

Scoping Report

Berkeley Vale Battery Energy Storage System

22 Jul 2025

Scoping Report

Berkeley Vale Battery Energy Storage System

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22-Jul-2025

Job No.: 60736246

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Executive Summary

Background

Ausgrid is seeking development consent to construct, operate and maintain a Battery Energy Storage System (BESS) with a capacity of 150 Megawatts (MW) over a 2-hour duration (i.e. 300 Megawatt hours (MWh)) at Berkeley Vale adjacent to the existing Berkeley Vale Zone Substation (referred to as the Project). The Project would provide storage and firming capacity to the National Electricity Market (NEM), which would increase the stability of the electricity network, including ancillary frequency control services. In doing so, the Project would support the transition of the NEM from largely fossil fuel generation to renewable energy, contributing to New South Wales (NSW) and Australian decarbonisation targets.

The Project is classified as State Significant Development (SSD) under Division 4.7 of the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act). This scoping report has been prepared to support a request for Secretary's Environmental Assessment Requirements (SEARs) which would guide the preparation of an Environmental Impact Statement (EIS) to support the SSD application (SSDA).

The site

The Project is proposed in the central and southern part of Lot 60 of Deposited Plan (DP) 262025 (the site), within land owned by Ausgrid. The site address is 14 Apprentice Drive, Berkeley Vale, NSW 2261. The site is located within the Central Coast Local Government Area (LGA) approximately 55 km south-west of Newcastle. The site is zoned 'E4 General Industrial' in the *Central Coast Local Environmental Plan 2022* (Central Coast LEP).

The site is approximately 2.2 hectares (ha) in total and contains the existing operational Berkeley Vale Zone Substation in the northern part of the site, as well as associated overhead transmission lines.

The indicative area within the site that is likely to be physically disturbed by the Project is approximately 1.6 ha (the Project Area). This area includes the operational footprint of the BESS, a permanent access road, a construction compound and laydown areas which will be rehabilitated following completion of construction.

The Project

The Project comprises a BESS facility that would store electricity from the grid during periods of high generation and release it during periods of high demand. Key features of the Project would include:

- Construction, operation and maintenance of a BESS with a 150 MW maximum power output capacity with 2-hour duration (i.e. 300 MWh)
- Containerised battery units (84 Megapacks) and associated infrastructure, including inverters and medium voltage (MV) transformers
- A 33 kilovolt (kV) underground cable connection from the BESS facility to the existing Berkeley Vale Zone Substation
- A combined switch room and control room building
- Ring main units
- An onsite workshop facility
- One auxiliary transformer
- A backup diesel generator
- Onsite car parking
- Two new driveways off Enterprise Drive

- Other ancillary infrastructure, including fire suppression, stormwater management, security fencing, lighting and CCTV.

Likely impacts of the project

The environmental issues relevant to the Project have been identified in accordance with the *State significant development guidelines – preparing a scoping report* (DPIE, 2022). This process involved reviewing previous reports, undertaking investigations (including site inspections), and desktop searches of relevant environmental databases between June 2024 and May 2025. The key environmental matters issues that have been identified for detailed assessment within the EIS are:

- Biodiversity
- Soils, groundwater and contamination
- Surface water and flooding
- Noise and vibration
- Traffic and transport
- Aboriginal heritage
- Bushfire risk.

Other matters to be considered in the EIS are air quality, non-Aboriginal heritage, social and economic impacts, visual amenity, hazards and risk, and waste management. Relevant cumulative impacts for these matters will also be assessed.

In assessing the Project, the key focus would be avoidance and minimisation of potential environmental and community impacts. Where avoidance is not practical or feasible the EIS would include mitigation and management measures to address potential adverse impacts incurred during construction and/or operation.

Detailed consultation regarding the Project and its impacts is proposed with stakeholders and the local community, and would continue throughout the assessment, detailed design, construction and operation phases.

1.0 Introduction

As the contribution of renewable energy to the national electricity market (NEM) increases so does the need for short-term energy storage. Ausgrid aims to address this through the development of Battery Energy Storage Systems (BESS), using available land within their existing property portfolio across New South Wales (NSW).

Ausgrid is seeking development consent to construct, operate and maintain the Berkeley Vale BESS with a capacity of 150 megawatts (MW) over a 2-hour duration (i.e. 300 MWh) (the Project).

The Project would be located in the central and southern part of Lot 60, of Deposited Plan (DP) 262025, adjacent to Ausgrid's existing 132 kV/11 kV Berkeley Vale Zone Substation at 14 Apprentice Drive, Berkeley Vale, NSW 2261. There would be two access points to the Project, the primary access point would be off Enterprise Drive via two new permanent driveways. Secondary access would be off Apprentice Drive using the existing driveway for the Berkeley Vale Zone Substation. New permanent access for the Project connecting to this existing Berkeley Vale Substation driveway would be along the western side of the site. **Figure 1-1** shows the indicative location of the Project.

1.1 Project background

The Project forms part of Ausgrid's broader strategy to enhance grid resilience and support the transition to renewable energy. As the energy market shifts away from fossil fuels, the need for large-scale energy storage is critical to maintaining network stability, managing peak demand, and integrating variable renewable generation.

