application applies (unless otherwise stipulated)
RAP	Registered Aboriginal Party
SEIFA	Socio-Economic Indexes for Areas
Sunny Corner Wind Farm	Project name
WTG	Wind Turbine Generators

1. Overview

Lecroma Pty Ltd was engaged by MRP Someva ProjectCo Pty Ltd as trustee for the MRP Someva Project Trust 1 (Joint venture between Someva Pty Ltd and Mainstream Renewable Power Australia Pty Ltd) (Applicant) to conduct a preliminary social impact assessment to support the Scoping Report for the Sunny Corner Wind Farm (Project).

This preliminary social impact assessment (PSIA) has been undertaken for the Project in accordance with the DPIE's 'Social Impact Assessment Guideline for State Significant Projects' (DPIE, 2023) (Social Guidelines), 'Cumulative Impact Assessment Guidelines for State Significant Projects '(DPIE, 2022), and 'Undertaking Engagement Guidelines for State Significant Projects' (DPIE, 2024) (Engagement Guidelines).

In accordance with the Social Guidelines, the PSIA involves scoping and preliminary assessment, identifies the level of assessment to be applied, and sets further parameters for the second phase SIA (the assessment report to be appended to the EIS). Accordingly, the first phase SIA:

- Defines the Project's social locality (**Section 3**).
- Describes the community profile in the preliminary social baseline (**Section 4**).
- Outlines the potential social impacts (**Section 5**).
- Outlines the approach to complete the second phase SIA (**Section 6**).

The Applicant is committed to an engagement process that is respectful and balances the interests of community cohesion, economic development, and forest use through socially responsible renewable energy development. The Applicant has also prepared a Stakeholder Engagement Plan to achieve the following objectives:

- Produce clear information about the Project, potential positive and negative impacts and benefits for the environment, community, and region by delivering high-quality communication products across all targeted channels.
- Ensure the Project has a positive impact on the region with clear demonstration of shared local and broader regional social, economic, and environmental benefits.
- Develop a sense of local ownership of the Project by identifying local advocates with an interest in the Project.
- Work with the community collaboratively to identify issues and likely mitigations throughout Project phases.
- Support an uplift in the regional economy and level of local prosperity via a regional economic assessment.
- Demonstrate sharing of Project benefits by creating a successful community led Community Benefit Scheme and Voluntary Planning Agreements with local councils.
- Support and engage local capabilities, engaging several local suppliers including Aboriginal peoples' owned suppliers.

This preliminary SIA has been undertaken as a desktop analysis supplemented by ten in-region visits and supplementary remote engagement. The report has been further informed by Project information provided by the Applicant, engagement outcomes to date, internet searches of information relating to the Project and the broader socio-economic context, comparative studies, and publicly available data obtained from government websites, e.g. the Australian Bureau of Statistics (ABS). All population and demographic data presented in this section are from the ABS 2021 Census unless otherwise stated.

2. Project Description

The Project will involve the construction, operation and decommissioning of a wind farm, Battery Energy Storage System (BESS), electrical infrastructure, other infrastructure and ancillary activities generally including the components described below:

- Up to 80 Wind Turbine Generators (WTGs) each with a rating of approximately 8 MW, and a tip height of up to 285 m and hub height of up to 185 m.
- Electrical reticulation network:
  - one switching station
  - up to four substations and additional switch room and reactive plant
  - on-site connection to existing 330 kV transmission line to the south of the Project Area (or other option to be confirmed in the EIS)
  - internal electrical reticulation (both underground and overhead)
  - approximately 500 MW / 2000 MWh (4 hours) Battery Energy Storage (BESS).
- Other temporary and permanent infrastructure including:
  - operations and maintenance facility and infrastructure including site office, storage facilities, car parking and fencing
  - concrete batching plant and laydown areas for construction of the Project
  - transmission infrastructure
  - water tank
  - internal access tracks
  - up to seven meteorological masts
  - construction and operational compounds
  - hardstands for WTGs and other infrastructure
  - internal access tracks and road turning head connecting Project infrastructure.
- Access road use and Project-required upgrades associated with:
  - Project Area access: approximately five access points
  - wind farm components access: Port of Newcastle (or other option to be confirmed in the EIS).
- Operational workforce of up to 35 Full Time Equivalent (FTE) and construction up to 475 FTE.
- Construction generally within standard hours and operations 24 hours per day 7 days per week.
- Preliminary Project Area of up to 10,434 ha and a Preliminary Disturbance Footprint of up to 496 ha.

The Applicant has adopted early strategies to avoid, minimise or offset the impacts of the Project to the extent known at the scoping stage. These are detailed in the *Social Impact Scoping Worksheet* attached to the Scoping Report.

3. Social Locality

The Project is located in the Sunny Corner State Forest in NSW between Lithgow and Bathurst, which is managed by the Forestry Corporation of NSW. The Project is on Wiradjuri land, within the Lithgow City and Bathurst Regional Council Local Government Areas (LGAs).

The social locality includes:

- Associated host landowner and adjacent/near neighbouring properties, including residents and local businesses.
- Localities likely to be impacted by and/or benefit from the Project.
- Localities likely to experience construction-related workforce, procurement, and traffic impacts.

To determine social locality, the Applicant considered the following aspects:

- Site location and Project layout, including proposed location of all Project-related infrastructure in the project area.
- Location of the project components relative to Project neighbours (nearby residential dwellings), major highways or transport routes, potential sensitive land uses and structures.
- Construction, operation and decommissioning phase activities.

When considering these aspects and the general proximity of the Project area to other proposed renewable energy projects in the surrounding region, it was determined the Project's social locality includes: the Project Area, haulage routes, and larger nearby centres (Bathurst/Lithgow). This will be refined as the Project evolves.

For the purposes of this PSIA, the Project's social locality is shown in **Figure 1** and comprises the following three components:

- Project Area and immediate surrounding areas located within the Australian Bureau of Statistics (ABS) LGAs of Bathurst (ABS reference LGA 10470) and Lithgow (ABS reference LGA 14870). Data on these LGAs has been used to understand the broader and comparative social context.
- Transportation and haulage routes, including primary vehicular routes within the region.
- Surrounding towns and regional centres of Bathurst and Lithgow, which may provide construction and operations phase goods and services to support the Project. **Table 1** lists the surrounding townships within 35 km of the Project Area and notes their travel time and direction from the Project Area.