Ausgrid has identified battery storage as a key technology to provide firming capacity and frequency control services within its network. The Project aligns with national and state energy strategies, including the NSW Electricity Strategy, NSW Electricity Infrastructure Roadmap, and the Integrated System Plan (AEMO, 2024), which highlight the role of energy storage in delivering secure, affordable, and low-emission electricity. The Project also contributes to Ausgrid's long-term decarbonisation goals, supporting a net-zero emissions future by 2045.

The site was selected due to its proximity to the Berkeley Vale Zone Substation, an existing Ausgrid asset. This location enables efficient grid connection while minimising the need for additional transmission infrastructure, reducing environmental and social impacts. Parts of the site have been subject to historical disturbance from the construction of the Berkeley Vale Zone Substation and associated infrastructure.

1.2 Project overview

Key features of the Project would include:

- Construction, operation, and maintenance of a BESS with a 150 MW maximum power output capacity with 2-hour duration (i.e. 300 MWh)
- Containerised battery units (84 Megapacks) and associated infrastructure, including inverters and medium voltage (MV) transformers
- A 33 kV underground cable connection from the BESS facility to the existing Berkeley Vale Zone Substation
- A combined switch room (33 kV) and control room building
- Ring main units
- An onsite workshop facility
- One auxiliary transformer
- A backup diesel generator
- Onsite car parking
- Two new driveways off Enterprise Drive

- Other ancillary infrastructure including stormwater management, security fencing, lighting and CCTV.

FIGURE 1-1:
BERKELEY VALE SITE AND
INDICATIVE PROJECT LOCATION



Legend

- The site
- Project Area
- Site access point

Transmission Lines

- 132kV

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1.3 Project objectives

The objectives of the Project are:

- To provide storage capacity to the NEM to increase the stability of the electricity network
- To support the transition from fossil fuel to renewable energy by providing firming capability to support increasing levels of renewable energy generation
- Where applicable, provide system services to help correct and/or stabilise the wider transmission network, e.g. frequency stabilisation.

1.4 The applicant

The applicant for this Project is Ausgrid (ABN: 78 508 211 731), located at 24-28 Campbell Street, Sydney NSW 2000. Ausgrid is the largest distributor of electricity in eastern Australia, providing power to 1.8 million customers and powering 60% of NSW's Gross Domestic Product (GDP). Ausgrid's network is made up of substations, transmission lines, underground cables and power poles, spanning 22,275 square kilometres (km²) throughout Sydney, the Central Coast and the Hunter Region.

The NSW Treasury holds the largest stake in the Ausgrid business (49%), with the remainder made up of institutional investors.

Ausgrid operates in the NEM as both a Distribution Network Service Provider (DNSP) and a Transmission Network Service Provider (TNSP). Ausgrid actively operates, maintains, repairs and builds its electricity network with a focus on safety and reliability.

1.5 Related development

The existing Berkeley Vale Zone Substation is located in the northern section of the site. The BESS would connect to this substation via a 33 kV underground cable.

To prepare its infrastructure for new and changing customer connections as part of the renewable energy transition, Ausgrid plans to install high voltage (HV) connection infrastructure at the Berkeley Vale Zone Substation. These works would be assessed and determined by Ausgrid separately in accordance with Part 5 of the EP&A Act.

1.6 Purpose and content of this report

This scoping report has been prepared to request Secretary's Environmental Assessment Requirements (SEARs) for the Project from the NSW Department of Planning, Housing and Infrastructure (DPHI).

This scoping report provides a description of the Project and presents the strategic context of the Project. It presents a preliminary assessment to identify matters for further assessment in the EIS, and the level of detail of that assessment.

This scoping report has been prepared in accordance with *State significant development guidelines – preparing a scoping report* (DPIE, 2022), in support of an application for SEARs for the Project.

2.0 Strategic context

This chapter provides a high-level analysis of the strategic context in which the Project is proposed, including:

- A summary of key government strategies and policies that provide strategic support for the Project (refer to **Section 2.1**)
- An analysis of the key features of the site and surrounds that could affect or be affected by the Project (refer to **Section 2.2**)
- A summary of land ownership and any agreements that the Applicant has entered into with other parties (refer to **Section 2.4**)
- Whether the Project is likely to generate cumulative impacts with other relevant future projects in the area (refer to **Section 2.3** and **Section 6.11**).

2.1 Strategic planning

2.1.1 Australia's Long Term Emissions Reduction Plan

Australia's whole-of-economy Long-Term Emissions Reduction Plan (DISER, 2021) is focused on technology and sets out how Australia will achieve net zero emissions by 2050. One of the key principles of the plan is keeping energy prices down with affordable and reliable power. The plan outlines how the Australian Government will:

- Drive down the cost of low emissions technologies (including battery storage)
- Deploy these technologies at scale
- Help regional industries and communities seize economic opportunities in new and traditional markets
- Work with other countries on the technologies needed to decarbonise the world's economy.

The *Technology Investment Roadmap* (DISER, 2020) (TIR) is the foundation of the *Long-Term Emissions Reduction Plan* and sets a process to develop and deploy low emissions technologies (including battery storage). By prioritising government investment, it aims to make these emerging technologies cost competitive with existing high emission technologies. Importantly, the TIR includes a requirement to prepare Low Emissions Technology Statements (LETS) (DISER, 2022), which review, refine and evaluate the government's investment in low carbon emission technologies.

The current LETS (2022) include energy storage as an existing priority technology for government investment. Specifically, the LETS indicates that broad deployment of electrical energy storage will facilitate further integration of solar and wind energy in the NEM. The LETS states that energy storage will provide network security services and a source of reliable, dispatchable electricity.

The Project would help reduce electricity prices during peak demand periods for consumers in the Ausgrid distribution network. As the Project intends to provide a source of reliable, dispatchable electricity, it would be consistent with the principles of the *Long-Term Emissions Reduction Plan*.

2.1.2 2024 Integrated System Plan

The 2024 Integrated System Plan (AEMO, 2024) (ISP) is a whole-of-system plan that provides a coordinated generation and transmission investment plan to transition the NEM over the next 30 years. The Australian Energy Market Operator (AEMO) updates the ISP every two years, with the most recent ISP for the NEM being published in June 2024. Under the 'Step Change' scenario, identified in the 2024 ISP as the most likely scenario, the NEM will need to cater for significant investment in generation capacity, storage, firming generation and transmission augmentation as coal generation withdraws – a process that is occurring two to three times faster than anticipated.

Under the Step Change scenario, the 2024 ISP predicts that about 90% of the current 21 gigawatt (GW) of coal capacity will retire by 2034-35, with the remainder retiring before 2040. The ISP suggests that 49 GW / 646 GWh of new battery and hydro storage (distributed and utility scale), would be required to help firm the renewable energy sources entering the market.

2.1.3 NSW Electricity Strategy 2019

The NSW Electricity Strategy (NSW DPIE, 2019) is the NSW Government's plan for a reliable and sustainable electricity future that supports a growing economy. This strategy is designed to complement the *NSW Transmission Infrastructure Strategy*, and the work of the NEM's regulatory bodies.

The strategy outlines three approaches for the NSW government to meet these objectives:

Support the market to deliver reliable electricity at the lowest price, while protecting the environment

- Set an Energy Security Target to ensure that the State has sufficient generation capacity to cope with unexpected generator outages during periods of peak demand, such as during heat waves, and
- Ensure the State has sufficient powers to deal with an electricity emergency if one arises.

The strategy outlines that the cheapest and most efficient way to develop a modern and complex energy system to replace coal-fired generators is to build a mix of low-cost renewables, gas-fired generators and other storage options, such as batteries and pumped hydro. The strategy also outlines the projected changing patterns of electricity usage, with more consumers and businesses utilising solar generation.

It is noted that the peak supply of solar energy, during the middle of the day, does not align with peak demands, which continue into the evening. The implementation of electricity storage, like the Project, allows electricity prices to be managed for consumers, whilst aiding the NSW Government's plan for reliable and sustainable electricity supply for the future.

2.1.4 NSW Electricity Infrastructure Roadmap 2020

The *NSW Electricity Strategy* (NSW DPIE, 2019) is intended to be implemented through the *NSW Electricity Infrastructure Roadmap* (NSW DPIE, 2020). The Roadmap envisions a modern electricity system in NSW built on the following five pillars:

1. *'Driving investment in regional NSW: supporting our regions as the State's economic and energy powerhouse.'*
2. *'Delivering energy storage infrastructure: supporting stable, long-term energy storage in NSW.'*
3. *'Delivering Renewable Energy Zones: co-ordinating regional transmission and renewable generation in the right places for local communities.'*
4. *'Keeping the grid secure and reliable: backing the system with gas, batteries or other reliable sources as needed.'*
5. *'Harnessing opportunities for industry: empowering new and revitalised industries with cheap, reliable and low emissions electricity.'*

The Project is in keeping with the vision of the *NSW Electricity Infrastructure Roadmap* in that it:

- Represents a private regional investment
- Delivers energy storage
- Is appropriately zoned and uses existing transmission infrastructure
- Provides security to the NEM
- Provides cost effective and reliable electricity with negligible additional emissions.

2.1.5 State Infrastructure Strategy 2022-2042

The *NSW State Infrastructure Strategy 2022-2042* (Infrastructure NSW, 2022) (SIS) builds on the NSW Government's major long-term infrastructure plans, as initially outlined within *NSW State Infrastructure Strategy 2012* (Infrastructure NSW, 2012). The SIS outlines the government's priorities for the next 20 years, and highlights that ongoing investment is required to keep pace with population growth, ensure competitiveness of NSW industry and meet NSW Governments social and economic goals.

Some of the relevant objectives and strategic directions of the SIS include:

- Embedding energy reliability and resilience
- Achieving an orderly and efficient transition to net zero
- Adopting new technologies to improve infrastructure efficiency
- Boosting economy-wide productivity
- Supporting sustainable growth and development.

The SIS highlights the need for reliable and resilient infrastructure. The Project would address this through the provision of backup power during outages and by stabilising the grid.

The Project would support the transition to net zero by enabling the storage and use of renewable energy, reducing reliance on fossil fuels.

The Project would also contribute to the reduction in energy costs and improvement in the economic competitiveness of NSW, which aligns with the strategy's goals.