Figure 1: Project social locality

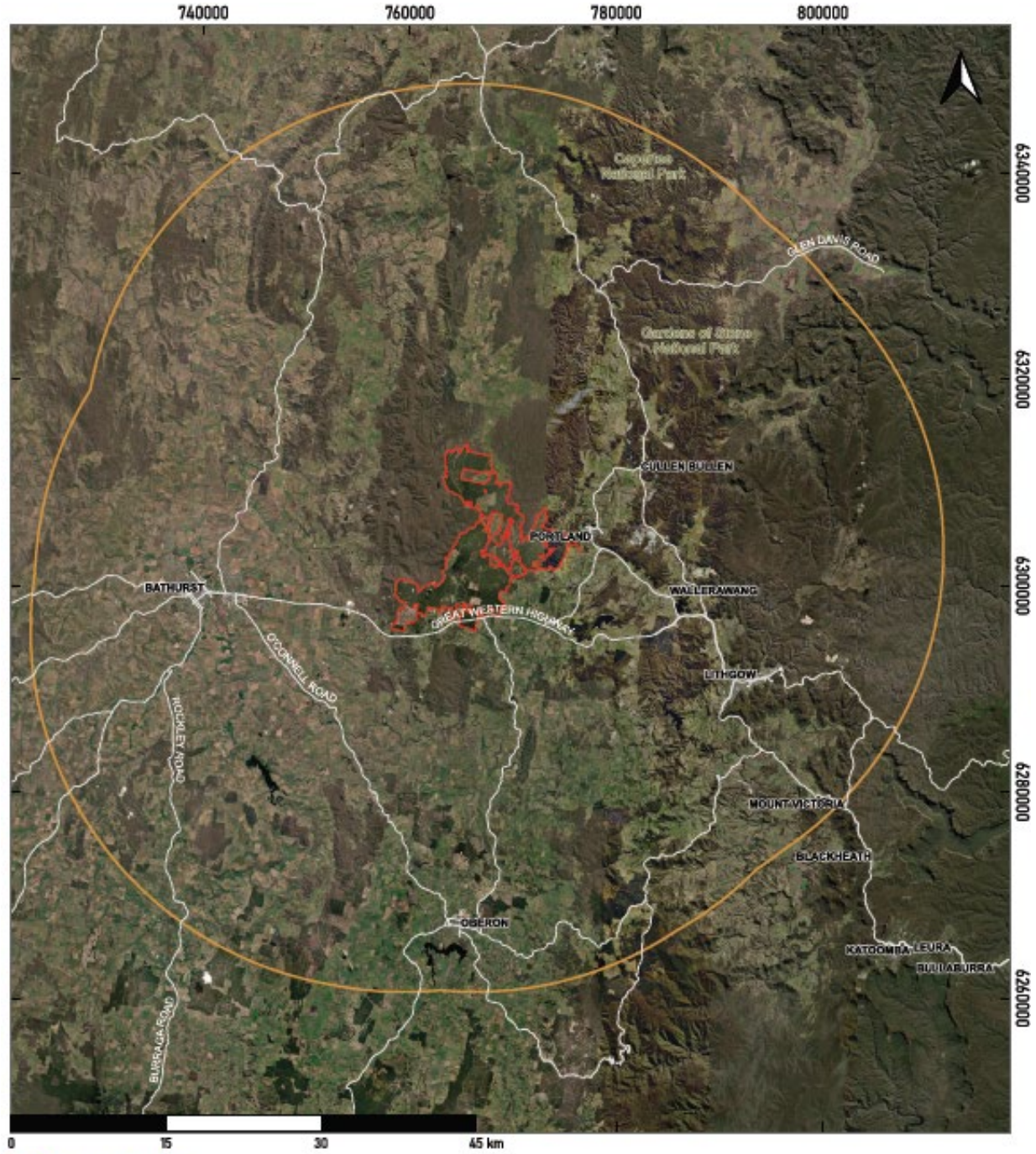

Table 1: Distances to the Project Area

Town / regional centre	Travel distance (from Victoria Hall in Sunny Corner)	Approximate time to drive (from Victoria Hall in Sunny Corner)	Direction from the Project Area
Sunny Corner	0 km	0 mins	N/A
Kirkconnell	7.6 km	6 mins	South southwest
Meadow Flat	8.4 km	8 mins	South southeast
Dark Corner	10.6 km	10 mins	North
Yetholme	13.5 km	11 mins	South southwest
Mount Lambie	14.2 km	11 mins	Southeast
Portland	15.5 km	14 mins	East
Walang	16.2 km	12 mins	Southwest
Tarana	21.1 km	20 mins	South
Blackmans Flat	21.6 km	21 mins	East northeast
Wallerawang	22.4 km	19 mins	East southeast
Rydal	23 km	18 mins	Southeast
Wambool	24 km	19 mins	Southwest
Cullen Bullen	25.1 km	23 mins	Northeast
Glanmire	26 km	19 mins	West southwest
Marrangaroo	28 km	19 mins	East southeast
Napoleon Reef	28.6 km	29 mins	West
Locksley	29.9 km	24 mins	South southwest
Brewongle	30 km	24 mins	Southwest
Lidsdale	30.3 km	35 mins	East
Sodwalls	32.9 km	27 mins	South southeast
Gemalla	33.8 km	28 mins	South southwest
Lithgow (regional centre)	34.7 km	24 mins	Southeast
Bathurst (regional centre)	36.3 km	31 mins	West

Source: Google Maps, 2024

4. Community Profile

The community profile presented in this section will inform the social baseline in the second phase SIA (part of the EIS) and is largely based on ABS 2021 census data.

4.1 Statistical data

Table 2 outlines the primary ABS datasets identified to provide key demographic data across the Project's social locality.

Table 2: Relevant ABS data sets

Location	2021 Census Geography Type	2021 Census Area Code
Sunny Corner	Suburbs and localities	SAL 13707
Kirkconnell	Suburbs and localities	SAL 12179
Meadow Flat	Suburbs and localities	SAL 12559
Dark Corner	Suburbs and localities	SAL 11209
Yetholme	Suburbs and localities	SAL 14531
Mount Lambie	Suburbs and localities	SAL 12784
Portland	Suburbs and localities	SAL 13262
Walang	Suburbs and localities	SAL 14109
Tarana	Suburbs and localities	SAL 13775
Blackmans Flat	Suburbs and localities	SAL 10393
Wallerawang	Suburbs and localities	SAL 14132
Rydal	Suburbs and localities	SAL 13467
Wambool	Suburbs and localities	SAL 14142
Cullen Bullen	Suburbs and localities	SAL 11149
Glanmire	Suburbs and localities	SAL 11644
Marrangaroo	Suburbs and localities	SAL 12512
Napoleon Reef	Suburbs and localities	SAL 12903
Locksley	Suburbs and localities	SAL 12379
Brewongle	Suburbs and localities	SAL 10561
Lidsdale	Suburbs and localities	SAL 12327
Sodwalls	Suburbs and localities	SAL 13584
Gemalla	Suburbs and localities	SAL 11602
Lithgow (regional centre)	Local Government Areas	LGA 14870
Bathurst (regional centre)	Local Government Areas	LGA 10470

Source: ABS 2021 Census Quick Stats

The second phase SIA social baseline will also be informed by a desktop review of publicly available sources, including ABS 2021 Census data for economic profiling, and local and State government documentation for guidance on policy priorities and regional challenges. This data will be supplemented by primary quantitative and qualitative data collected from the community through direct engagement, including face-to-face meetings, verbal and written communications, and surveys.

Table 3 draws on the ABS datasets noted above, providing a demographic overview focusing on LGA data within 35 km of the Project Area. It also includes the Socio-Economic Indexes for Areas (SEIFA) in Australia percentile of relative socio-economic disadvantage within NSW, where percentile 1 is the most disadvantaged relative to the other percentiles.

Table 3: Area profile data on key locations within 35 km of the Project

Population statistics	Household data	Top five employment industries	Top five occupations	Workforce participation
Sunny Corner				
• Population: 94 (47.8% male, 52.2% female) • Median age: 59 • Aboriginal and Torres Strait Islander People: 0 • Number of families: 20 • Average number of people per household: 1.8 • SEIFA (Percentile in NSW): 67	• Median weekly household income: $1,281 • Median monthly mortgage repayments: $1,083 • Median weekly rent: $163 • Private dwellings: 65	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*
Kirkconnell				
• Population: 219 (93.7% male, 6.3% female) • Median age: 43 • Aboriginal and Torres Strait Islander People: 27 (12.3%) • Number of families: 8 • Average number of people per household: 3.3 • SEIFA (Percentile in NSW): 67	• Median weekly household income: $2,583 • Median monthly mortgage repayments: $1,950 • Median weekly rent: $0 • Private dwellings: 14	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*
Meadow Flat				
• Population: 359 (48% male, 52% female) • Median age: 45	• Median weekly household income: $2,083	• Beef cattle farming: 10 (6%) • Coal mining: 8 (4.8%) • Correctional and detention services: 6 (3.6%)	• Professionals: 35 (20.8%) • Community and personal service workers: 25 (14.9%) • Managers: 24 (14.3%)	• In the labour force: 59.5% • Not in the labour force: 27.1% • Not stated: 13% • Full time worker: 61.5%