2.1.6 Central Coast Regional Plan 2041

The *Central Coast Regional Plan 2041* (NSW DPE, 2022) (the Regional Plan) is a 20-year land use plan prepared under the EP&A Act. The Regional Plan applies to the Central Coast LGA. The Regional Plan sets the strategic land use framework for continued economic growth and diversification. The 2021 vision for the Central Coast is '*One Central Coast, connected to the Country, where people live near their work in sustainable 15-minute neighbourhoods or the region's vibrant capital*'. The Regional Plan is developed around four principles:

- Growth – Support a net zero emissions economy and foster employment growth, competitiveness and innovation
- Community – Promote places to be together by weaving nature into our towns and cities which have welcoming and safe streets and public spaces
- Resilience – Reduce risks associated with place-based shocks and stresses to improve the community's ability to withstand, recover from and adapt to changes and become more resilient
- Equity – Ensure communities are safe and healthy with residents having opportunities for economic advancement, housing choices and a secure retirement.

To support the delivery of these principles, the Regional Plan contains nine objectives, which are enforced through several strategies. Of relevance to this Project are the following two objectives.

Objective 1: A prosperous Central Coast with more jobs close to home

The NSW Government's *Electricity Infrastructure Roadmap* identifies the Hunter-Central Coast as one of at least five renewable energy zones (REZ) in NSW. The development of the REZ will take advantage of existing transmission infrastructure, transport links, water resources and a skilled workforce.

The site has been chosen due to it being strategically located adjacent to an existing substation, which is owned and operated by Ausgrid (as discussed in **Section 1.1**). The Project would help meet increasing electricity demand in the Berkeley Vale area by storing and supplying power to the grid during periods of high demand, thereby supporting industrial and commercial growth in the area. This would contribute to the '*more jobs close to home*' part of this objective.

Objective 7: Reach net zero and increase resilience and sustainable infrastructure

The Regional Plan highlights the need for renewable energy solutions and resilient infrastructure to combat rising energy prices. Objective 7 aims to facilitate the transition to a net-zero economy by integrating sustainable energy infrastructure, enhancing energy security, and ensuring the region is prepared for climate-related risks.

The Project directly supports this objective by providing energy storage capacity that enables greater integration of renewable energy sources into the grid. By reducing reliance on fossil fuel generation and improving grid stability, the Project enhances the resilience of the Central Coast's energy network.

2.1.7 Central Coast Local Strategic Planning Statement 2020

The *Central Coast Local Strategic Planning Statement 2020* (Central Coast Council, 2020) (CCLSPS) is the Central Coast Council's plan to guide growth and development until 2036. The CCLSPS outlines planning priorities to achieve the Central Coast Council's land use planning vision.

The CCLSPS identifies the need to invest in renewable energy under the *respect our environment* key driver for change. Although the Project is not a renewable energy generation project, it will provide storage and firming capacity to meet growing demand and provide network and stability for residential, commercial and industrial customers.

2.1.8 Central Coast Community Strategic Plan 2018-2028

The *Central Coast Community Strategic Plan 2018-2028* (Central Coast City Council, undated) (CCCSP) sets out the strategies and actions for the development of the Central Coast City Council's community. The vision of the CCCSP is *'We are a one Central Coast a smart, green and liveable region with a shared sense of belonging and responsibility'*. The plan is centred around five themes, *belonging, smart, green, responsible and liveable*.

The *'green'* theme includes improving and safeguarding biodiversity and incorporating renewable energy and energy efficiency into future design and planning. The Project aligns with the *'green'* theme as it supports the development of the renewable energy sector by providing an electricity storage facility that provides storage and firming capacity and increases the overall stability of the electricity network.

2.2 Key features of the site and surrounds

2.2.1 Regional context

The site is located within the Central Coast LGA approximately 55 km south of Newcastle CBD and 62 km north of Sydney CBD. The closest town to the site is Berkeley Vale, located approximately 2 km south-east. **Figure 2-1** shows the location of the site within the broader regional context.

The Central Coast LGA had an area of 1,681 km² and an estimated population of 346,596 at the time of the 2021 Australian Bureau of Statistics (ABS) census (Australian Bureau of Statistics, 2022). The main employment industries within the Central Coast LGA in 2021 were retail trade, construction and manufacturing.

Major transport routes within the local area include the Pacific Motorway (M1) approximately 2.6 km west of the site, which forms part of the major transport connection between Sydney and Newcastle.

Tuggerah Lake wetlands, which are classified as nationally important wetlands, are located 1.7 km east of the site, and the Tuggerah State Conservation Area is located 1.9 km to the north.

2.2.2 The site

The site is located at 14 Apprentice Drive, Berkeley Vale, NSW 2661, comprising Lot 60 of DP 262025. The site is entirely owned by Ausgrid and is approximately 2.2 ha in extent.

Primary access to the site is proposed via two new driveways off Enterprise Drive. The driveways would be located at and cross 8W Enterprise Drive, comprising Lot 62 of DP 262025.

The land within the site is relatively flat, with a slight slope from south (high) to north (low).

The site contains the existing Berkeley Vale Zone Substation and overhead transmission lines. The Project would be located in the central and southern part of the site, adjacent to the existing substation.

A portion of the site has undergone previous ground disturbance and was sealed with bitumen. This area contains piles of fill material and minimal vegetation is present. The remainder of the site contains native vegetation which would be directly impacted during the development of the Project. Two threatened plant species were identified in the site and three hollow bearing trees are located within the Project Area.

The indicative area within the site that is likely to be physically disturbed by the Project (the Project Area) is approximately 1.6 ha. The Project Area includes the operational footprint of the BESS, a permanent access road, and a construction compound and laydown areas, which will be rehabilitated following completion of construction. The extent of the site is provided in **Figure 1-1**.

The site is bordered by Apprentice Drive to the north and Enterprise Drive to the south.

FIGURE 2-1:
REGIONAL CONTEXT



Legend

- The site
- LGA boundary
- Industrial area
- National Park/Reserve
- Local park
- Motorway
- Primary road
- Railway
- Railway station

Transmission Lines

- 330kV
- 132kV

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2.2.3 Land uses and sensitive receivers

2.2.3.1 Industrial and commercial

The site is zoned 'E4 General Industrial' under the Central Coast LEP. This land use zone, comprising largely light industrial and commercial use, extends to the north and east of the site. Industries within this area include:

- Storage facilities
- Mechanical workshops
- Transportation and haulage
- Concrete manufacturing
- Food manufacturing.

Land use zones are shown in **Figure 2-2**.

2.2.3.2 Residential

There is no residential zoned land within the site. The closest residential land (zoned 'R2 Low Density Residential') is located to the south of Enterprise Drive, with the nearest sensitive residential receptors on Butternut Avenue, approximately 240 m to the south-east of the site. Other residential properties are located on Sugar Pine Avenue, Candlebark Avenue and Nightshade Drive.

2.2.3.3 Recreational and environmental land

There is no recreational or environmental land within the site. Land immediately west of the site is zoned as 'C3 Environmental Management' and land on the southern boundary of Enterprise Drive is zoned as 'C2 Environment Conservation'. The two new driveways located to the south of the site would cross land zoned as 'C3 Environmental Management'. An access agreement for these new driveways would need to be agreed with Central Coast Council.

The nearest recreational zoned land are road reserves immediately adjacent to the site which are zoned as 'RE1 Public Recreation'. The closest accessible recreational area to the site is the Ashwood Close Reserve located 420 m east of the site.

The nearest conservation area is the Tuggerah State Conservation Area, located 1.9 km to the north of the site at Chittaway Point. The conservation area covers an area of 191 ha and contains hiking trails and boat launching facilities. This area is zoned as 'C1 National Parks and Nature Reserves'. The objective of this land use zone is to enable the management and appropriate use of land reserved under the *National Parks and Wildlife Act 1974*.

2.2.4 Key risks and hazards

Key risks and hazards for the Project Area, including flood risk, erosion and bushfire prone land are detailed in **Section 6.0**.

FIGURE 2-2:
LAND USE ZONES

Legend

 The site

LEP Land Zoning

-  C2 - Environmental Conservation; C2, Environmental Management
-  C3 - Environmental Management
-  C4 - Environmental Living
-  E1 - Local Centre
-  E4 - General Industrial
-  R1 - General Residential
-  R2 - Low Density Residential
-  RE1 - Public Recreation
-  SP2 - Infrastructure
-  W1 - Natural Waterways

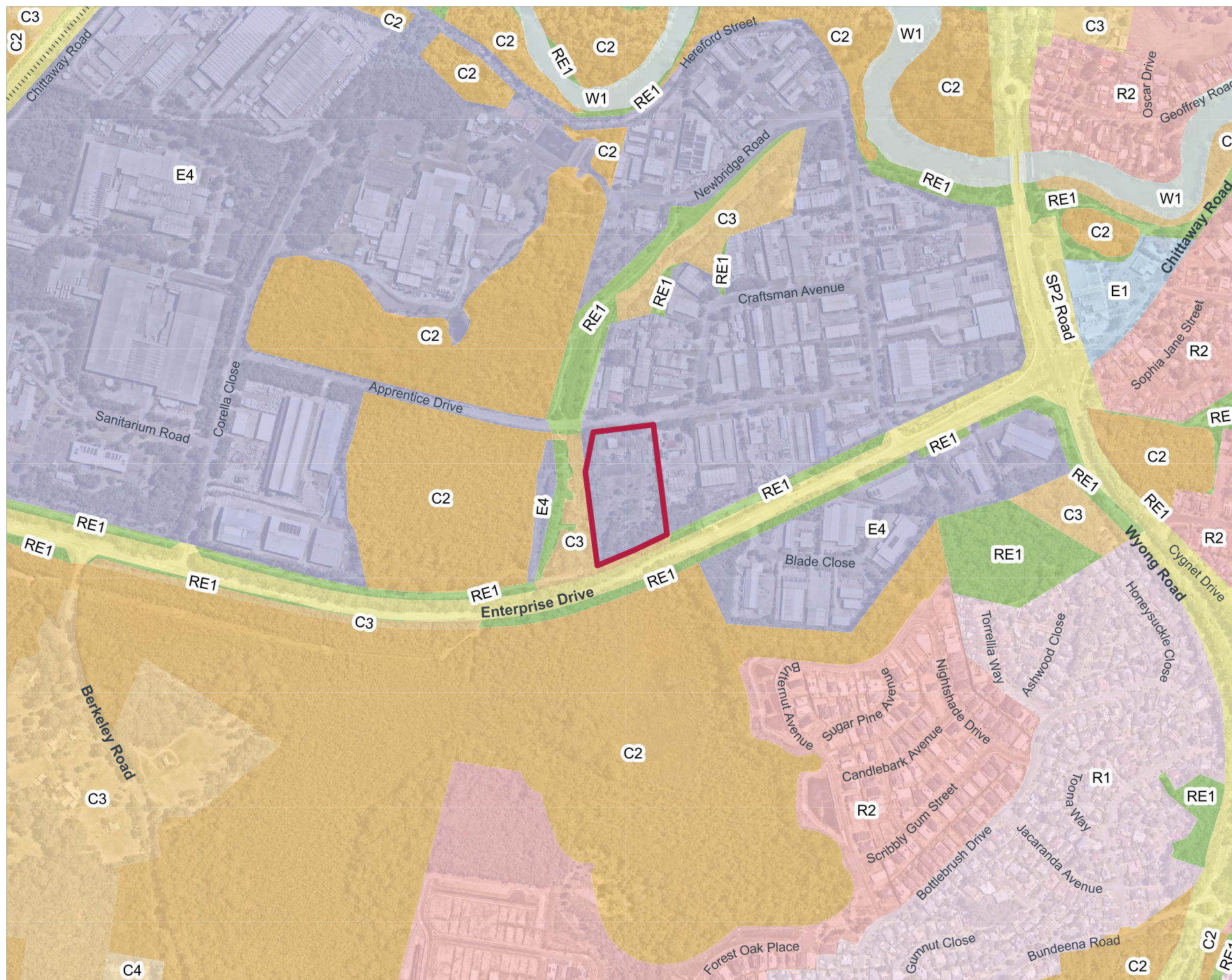
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2.3 Cumulative impacts