Population statistics	Household data	Top five employment industries	Top five occupations	Workforce participation
• Aboriginal and Torres Strait Islander People: 23 (6.5%) • Number of families: 99 • Average number of people per household: 2.8 • SEIFA (Percentile in NSW): 69	• Median monthly mortgage repayments: $2,000 • Median weekly rent: $323 • Private dwellings: 135	• Fossil fuel electricity generation: 5 (3%) • Electricity distribution: 5 (3%)	• Technicians and trades workers: 24 (14.3%) • Clerical and administrative workers: 20 (11.9%)	• Part time worker: 32.5% • Unemployed: 0%
Dark Corner				
• Population: 45 (46.9% male, 53.1% female) • Median age: 48 • Aboriginal and Torres Strait Islander People: 0 • Number of families: 15 • Average number of people per household: 2.4 • SEIFA (Percentile in NSW): 15	• Median weekly household income: $899 • Median monthly mortgage repayments: $2,059 • Median weekly rent: $250 • Private dwellings: 33	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*
Yetholme				
• Population: 241 (55.5% male, 44.5% female) • Median age: 48 • Aboriginal and Torres Strait Islander People: 13 (5.4%) • Number of families: 64 • Average number of people per household: 2.7 • SEIFA (Percentile in NSW): 46	• Median weekly household income: $1,462 • Median monthly mortgage repayments: $1,300 • Median weekly rent: $365 • Private dwellings: 106	• Hospitals (except psychiatric hospitals): 8 (7.1%) • Other social assistance services: 8 (7.1%) • State government administration: 7 (6.2%) • Financial asset broking services: 6 (5.4%) • Takeaway food services: 5 (4.5%)	• Technicians and trades workers: 21 (18.8%) • Managers: 20 (17.9%) • Professionals: 18 (16.1%) • Clerical and administrative workers: 11 (9.8%) • Community and personal service workers: 11 (9.8%) • Machinery operators and drivers: 11 (9.8%)	• In the labour force: 57.7% • Not in the labour force: 32.3% • Not stated: 10% • Full time worker: 55.2% • Part time worker: 32.8% • Unemployed: 4.3%

Population statistics	Household data	Top five employment industries	Top five occupations	Workforce participation
Portland				
• Population: 2,447 (50.8% male, 49.2% female) • Median age: 46 • Aboriginal and Torres Strait Islander People: 205 (8.4%) • Number of families: 652 • Average number of people per household: 2.3 • SEIFA (Percentile in NSW): 9	• Median weekly household income: $1,150 • Median monthly mortgage repayments: $1,272 • Median weekly rent: $250 • Private dwellings: 1,144	• Coal mining: 46 (7.3%) • Aged care residential services: 33 (5.2%) • Supermarket and grocery stores: 29 (4.6%) • Correctional and detention services: 22 (3.5%) • Local government administration: 21 (3.3%)	• Technicians and trades workers: 120 (19%) • Community and personal service workers: 109 (17.2%) • Labourers: 102 (16.1%) • Machinery operators & drivers: 89 (14.1%) • Clerical and administrative workers: 58 (9.2%)	• In the labour force: 48.9% • Not in the labour force: 42.5% • Not stated: 8.6% • Full time worker: 53.3% • Part time worker: 32.1% • Unemployed: 7.3%
Walang				
• Population: 109 (47.2% male, 52.8% female) • Median age: 46 • Aboriginal and Torres Strait Islander People: 9 (8.2%) • Number of families: 31 • Average number of people per household: 3 • SEIFA (Percentile in NSW): 52	• Median weekly household income: $2,399 • Median monthly mortgage repayments: $2,167 • Median weekly rent: $208 • Private dwellings: 41	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*
Tarana				
• Population: 187 (50.8% male, 49.2% female) • Median age: 48 • Aboriginal and Torres Strait Islander People: 3 (1.6%) • Number of families: 52	• Median weekly household income: $1,875 • Median monthly mortgage repayments: $1,845 • Median weekly rent: $280	• Beef cattle farming (specialised): 7 (6.9%) • Landscape construction services: 6 (5.9%) • Special school education: 5 (5%) • Sheep-beef cattle farming: 4 (%)	• Managers: 30 (29.7%) • Professionals: 19 (18.8%) • Community and personal service workers: 19 (18.8%) • Technicians and traders workers 18 (17.8%) • Clerical and administrative workers: 10 (9.9%)	• In the labour force: 68% • Not in the labour force: 19.3% • Not stated: 7.3% • Full time worker: 62.7% • Part time worker: 26.5% • Unemployed: 0%

Population statistics	Household data	Top five employment industries	Top five occupations	Workforce participation
• Average number of people per household: 2.5 • SEIFA (Percentile in NSW): 68	• Private dwellings: 99	• Tiling and carpeting services: 4 (4%)	• Machinery operators and drivers: 7 (6.9%)	
Blackmans Flat				
• Population: 22 (45% male, 55% female) • Median age: 38 • Aboriginal and Torres Strait Islander People: 0 (0%) • Number of families: 8 • Average number of people per household: 3.8 • SEIFA (Percentile in NSW): 49	• Median weekly household income: $2,250 • Median monthly mortgage repayments: $2,167 • Median weekly rent: $360 • Private dwellings: 8	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*
Wallerawang				
• Population: 2,019 (51.3% male, 48.7% female) • Median age: 39 • Aboriginal and Torres Strait Islander People: 187 (9.3%) • Number of families: 538 • Average number of people per household: 2.6 • SEIFA (Percentile in NSW): 14	• Median weekly household income: $1,424 • Median monthly mortgage repayments: $1,517 • Median weekly rent: $275 • Private dwellings: 861	• Coal mining: 66 (7.6%) • Aged care residential services: 29 (3.4%) • Supermarket and grocery stores: 27 (3.1%) • State Government administration: 27 (3.1%) • Other social assistance services: 25 (2.9%)	• Technicians and trades workers: 157 (18.2%) • Community and personal service workers: 143 (16.5%) • Machinery operators and drivers: 125 (14.5%) • Clerical and administrative workers: 116 (13.4%) • Managers: 90 (10.4%)	• In the labour force: 57.4% • Not in the labour force: 38.2% • Not stated: 4.4% • Full time worker: 57.4% • Part time worker: 30% • Unemployed: 5.3%
Rydal				

Population statistics	Household data	Top five employment industries	Top five occupations	Workforce participation
• Population: 163 (50.3% male, 49.7% female) • Median age: 53 • Aboriginal and Torres Strait Islander People: 11 (6.7%) • Number of families: 46 • Average number of people per household: 2.1 • SEIFA (Percentile in NSW): 20	• Median weekly household income: $1,325 • Median monthly mortgage repayments: $1,300 • Median weekly rent: $200 • Private dwellings: 83	• Coal mining: 12 (16%) • Accommodation: 9 (12%) • Tiling and carpeting services: 6 (8%) • Pubs, taverns and bars: 6 (8%) • Primary education: 6 (8%)	• Professionals: 14 (18.7%) • Community and personal service workers: 13 (17.3%) • Machinery operators and drivers: 12 (16%) • Managers: 11 (14.7%) • Labourers: 11 (14.7%) • Technicians and trades workers: 8 (10.7%)	• In the labour force: 55,1% • Not in the labour force: 40.8% • Not stated: 8.2% • Full time worker: 48.1% • Part time worker: 34.6% • Unemployed: 6.2%
Wambool				
• Population: 38 (46.3% male, 53.7% female) • Median age: 45 • Aboriginal and Torres Strait Islander People: 0 (0%) • Number of families: 11 • Average number of people per household: 2.7 • SEIFA (Percentile in NSW): 81	• Median weekly household income: $2,812 • Median monthly mortgage repayments: $1,250 • Median weekly rent: $250 • Private dwellings: 16	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*
Cullen Bullen				
• Population: 166 (50.6% male, 49.4% female) • Median age: 51 • Aboriginal and Torres Strait Islander People: 23 (13.9%) • Number of families: 44	• Median weekly household income: $1,042 • Median monthly mortgage repayments: $1,571 • Median weekly rent: $190 • Private dwellings: 69	• Primary education: 6 (10.2%) • Coal mining: 4 (6.8%) • Takeaway food services: 4 (6.8%) • Clubs (hospitality): 4 (6.8%) • Local Government administration: 4 (6.8%)	• Clerical and administrative workers: 14 (23.7%) • Managers: 12 (20.3%) • Technicians and trades workers: 10 (16.9%) • Machinery operators and drivers: 10 (16.9%) • Community and personal service workers: 8 (13.6%)	• In the labour force: 45.7% • Not in the labour force: 45% • Not stated: 6.4% • Full time worker: 64.1% • Part time worker: 26.6% • Unemployed: 3%