The *Cumulative impact assessment guidelines for state significant projects* (DPIE, 2022) require consideration of whether the Project is likely to generate cumulative impacts with other relevant future projects in the area and details the assessment approach for cumulative impacts.

Cumulative impacts in the context of development are positive or negative compounding effects of a single project or multiple projects in an area. Cumulative impacts can result from historic, current or future projects.

Cumulative impact assessment (CIA) is not required for all projects; in cases where there are no relevant future projects, CIA would not be deemed necessary.

The guidelines require that the study area for CIA is defined in the scoping report, as well as outlining what to assess, the time period, the projects to include, the assessment approach and any key uncertainties. These details are provided in **Section 6.11**.

2.4 Land ownership and agreements

The Project will be constructed and operated on land owned by Ausgrid.

Two access points to the site are proposed, the primary access would be via Enterprise Drive and would require the construction of two new driveways, the secondary access would be via an existing driveway off Apprentice Drive, which provides access to the Berkeley Vale Zone Substation, and is owned by Ausgrid.

To secure the access off Enterprise Drive, an access agreement for these new for the new driveways would need to be agreed with Central Coast Council. Ausgrid will also hold discussions with Central Coast Council in relation to strategic support from Ausgrid for local sustainability and social value opportunities as part of a Voluntary Planning Agreement. In particular, this would include initiatives that prioritise opportunities that align with both Council and Ausgrid's strategic priorities, can benefit from Ausgrid's expertise and continue to enable the renewable energy transition.

3.0 The Project

3.1 Project overview

The Project comprises a BESS facility that would store electricity from the grid during periods of high generation and release it during periods of high demand. The BESS would also provide frequency control services for the local grid.

Key features of the Project would include:

- Construction, operation, and maintenance of a BESS with a 150 MW maximum power output capacity with 2-hour duration (i.e. 300 MWh)
- Containerised battery units (84 units) and associated infrastructure, including inverters and MV transformers
- A 33 kV underground cable connection from the battery units to the existing Berkeley Vale Zone Substation
- Combined switch room and control room building
- Ring main units
- An onsite workshop facility
- One auxiliary transformer
- A backup diesel generator
- Onsite car parking
- Two new driveways off Enterprise Drive
- Other ancillary infrastructure such as internal access roads and laydown areas, stormwater management, 2.4 m high boundary security fence, lighting and CCTV.

The BESS is proposed on property owned by Ausgrid; therefore, no easements or leases are required. The new driveways off Enterprise Drive are however located on land owned by Central Coast Council. Ausgrid would therefore either need to purchase this section of the property or an easement would be required.

Further details regarding the Project specifics are provided in the following sections of this scoping report. These details are subject to review during the preparation of the EIS and the detailed design. Whilst the construction of the Project may be carried out in stages, the scoping report and EIS will consider and address the environmental impacts associated with the Project as a whole.

3.1.1 Battery Energy Storage System

The BESS technology would consist of a series of containerised lithium iron phosphate (LiFePO₄) battery units (84 Megapacks). The containerised battery units would be approximately 2.75 m tall with a footprint of approximately 1.65 m by 8.8 m and would be mounted on a compacted gravel base, screw piles or a concrete slab. A containerised battery unit (Megapack) is shown in **Figure 3-1**.

The prefabricated containerised battery units (containing the battery cells, inverters and cooling systems) would be arranged in a series of rows, as shown in **Figure 3-2**.

The units would connect to MV transformers, ring main units, control systems and a battery management system.



Figure 3-1: Typical single battery unit



Figure 3-2: A typical BESS site

The BESS is intended to have an operational life of up to 50 years, though it may be replaced and/or upgraded to extend this timeframe, subject to further planning approval. Should this not occur, components would be removed and re-purposed where possible at the end of this period. The land would be rehabilitated in a manner consistent with the surrounding area, and in accordance with legislative requirements to achieve pre-development conditions as far as is reasonably practicable.

3.1.2 Underground cable connection

An underground 33 kV cable is proposed to connect the BESS to the Berkeley Vale Zone Substation. The specific design of this component will be subject to detailed design during the development of the EIS.

3.1.3 Vehicle access

The area around the site contains industrial land uses and is serviced by an extensive road network. The site is bordered by Apprentice Drive to the north and Enterprise Drive to the south. Access to the Project would be off a shared driveway with the existing Berkeley Vale Zone Substation. There will be two access points to the Project. The primary access will be off two new driveways from Enterprise Drive which is a single sealed land, two-way regional road owned by Transport for NSW. Secondary access will be via an existing driveway off Apprentice Drive which provides access to the Berkeley Vale Zone Substation. Apprentice Drive, is a sealed single lane, two-way council owned road. Apprentice Drive adjoins Wyong Road (B74) which connects to the Pacific Motorway (M1) north of the site. Consultation will be undertaken with both the Central Coast Council and Transport for NSW regarding the proposed new driveways off Enterprise Drive.

3.1.4 Operational workforce and hours

Once constructed, the Project would operate 24 hours a day, seven days a week as an unmanned facility. The BESS would typically be managed remotely and staffed as required during both planned and unplanned maintenance periods.

Likely maintenance and operation activities include but are not limited to:

- Vegetation trimming to maintain electrical safety clearances and asset protection zones
- General landscape maintenance, including mowing
- Driveway and access track maintenance
- Fence and gate maintenance and repair
- Staff attendance for routine inspection, operation and planned ad hoc maintenance activities.

3.2 Project construction

3.2.1 Construction overview

It is anticipated that construction of the Project would occur from mid-2027 to late-2028, though these dates are subject to change pending equipment lead times and availability.

The construction period may also vary in duration depending on weather conditions, environmental issues and the availability of materials and contractors.

Works that are likely to generate audible noise at sensitive receivers would generally be undertaken during standard construction hours, between 7am and 6pm Monday to Friday and 8am and 1pm on Saturday. Some construction activities may require work on Sundays or during other out of hours periods, including but not limited to electrical commissioning and testing and emergency situations where work is required to prevent harm to persons or property. These works would be subject to mitigation and consultation.

Construction works would likely involve:

- Installation of erosion and sediment controls and site fencing
- Development/upgrade of site access and internal access roads
- Construction of supporting structures, e.g., temporary construction compound, construction laydown areas and storage facilities
- Earthworks to form the BESS pad, switch room and control room building and construction laydown areas
- Concrete works associated with the BESS pad and building foundations/footings
- Construction of permanent stormwater drainage network
- Structural works to support the BESS and combined switch room and control room building
- Delivery, installation and electrical fit-out of BESS and transformers
- Construction of the cable connection between the BESS and the substation

- Installation of a diesel generator for use during operation and in case of emergency
- Testing and commissioning activities
- Removal of construction equipment and rehabilitation of construction areas, including landscaping.

3.2.2 Construction plant and equipment

Table 3-1 provides an indicative list of the plant and equipment that would be used to construct the Project. The equipment list would be further refined during detailed design.

Table 3-1: Indicative plant and equipment for construction

Equipment to be used during construction	
Enabling works and prefabrication	
Front end loaders	Excavators
Dump trucks	Graders
Road trucks	Compactors
Water trucks	Light Vehicles
Structural, civil, mechanical and electrical works	
Front end loaders	Dump trucks
Road trucks	Excavators
Graders	Bobcats
Concrete trucks and pumps	Compactors and rollers
Elevated work platforms	Light Vehicles
Cranes	Backhoe
Concrete saws and grinders	Generators
Water trucks	
Commissioning	
Elevated work platforms	Generators
Cranes	Light Vehicles
Finishes and demobilisation	
Water trucks	Backhoe
Compactors	Light Vehicles

3.3 Decommissioning

At the end of the Project's design life (approximately 50 years), the BESS infrastructure would either be disposed of or recycled at a suitably approved waste management facility, or subject to confirmation, be returned to the original equipment manufacturer for refurbishment and recycling.

The site would be rehabilitated in accordance with legislative requirements to achieve pre-development conditions as far as is reasonably practicable.

3.4 Estimated development cost

The total EDC for the Project is anticipated to be greater than \$30 million. The EDC would be confirmed as part of preparation of the EIS.

3.5 Alternatives considered

Alternatives to the Project have been considered and are outlined below. Where relevant these alternatives would continue to be considered throughout the development of the Project to ensure it is optimised for its location and setting.

Following a constraints and opportunities analysis undertaken of the Project, the following alternatives have been considered:

- The ‘do nothing approach’
- Site location alternatives
- BESS technology and provider alternatives.