Population statistics	Household data	Top five employment industries	Top five occupations	Workforce participation
• Average number of people per household: 2.5 • SEIFA (Percentile in NSW): 12			• Labourers: 7 (11.9%)	
Glanmire				
• Population: 186 (53.4% male, 46.6% female) • Median age: 40 • Aboriginal and Torres Strait Islander People: 8 (4.3%) • Number of families: 54 • Average number of people per household: 3 • SEIFA (Percentile in NSW): 64	• Median weekly household income: $1,958 • Median monthly mortgage repayments: $2,000 • Median weekly rent: $298 • Private dwellings: 69	• Beef cattle farming (specialised): 11 (11.1%) • Road freight transport: 7 (7.1%) • Sheep-beef cattle farming: 4 (4%) • Correctional and detention services: 4 (4%) • Secondary education: 4 (4%)	• Managers: 30 (30.3%) • Professionals: 16 (16.2%) • Community and personal service workers: 11 (11.1%) • Technicians and traders worders: 9 (9.1%) • Labourers: 9 (9.1%)	• In the labour force: 63.9% • Not in the labour force: 29% • Not stated: 3.9% • Full time worker: 60.6% • Part time worker: 36.4% • Unemployed: 0%
Marrangaroo				
• Population: 783 (68% male, 32% female) • Median age: 38 • Aboriginal and Torres Strait Islander People: 137 (17.5%) • Number of families: 143 • Average number of people per household: 2.9 • SEIFA (Percentile in NSW): 70	• Median weekly household income: $2,283 • Median monthly mortgage repayments: $2,167 • Median weekly rent: $353 • Private dwellings: 192	• Coal mining: 44 (16.9%) • Hospitals (except psychiatric hospitals): 15 (5.7%) • State Government administration: 11 (4.2%) • Local Government administration: 9 (3.4%) • Primary education: 9 (3.4%)	• Technicians and trades workers: 49 (18.8%) • Clerical and administrative workers: 43 (16.5%) • Managers: 36 (13.8%) • Professionals: 36 (13.8%) • Community and personal service workers: 30 (11.5%) • Machinery operators and drivers: 29 (11.1%)	• In the labour force: 37.9% • Not in the labour force: 56.3% • Not stated: 5.5% • Full time worker: 60.2% • Part time worker: 29% • Unemployed: 2.6%
Napoleon Reef				

Population statistics	Household data	Top five employment industries	Top five occupations	Workforce participation
• Population: 130 (52.4% male, 47.6% female) • Median age: 59 • Aboriginal and Torres Strait Islander People: 6 (4.6%) • Number of families: 44 • Average number of people per household: 2.3 • SEIFA (Percentile in NSW): 64	• Median weekly household income: $1,859 • Median monthly mortgage repayments: $1,975 • Median weekly rent: $215 • Private dwellings: 63	• Local government administration: 6 (9.7%) • Sheep farming (specialised): 4 (6.5%) • Mineral exploration: 4 (6.5%) • Primary education: 4 (6.5%) • Other waste collection services: 3 (4.8%)	• Professionals: 13 (21%) • Technicians and trades workers: 12 (19.4%) • Clerical and administrative workers: 11 (17.7%) • Community and personal service workers: 9 (14.5%) • Managers: 7 (6.5%)	• In the labour force: 57.4% • Not in the labour force: 40.7% • Not stated: 4.6% • Full time worker: 54.8% • Part time worker: 43.5% • Unemployed: 0%
Locksley				
• Population: 55 (54.9% male, 45.1% female) • Median age: 39 • Aboriginal and Torres Strait Islander People: 0 (0%) • Number of families: 11 • Average number of people per household: 2.6 • SEIFA (Percentile in NSW): 80	• Median weekly household income: $2,312 • Median monthly mortgage repayments: $1,696 • Median weekly rent: $300 • Private dwellings: 23	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*
Brewongle				
• Population: 151 (53.9% male, 46.1% female) • Median age: 38 • Aboriginal and Torres Strait Islander People: 5 (3.3%) • Number of families: 41	• Median weekly household income: $2,125 • Median monthly mortgage repayments: $1,588 • Median weekly rent: $370 • Private dwellings: 60	• Takeaway food services: 9 (10.5%) • Sheep-beef cattle farming: 5 (5.8%) • Hospitals (except psychiatric hospitals): 5 (5.8%) • Other machinery and equipment repair and maintenance: 5 (5.8%)	• Professionals: 16 (18.6%) • Managers: 15 (17.4%) • Clerical and administrative workers: 13 (15.1%) • Technicians and trades workers: 12 (14%) • Sales workers: 9 (10.5%)	• In the labour force: 68.3% • Not in the labour force: 25.2% • Not stated: 4.9% • Full time worker: 61.9% • Part time worker: 39.3% • Unemployed: 4.8%

Population statistics	Household data	Top five employment industries	Top five occupations	Workforce participation
• Average number of people per household: 2.9 • SEIFA (Percentile in NSW): 81		• Road freight transport: 4 (4.7%)		
Lidsdale				
• Population: 471 (48.2% male, 51.8% female) • Median age: 38 • Aboriginal and Torres Strait Islander People: 39 (8.3%) • Number of families: 138 • Average number of people per household: 2.9 • SEIFA (Percentile in NSW): 48	• Median weekly household income: $2,083 • Median monthly mortgage repayments: $1,560 • Median weekly rent: $313 • Private dwellings: 176	• Coal mining: 27 (11.4%) • Road freight transport: 13 (5.5%) • Supermarket and grocery stores: 11 (4.7%) • Takeaway food services: 9 (3.8%) • Health insurance: 8 (3.4%)	• Technicians and trades workers: 54 (22.9%) • Machinery operators and drivers: 38 (16.1%) • Clerical and administrative workers: 37 (15.7%) • Community and personal service workers: 32 (13.6%) • Labourers: 28 (11.9%)	• In the labour force: 66% • Not in the labour force: 28.1% • Not stated: 6.1% • Full time worker: 56.7% • Part time worker: 34% • Unemployed: 2.8%
Sodwalls				
• Population: 94 (50% male, 50% female) • Median age: 52 • Aboriginal and Torres Strait Islander People: 3 (3.19%) • Number of families: 28 • Average number of people per household: 2.3 • SEIFA (Percentile in NSW): 71	• Median weekly household income: $1,937 • Median monthly mortgage repayments: $1,730 • Median weekly rent: $365 • Private dwellings: 55	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*
Gemalla				

Population statistics	Household data	Top five employment industries	Top five occupations	Workforce participation
• Population: 24 (31.8% male, 68.2% female) • Median age: 49 • Aboriginal and Torres Strait Islander People: 0 (0%) • Number of families: 5 • Average number of people per household: 2.6 • SEIFA (Percentile in NSW): 80	• Median weekly household income: $1,749 • Median monthly mortgage repayments: $867 • Median weekly rent: $180 • Private dwellings: 9	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*	** Due to the small population, ABS data in this format is not available*
Lithgow				
• Population: 20,842 (50.5% male, 49.5% female) • Median age: 46 • Aboriginal and Torres Strait Islander People: 1,621 (7.8%) • Number of families: 5,397 • Average number of people per household: 2.3 • SEIFA (Percentile in NSW): 18	• Median weekly household income: $1,196 • Median monthly mortgage repayments: $1,500 • Median weekly rent: $270 • Private dwellings: 10,203	• Coal mining (6.9%) • Aged care residential services (3.4%) • Supermarket and grocery stores (3.1%) • State Government administration (3%) • Local Government administration (2.9%)	• Technicians and trades workers (16.6%) • Community and personal service workers (14%) • Professionals (13.4%) • Clerical and administrative workers (12.9%) • Labourers (11.4%)	• In the labour force: 50.4% • Not in the labour force: 42.4% • Not stated: 7.1% • Full time worker: 53.7% • Part time worker: 32.2% • Unemployed: 5.5%
Bathurst				
• Population: 43,567 (50.2% male, 49.8% female) • Median age: 38 • Aboriginal and Torres Strait Islander People: 3,153 (7.2%)	• Median weekly household income: $1,585 • Median monthly mortgage repayments: $1,733	• Hospitals (except Psychiatric Hospitals) (4.2%) • Other social assistance services (4%) • State Government administration (3.3%)	• Professionals (19.1%) • Community and personal service workers (15%) • Technicians and trades workers (14.2%) • Managers (12.1%)	• In the labour force: 60.2% • Not in the labour force: 35.5% • Not stated: 5.3% • Full time worker: 58.4% • Part time worker: 31.7% • Unemployed: 4%

Population statistics	Household data	Top five employment industries	Top five occupations	Workforce participation
• Number of families: 11,242 • Average number of people per household: 2.5 • SEIFA (Percentile in NSW): 64	• Median weekly rent: $320 • Private dwellings: 18,400	• Aged care residential services (3%) • Supermarket and grocery stores (2.6%)	• Clerical and administrative workers (11.9%)	

* Due to the small population, ABS data in this format is not available for Sunny Corner, Dark Corner, Walang, Blackmans Flat, Kirkconnell, Wambool, Locksley, Sodwalls, or Gemalla.

Source: ABS 2021 Census Quick Stats

4.2 Initial insights from desktop analysis

The Project is situated on Wiradjuri land. The Wiradjuri nation is the largest cultural footprint in NSW; from the Blue Mountains in the east, to Hay in the west, north to Nyngan and south to Albury in the South Western slopes region. Wiradjuri lands were known as the land of three rivers: Murrumbidgee (known by its traditional Wiradjuri name), Gulari (Lachlan), and Womboy (Macquarie). Approximately 3,000 Wiradjuri people were living in New South Wales during European settlement.

For this Project, the Applicant has defined Project neighbours as those landholders who live within people living within 8 km of the Project Area, which includes 1,840 dwellings. Within this area, 1,537 are 'near neighbours' (within 4 kms) and 303 are 'far neighbours' (within 4-8 kms) of the Project Area.

There are 22 towns or townships within 35 km of the Project Area as shown in **Table 1**, with populations ranging from 22 (Blackmans Flat) to 2,447 (Portland); as well as the two nearby bigger regional centres of Lithgow and Bathurst. The regional community around the Project Area appears to rely heavily on the provision of essential services from Lithgow and Bathurst. Lithgow is the smaller of the two LGAs, and has an older population, lower average weekly income per household, and higher unemployment rate. On the SEIFA index of relative socio-economic disadvantage, Lithgow LGA is in the 22nd percentile within Australia and the 18th percentile within NSW (where percentile 1 is the most disadvantaged relative to the other percentiles). Bathurst faces less socio-economic disadvantage, being in the 61st percentile within Australia, and the 64th within NSW.

The Lithgow LGA has a population of 20,842. The median age is 46 compared to 38 nationally. 7.8% of people identify as being Aboriginal and/or Torres Strait Islander, which is higher than the national proportion of 3.2%. The median weekly income per household is $1,196, compared to $1,746 Australia-wide. The top five industries of employment are coal mining (6.9%), aged care residential services (3.4%), supermarket and grocery stores (3.1%), State Government administration (3%), and Local Government administration (2.9%). The top five occupations are technicians and trades workers (16.6%), community and personal service workers (14%), professionals (13.4%), clerical and administrative workers (12.9%), and labourers (11.4%). 50.4% of people aged 15 years or over are in the labour force, which is less than the national proportion of 61.1%. The unemployment rate is 5.5%, which is slightly higher the national proportion of 5.1%.

The Bathurst LGA has a population of 43,567. The median age is 38, which is the same as nationally. 7.2% of people identify as being Aboriginal and/or Torres Strait Islander (3.2% nationally). The median weekly income per household is $1,585 ($1,746 nationally). The top five industries of employment are hospitals (except Psychiatric Hospitals) (4.2%), other social assistance services (4%), State Government administration (3.3%), aged care residential services (3%) and supermarket and grocery stores (2.6%). The top five occupations are professionals (19.1%), community and personal service workers (15%), technicians and trades workers (14.2%), managers (12.1%), and clerical and administrative workers (11.9%). 60.2% of people aged 15 years or over are in the labour force, which is close to the national 61.1%. The unemployment rate is 4%, which is lower than the national proportion of 5.1%.

Bathurst appears to have the stronger business service centre followed by Lithgow, especially for civil works and construction services/suppliers, and Bathurst appears to be the primary hub for technicians, construction suppliers and trades services for the surrounding area (within 35 km). There appears to be an established energy generation service sector, courtesy of the nearby Mt Piper Power Station, with most suppliers/traders/installers operating from Bathurst, Lithgow and/or further afar (Sydney).

Lithgow and Bathurst are the most likely areas to support increased demand on local housing requirements for the Project workforce (should an onsite accommodation or other

project's approved temporary accommodation not be relied upon for the Project). To minimise the impact on the local surrounding communities, the SIA will seek to fully understand:

- Current housing and accommodation availability, and requirements of the workforce during construction and future operations. The Applicant will explore accommodation-sharing options for workers and support staff to reduce demand impacts on local housing, including liaison with local real estate providers to seek further advice.
- Community sentiment towards a significant increase in proposed largescale renewable energy development projects.
- Overlapping periods of peak employment through early consultation with other local industry activities and businesses in the area.

5. Preliminary Assessment

5.1 Social infrastructure overview

Social infrastructure typically comprises schools and other education institutions, medical services, emergency services, recreational facilities, and community organisations. Some commercial services are also listed under social infrastructure, such as childcare facilities.

The Project Area is on Wiradjuri land, within the Sunny Corner State Forest, which is managed by the NSW Forestry Corporation. Sunny Corner is a small village of under 100 people. Community capital and infrastructure includes a community hall, rural fire service brigade, war memorial, recreation ground, children's playground, picnic spaces, and a waste management facility. Sunny Corner Sundays is a local food and flea community market. A range of old mines are also present throughout the Project Area.

Portland is the biggest of the nearby townships, with a population of approximately 1,840. Located 15.5 km east of Sunny Corner State Forest, Portland is surrounded by sheep and cattle farms on undulating countryside. The economic focus of the town is the Mt Piper Power Station and related coal mines, noting Mt Piper Power Station is set to close by 2040. Wool and forestry are other major local industries. Small boutique farmers also grow and breed goats, alpacas, horses, olives, chestnuts and there are a small number of vineyards. The first successful manufacturer of cement in NSW occurred in Portland in the 19th century, based on local limestone deposits. Today the Portland Cement Works no longer operates but is transforming into a cultural and tourist hub known as The Foundations, featuring a large-scale mural artwork by Guido Van Henlten, monthly markets, pop up galleries and museums.

Most businesses and communities around the Project Area rely on the regional centres of Lithgow and Bathurst for essential and community support services. The Great Western Highway connects Lithgow and Bathurst. Some small towns are located along this Highway between the two and have small populations and limited accommodation and service support options: Marrangaroo (783 people), Mount Lambie (65 people), Meadow Flat (356 people), Yetholme (241 people) and Walang (109 people). The Great Western Highway will be used throughout the Project as the primary connection between nearby regional centres and the Project Area.

Lithgow LGA

The Lithgow LGA is on the western ramparts of the Blue Mountains, 140 km from Sydney. The LGA totals 4,567 square kilometres from the Capertee and Wolgan Valleys in the north, Little Hartley in the east, Tarana in the south and Meadow Flat in the west. In addition to the major urban centre of Lithgow, the Lithgow LGA has 12 villages/hamlets with mining or farming backgrounds, including Dark Corner, Sunny Corner, Meadow Flat and Portland.

The Lithgow LGA lies almost wholly within the Wiradjuri Aboriginal nation, with the Gundungurra nation situated to the south and the Darug nation to the east.

Lithgow was previously perceived to be an inland mining and industrial centre, however, recent developments have seen it recognised as an important tourism destination, heritage centre and a desirable residential area. The area includes World Heritage listed National Parks and State Forests, making Lithgow an important leisure destination for Sydney residents.

Lithgow's social infrastructure includes 11 sports fields, an aquatic centre, museum and golf course, 120 playgrounds and parks, approximately 130 km of cycleway and footpath, 55 parks and reserves, three libraries, 12 childcare centres, six primary schools, two high schools, a TAFE and a Western Sydney University Campus.

Lithgow Hospital has a 24-hour emergency department and 46 in-patient beds. It provides allied health, medical, surgical and other health care services. Co-located is the Lithgow Community Health Centre, Lithgow Community Private, Lithgow Health Service Specialist Medical Centre, Three Tree Lodge aged care service and the University of Notre Dame Australia Lithgow Clinical School.

Lithgow Fire Station is on Cook Street, and NSW State Emergency Services has a unit on Silcock Street. The nearest airport to Lithgow is Orange Airport, which is 96.4 km away. Other nearby airports include Sydney (106 km) and Newcastle (173 km).

Bathurst Regional LGA

Bathurst is Australia's oldest European inland settlement located just over 200 km west of Sydney on the Macquarie River. On Wiradjuri land, Bathurst LGA covers 3,818 square km and includes the city of Bathurst and rural nine villages: Georges Plains, Hill End, Peel, Rockley, Sofala, Sunny Corner, Trunkey Creek, Wattle Flat and Yetholme. As the hub of central west NSW, Bathurst provides access to a market of more than eight million people with Sydney just two and a half hours drive away. Bathurst Regional Council was created in 2004 with the merger of Bathurst City Council and Evans Shire Council. It services a population of 44,000, and more than one million visitors annually. The road network covers more than 1,360 km, with almost 1,000 km of that being sealed.

Bathurst's social infrastructure includes: four museums, 30 public car parks, 23 sporting facilities, 120 playgrounds and parks, approximately 138 km of cycleway and footpath, 38 childcare centres, two special support schools, 18 primary schools, five high schools, a TAFE and Charles Sturt University.

Bathurst Hospital services include allied health, ambulatory care, coronary care, emergency medicine, intensive care, general medicine, maternity, mental health, drug and alcohol, obstetrics and gynaecology, oncology, paediatrics, pathology, radiology, rehabilitation and surgery services. Bathurst also has 'Hospital in the Home' and primary community health services for the surrounding townships of Blayney, Oberon, Perthville, Hill End, Sofala and Rylstone.

Bathurst Fire Station is on Suttor Street, and NSW State Emergency Services has unit on Lloyds Road. Bathurst Airport is the nearest airport west of Sydney, located 10-minutes' drive from the Bathurst CBD. The airport is owned and operated by Bathurst Regional Council and receives a range of aircrafts.

5.2 Key stakeholder groups

The Applicant has identified 11 key stakeholder groups to help tailor engagement efforts. These are described in **Table 4**.

Table 4: Description of key stakeholder groups

Stakeholder group	Description
1. Project host	The Forestry Corporation of New South Wales (FCNSW) is the primary landholder within the Project Area.
2. Project neighbours	Project neighbours are those landholders who live within approximately 8 km of the Project Area. There are 1,840 neighbour dwellings within around 8 km from the Project Area. Within this area, 1,537 are 'near neighbours' (within 4 kms) and 303 are 'far neighbours' (within 4-8 kms) of the Project Area.
3. Community members and special interest groups	Community members who live or groups which operate within 35 km of the Project infrastructure. This includes schools and education institutions.

4. First Nations groups and/or Traditional Owners	Registered Aboriginal Parties (RAPs) and Aboriginal groups, including Local Aboriginal Land Councils (LALCs).
5. Local councils and elected representatives	Local Government Councillors and Council staff. Also includes elected representatives at the State or Federal level.
6. State and Commonwealth Government	The public service - departments and agencies at the State or Commonwealth level.
7. Local industry	Groups or organisations representing local business sectors, such as business chambers and sector-based associations.
8. Local business	Businesses operating within 35 km of the Project Area. Includes emergency services and local airports.
9. Local media	Media outlets and communication channels that operate at the community, city, or regional level.
10. Forest users	Individuals or organisations using the forest for either recreational or commercial purposes. Includes permittees and authorised users. Includes NSW Forestry customers, plantation companies, harvesting and hauling contractors, infrastructure, silviculture and stewardship companies.
11. Electricity / utility service providers	Respective providers or gas, water and electricity. Includes surrounding energy generation projects.

5.3 Headline engagement data and potential social impacts

To date, the Applicant has engaged with 400+ individuals, 100+ groups and had over 1,500 unique interactions. This PSIA has prioritised ensuring appropriate engagement with project neighbours, local Shire councils and First Nations groups to identify immediate issues and interests.

Data on potential social impacts has been collected through key channels:

1. **Community survey** – between August-November 2024 collected 200+ responses to ten questions about the Project. Respondents were asked to share their personal values and degree of connection to landscape features, as well as what their interest was in the Project and how they currently use the Sunny Corner State Forest. Respondents were also asked what concerns, if any, they had about the Project, ideas to alleviate them, and asked to share ideas about community benefits programs.
2. **In-region visits** – at the time of submission, the Project team had made 10+ visits to the Project Area and surrounding region and conducted face-to-face engagement via the following ways: one-one-one meetings with key stakeholder individuals and groups, door-knocking Project neighbour dwellings, hosting a drop-in centre open for six-weeks, organising a town hall meeting and attending industry networking events. Details about these visits are in **Table 5**.
3. **Remote engagement** – the Applicant has also heavily engaged with the community and other key stakeholders through its website, emails, phone-calls, hosting online meetings, and placing advertisements through the local media.
4. **Intelligence shared by trusted partners** – trusted partners have shared information with the Applicant about community concerns or ideas that have been communicated to them. These partners include the Project host, community leaders, and Council representatives.

5. **Desktop research including media monitoring** – the Applicant has reviewed predicted and realised social impacts of comparable projects within Australia and internationally and monitored media coverage of this Project and other similar projects.

The analysis of potential impacts has been undertaken in line with the requirements of the SIA.

Table 6 lists the 25 potential impacts that have been identified by stakeholders through consultation to date, ranked in approximate order of significance and the frequency raised through consultations and community survey responses. The table shows which stage the potential impacts are relevant to (construction, operation and/or decommissioning), and whether the impact is expected to be positive, negative or mixed. It also aligns the impact with one of the following eight categories from the SIA Guidelines: way of life, community, accessibility, culture, health and wellbeing, surroundings, livelihoods, and decision-making systems. All these impacts will require detailed assessment during the EIS phase. The *Social Impact Scoping Worksheet* is attached to the Scoping Report**,** which presents the key social impacts and benefits that will be assessed in more detail within the SIA in the EIS phase.

Table 5: In-region consultation for the Project

Date of in-region visit	Attendees	Stakeholder groups engaged	Details
5-6 June 2024	Someva and MRP representatives	Local councils and elected representatives	• Council meetings with both Bathurst Regional Council and Lithgow City Council to introduce the Project and seek initial guidance and advice. Positive reception received.
4 June-11 July 2024	Someva, MRP and Lecroma representatives	• Project neighbours • Community members and special interest groups	• 4 June to 11 July 2024 – The Sunny Corner Wind Farm project drop-in centre at the Portland Library was open to the public on Tuesdays and Wednesdays. • Over the six-week period, approximately 50 people visited the drop-in centre to discuss the project. • Issues raised mostly aligned with typical concerns across all wind farm projects, and included: visual amenity, community benefits, environment and biodiversity, project decommissioning, land values, roads and traffic, and noise. • Issues raised specific to the project included: potential impacts on hunting, bushfire risk, and the possibility that a nuclear reactor could replace Mount Piper coal-fired power station. • Of all visitors, approximately 40 % expressed an objection to the Project, although most of these people still sought more information about the project. Approximately 30 % were supportive, and the remaining 30 % were passive or neutral and seemed to have not yet made up their minds.
12 June 2024	Someva, MRP, FCNSW and Lecroma representatives	• Project neighbours • Community members and special interest groups	• 12 June 2024 – Sunny Corner Progress Association Town Hall meeting. Mixed reception received, with broad range of concerns and opportunities captured for detailed assessment.
29-31 July 2024	Someva and Lecroma representatives	• Project host • Project neighbours • Community members and special interest groups • Local media • Local businesses	• 29 July 2024 – Met with Bathurst Community Climate Action Network (BCCAN), Greening Bathurst and Sisters of Mercy. Positive reception noting broad range of key concerns raised for detailed assessment during EIS. • 30 July 2024 – Met with FCNSW to provide a project update. • 30 July 2024 – Met with Bathurst LALC (Wiradjuri peoples) to provide initial introductions. Positive reception received with key concerns raised for EIS. • 30 July 2024 – Met with Barrinang Aboriginal Corporation (Wiradjuri peoples). Positive reception received with key concerns raised for EIS.

Date of in-region visit	Attendees	Stakeholder groups engaged	Details
		• First Nations groups and/or Traditional Owners	• 31 July 2024 – Door knocked in Dark Corner and Sunny Corner for neighbour introductions. Mixed responses, positive and negative, received with key concerns raised for EIS. • 30 July 2024 – Met with Mingaan Aboriginal Corporation (Wiradjuri peoples). Positive reception received with key concerns raised for EIS. • 31 July 2024 – Met with the Village Voice (Portland). Positive reception received noting key concerns raised and noted for ongoing response and communication into the community, and for detailed assessment during EIS.
27-30 August 2024	Someva and Lecroma representatives	• Project host • Project neighbours • Community members and special interest groups • Local media • First Nations groups and/or Traditional Owners	• 28-30 August 2024 – Door knocked in Yetholme, Dark Corner and Sunny Corner for neighbour introductions. Mixed responses, positive and negative, received with key concerns raised for EIS. • 29 August 2024 – Met with NSW Forestry Corporation for Project update. • 29 August 2024 – Met with Sunny Corner Progress Association members for Project update. • 29 August 2024 – Met with the Village Voice for Project update. • 29 August 2024 – Met with Warrabinga Native Title Claimants Aboriginal Corporation. Positive reception noting broad range of key concerns raised for EIS.
9-10 September 2024	Someva, MRP and Lecroma representatives	• Project host • Forest users • Local businesses	• 9-10 September 2024 – Attended NSW Forestry Industry Day, with presentations by forest contractors and site tours. Positive reception with broad range of key concerns specific to business, local economy, workforce and accommodation/housing raised for detailed assessment during EIS. • 10 September 2024 – Met with Greening Bathurst and Constructive Energy, and the Upstairs Business Hub. Positive reception with broad range of concerns and opportunities raised for further investigation. • 10 September 2024 – Met with Charles Sturt University Office of Enterprise and Engagement. Broad range of opportunities raised for further investigation.
26 September 2024	Someva representatives	Local businesses	• 26 September 2024 – Local business engagement event at ‘Upstairs’. Sunny Corner Wind Farm Someva representative presented, along with other developers of nearby projects. Positive reception. Approximately 20 people attended (mainly electrical trades business owners, fencers, and the Director of Engineering at Charles Sturt University). Each developer presented on their projects, and then there was a panel session with discussion

Date of in-region visit	Attendees	Stakeholder groups engaged	Details
			focusing on how smaller local businesses can compete with big ones to participate in projects.
1-2 October 2024	Someva representatives	Project host	• 1 October 2024 – Ongoing door knocking, project neighbour dwellings in Sunny Corner, Dark Corner. Mixed responses, positive and negative, received with key concerns raised for EIS. • 2 October 2024 – Forestry Corporation Fire Awareness Day. Approximately 60 NSW Forestry staff and renewable energy delegates from Iberdrola, Stromlo and Sunny Corner Wind Farm. Content discussed covered communications, firefighting vehicles, GIS mapping and mental wellbeing.
4-5 November 2024	Someva representatives	• Project host • Project neighbours • Local businesses	• Central West Forestry Zone Industry Day (Oberon) attendance with Forestry NSW, forest users, and local suppliers/contractors/businesses. • Doorknocks with project neighbours. Mixed responses, positive and negative, received with key concerns raised for EIS.
25-28 November 2024	Someva, MRP and Lecroma representatives	• Project host • Project neighbours • Local businesses • Local councils and elected representatives • First Nations groups and/or Traditional Owners • Community members and special interest groups	• 25 November 2024 – Met with Greening Bathurst, Constructive Energy, to better understand ways project benefits could be co-designed, partnerships for community building and potential project impact mitigation strategies. • 26 November 2024 – Met with Charles Sturt University teams to discuss the project and partnership building opportunities. Also met with Bathurst Regional Council Director Environmental, Planning and Building Services, and FCNSW to further discuss the project pre Scoping Report submission. • 27 November 2024 – Met with Wiradjuri Cultural Care, Lithgow City Council General Manager and Head of Planning, Mingaan Aboriginal Corporation, Project neighbours, Yetholme RFS, Meadow Flat RFS and Yetholme Progress Association • 28 November 2024 – Met with Bathurst LALC to undertake wind monitoring equipment installation site visit and update on the project. Met with Wiradyuri Central West Traditional Owners group to introduce the Project and team. • Meetings were generally positive, with key stakeholders briefed on latest progress and next steps. Key interests included in the future co-design of benefits, local content/supply opportunity, and potential project impact mitigation strategy development.

Table 6: Preliminary social impacts identified by stakeholders

Description of potential impact	Impact type (positive / negative / mixed)	Relevant SIA guideline category	Project stage (construction / operation / decommissioning)	Detail of potential impact
1. Landscape character and visual amenity	Negative	Surroundings	Construction and operation	Potential impacts in relation to change in the natural environment and visual amenity may lead to impacts on the perceived quality, use and aesthetics of the landscape in the Social Locality. Overwhelmingly, long-term visual impact of the WTGs is the greatest concern among Project neighbours.
2. Biodiversity (including birds and bats)	Negative	Surroundings	Construction and operation	The main concern in this potential impact theme is about the potential for bird and bat strike by the WTGs. Other concerns raised by environmental groups and community members relate to broader potential impacts on native flora and fauna, and impacts on nearby native hardwood forests.
3. Bush, forest and grassland fire management	Negative	Surroundings	Operation	Community members and Project neighbours have raised concerns that the WTGs will increase the risk of fire due to electrical faults, and that the WTGs will obstruct aerial water bombers in the event of a forest fire.
4. Waste management (including Project infrastructure recycling and/or decommissioning)	Negative	Surroundings	Decommissioning	Through face-to-face meetings and the community survey, environmental groups and several community members including Project neighbours have raised concerns about the waste generation at the end of the Project lifecycle.
5. Land value depreciation	Negative	Way of life	Construction	Some Project neighbours have reported an increased number of nearby houses being advertised for sale after the announcement of the Project and voiced concerns the Project will negatively impact land values, particularly during the construction stage.
6. Access rights to public land for commercial or recreational use (forest access)	Negative	Livelihoods	Construction and operation	Via the community survey and in-person conversations, some existing forest users have raised concerns about temporary or permanent changes to the way they currently access and use the Sunny Corner State Forest, including for activities such as hunting, recreation (hang gliding, bike riding, bushwalking), and beekeeping.
7. Road and traffic (transportation)	Mixed	Way of life	All	Project neighbours and other community members welcome the potential for road upgrades to facilitate construction. Others have raised safety concerns

Description of potential impact	Impact type (positive / negative / mixed)	Relevant SIA guideline category	Project stage (construction / operation / decommissioning)	Detail of potential impact
				about increased traffic on local roads, and other negative impacts during construction like noise, dust, oversized loads and short-term limited road closures or diversions.
8. Aboriginal cultural heritage	Negative	Culture	Construction	Through face-to-face meetings and the community survey, First Nations stakeholders have raised concerns about alteration to the landscape and potential impact on tangible and intangible Aboriginal heritage.
9. Water quality (and hydrology)	Negative	Surroundings	Operation	Several community members have raised concerns about microplastics in the water. In similar projects, concerns are typically raised about the potential impact of wind farms on groundwater quality or the established groundwater flow regime.
10. Noise	Negative	Health and wellbeing	Construction and operation	Some project neighbours have raised concerns about noise impacts on their way of life and wellbeing (as well as their pets and livestock), during both construction and operation.
11. Community benefits	Positive	Community	All	Community members are pleased with the economic and social benefits that will flow from the project and have begun making suggestions about activities and initiatives that could be supported.
12. Neighbour benefits	Positive	Community	All	Several Project neighbours have reported they will be happy to receive economic and other benefits from the Project secured through Neighbour Agreements.
13. Diversification of income streams and flow on economic benefits	Positive	Livelihoods	All	Some Project neighbours are pleased with the potential direct financial benefit they will derive from the Project to diversify existing income streams. Local businesses engaged with to date also welcome the employment and contracting opportunities that may emerge during the construction and operation stages.
14. Access to affordable energy	Mixed	Livelihoods	All	Through the community survey and via direct emails to the Applicant, some community members have suggested the Project should result in better access to affordable energy. Some have suggested nuclear energy is a better alternative to wind energy, including because they assert it is cheaper.
15. Social cohesion between	Negative	Community	Construction and operation	Some project neighbours and other community members have raised concerns that local tensions will increase between those who support and object to the

Description of potential impact	Impact type (positive / negative / mixed)	Relevant SIA guideline category	Project stage (construction / operation / decommissioning)	Detail of potential impact
community members				Project and be exacerbated by those who financially benefit from host agreements, neighbour agreements or the community benefits program.
16. Insurance (premium increases)	Negative	Way of life	All	Some project neighbours have raised concerns that the Project will lead to an increase in their insurance premiums due to a perceived rise in bushfire risk.
17. Industry development and diversification	Positive	Livelihoods	Construction and operation	Representatives from both local councils have noted the potential significant impact in contributing to developing the local renewable energy generation industry in this region, and offsetting current fossil fuel-based energy generation activities forecasted to cease. This potential impact also includes consideration for Mt Piper Power Station becoming a future site for a nuclear power station (under proposed Coalition Government energy policy).
18. Climate resilience	Mixed	Way of life	All	Environment groups and several community members have highlighted the role that wind energy plays in mitigating climate change by directly reducing greenhouse gas emissions. Some Project objectors have suggested nuclear energy should be the default replacement for coal and gas instead.
19. Accommodation and housing	Mixed	Accessibility	Construction	Councils and Forestry industry representatives have raised concerns about the pressure the construction stage will place on already limited local housing and short-term accommodation but welcome any long-term increases in housing stock from the Project.
20. Supply and demand for local goods and services	Mixed	Way of life	Construction	Local business owners have generally welcomed the potential benefit that will flow from the increased demand for local goods and services during the life of the Project, particularly during construction. However, smaller businesses have expressed concern about access to contracts when competing with bigger companies. Councils and local industry groups typically raise concerns about the inflationary effect on goods and services that the increased local population could have during construction.
21. Disruption to softwood plantation activities	Negative	Way of life	Construction	Softwood plantation industry representatives have voiced concerns that forestry operations and haulage may be impacted during the construction stage by clashing road use requirements and by the poaching of skilled forestry operators.

Description of potential impact	Impact type (positive / negative / mixed)	Relevant SIA guideline category	Project stage (construction / operation / decommissioning)	Detail of potential impact
22. Mental health	Mixed	Health and wellbeing	Construction	Some community members have predicted negative impacts on their mental health through perceived impacts on their livelihoods, way of life, and community connections. Supporters typically report positive impacts on their mental health through increase employment opportunities or other benefits, for example from the community benefits program.
23. Information availability and transparency for community members about the Project	Negative	Decision-making systems	Construction	Primarily via the online survey, a small number of community members have voiced concerns that there is not enough information or transparency about the Project, including its scope, timing and the approval process.
24. Local infrastructure to facilitate the Project (including transmission lines)	Mixed	Surroundings	Construction	Community survey respondents have raised concerns about the physical and economic footprint of local infrastructure that will be needed to facilitate the Project, including potentially new transmission lines.
25. Access to local services (health, education, trades etc)	Negative	Accessibility	Construction	Councils have raised concerns about the potentially negative impact on community access to local services such as health, education and skilled trades, particularly during the construction stage. Although this has not specifically been raised, desktop reviews suggest existing strain on access to local services.

6. EIS Assessment Approach

This section outlines the plan for developing the second phase SIA alongside the EIS process, in accordance with the requirements of the SIA Guidelines.

The SIA will allow for a more comprehensive understanding of the potential social impacts and benefits of the Project. The SIA prepared to support the EIS will also examine any other social issues raised by the community during further engagement as described in **Section 5**. Cumulative impacts of other proposed developments in the area will also be considered.

Where significant impacts are found, the Applicant will develop mitigation and management measures, and describe expected residual impacts post-application of these measures.

Accordingly, the second phase SIA structure will be:

1. Introduction, Project Description, Regulatory Context: more detailed overview of the information provided to date including applicable legislative and regulatory frameworks
2. Social Locality and Stakeholder Identification: more detailed analysis on the Project's social locality and stakeholder feedback
3. Methodology: will follow the DPE's Social Impact Significance matrix
4. Stakeholder Engagement for SIA: details of relevant stakeholder engagement to date in accordance with the Community Engagement Strategy, noting it is a live document and will be updated based on stakeholder feedback and monitoring of other Project data
5. Social Baseline: more detail provided and updated in accordance with stakeholder feedback
6. Expected and Perceived impacts: more detail on expected and perceived impacts
7. Impact Assessment and Prediction: pre- and post-mitigation efforts will be detailed in relation to social impacts informed by stakeholder engagement
8. Social Impact Enhancement, Mitigation, and Residual Impacts: a summary of all impacts and mitigation measures taken throughout all phases of the Project, noting residual impacts
9. Monitoring and Management Framework: overview of monitoring and social impact management measures to be implemented covering all phases of the Project
10. Current housing and accommodation availability, and requirements of the workforce during construction and future operations.
11. Community sentiment towards a significant increase in proposed largescale renewable energy development projects.
12. Overlapping periods of peak employment through early consultation with other local industry activities and businesses in the area.
13. References: all references will be cited in the SIA
14. Appendices: will include all community profiles and supporting materials used.

7. References

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