These are explored in further detail as follows.

3.5.1 The ‘do nothing’ approach

The ‘do nothing’ approach would involve not constructing and operating a BESS at the site. This option may result in potential energy disruption issues.

As discussed in **Section 2.0**, the NEM requires firming and storage capability to be able to store energy and meet electricity demand at different times of the day and throughout the year. Without the Project, the projected future increase in demand for energy throughout the Central Coast LGA would not be adequately addressed as supply may be limited during peak demand periods. Given the existing network capacity and adjacent land holdings, any comparable alternate network solution will likely come at higher cost and higher community and environmental impact than that proposed. The ‘do nothing’ option would not meet the objectives of the Project (refer to **Section 1.3**) or the demands on the NEM (refer to **Section 2.1**) and is therefore not considered a feasible option.

3.5.2 Location alternatives

In selecting a location for the BESS, Ausgrid completed a detailed site selection process, including rating potential alternative locations based on key selection criteria, including environmental, social and technical parameters.

A criterion was the location of the BESS in relation to the distribution network. By locating grid-scale storage on the distribution network close to customers, Ausgrid is able to deliver network resilience during extreme weather and network events and potentially help to defer network investment over time.

Additionally, constructing the Project in proximity to an existing Ausgrid substation has the benefit of containing the impacts of the Project to an existing operating industrial location.

Environmental and amenity factors were also considered for each location, noting the sensitivities in proximity to each location. Alternative sites were discounted based on:

- Environmental impacts and/or
- The potential increased costs associated with acquiring property and/or
- The increased extent of connection infrastructure between the BESS and the substation.

3.5.3 Alternative BESS technology vendors

Ausgrid undertook a review and evaluation of the available solutions in the market to select a BESS Original Equipment Manufacturer (OEM). This technical assessment considered efficiency, system reliability, inverter readiness and integrator compatibility. Details of the selected BESS technology and OEM will be provided in the EIS.

3.6 Site suitability

The selected site possesses key attributes that make it an optimal location for the development of a BESS. The attributes of the site that make the location optimal for the Project include:

- Proximity to the electricity transmission network, ensuring efficient grid connection and minimising transmission losses

- Availability of existing capacity within the existing transmission network, without needing significant infrastructure upgrades
- Existing road network is suitable to accommodate the transport of heavy construction loads
- Availability of suitably zoned land with compatible existing land uses surrounding the site (refer to **Section 4.2.2**)
- Expected low environmental and social impacts
- The availability of skilled construction and operational workforce in the region.

3.7 Project benefits

The Project is expected to provide tangible benefits to the State and the local community. Key benefits of the Project include:

- Improved network security and a diversified energy storage offering within NSW
- Alignment with Commonwealth and NSW legislation and policy (discussed in **Section 2.1** and **Section 4.0**)
- Support for increased renewable power generation, placing downward pressure on wholesale electricity prices in accordance with the ISP (discussed in **Section 2.1.2**)
- Expanding the role DNSPs play in energy transition by supporting the delivery of energy storage on the distribution network at a pace that is faster, lower cost, and has less impact on communities and the environment
- Creation of direct and indirect jobs during the Project's construction and operation phases
- Diversification of skills and employment which helps to promote economic diversification and sustainability of the local community.

BESS projects such as this are becoming an integral part of the electricity market's response to the retirement of coal fired power stations from the market and are playing an important role in supporting increased levels of renewable generation while improving the strength of the network.

4.0 Statutory context

A summary of the legislative instruments relevant to the Project is provided in **Table 4-1**. This includes a description of the proposed planning approval pathway and the Project's permissibility under the EP&A Act. The legislative instruments are categorised in alignment with the *State Significant Development guidelines – preparing a scoping report* (DPIE, 2022). These matters are discussed further in **Section 4.1 to 4.4**.

Table 4-1: Summary of statutory requirements

Matter	Application to the Project	Discussed further in:
Power to grant consent	The Project is considered SSD under the EP&A Act as it satisfies the SSD requirements of section 2.6 of the Planning Systems SEPP and is listed under Schedule 1 of that SEPP. As SSD, the Project would be assessed under Part 4, Division 4.7 of the EP&A Act. Under section 4.5(a) of the EP&A Act, the consent authority for the Project would be the Minister for Planning and Public Spaces or the Independent Planning Commission. The consent authority will evaluate the SSD application in accordance with section 4.15 of the EP&A Act.	Section 4.1.2
Permissibility	The Central Coast LEP (the Standard Instrument) defines 'electricity generating works' as a building or place used for the purpose of 'making or generating electricity' or 'electricity storage'. As such BESS projects are defined as 'electricity generating works' for the purposes of the EP&A Act. The Project is located on land that is zoned 'E4 General Industrial' under the Central Coast LEP. 'Electricity generating works' are permitted with consent in this land zone under the LEP.	Section 4.1.2 Section 4.2.1.1 Section 4.2.1.4 Section 4.2.2
Other Approvals	Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) approval Under the EPBC Act, activities that have the potential to result in significant impacts on a MNES must be referred to the Commonwealth Minister for the Environment and Water. MNES within 10 km of the site have been identified in Table 4-4 . If the Project is likely to result in a significant impact on a MNES, a referral to the Minister would be required to determine whether the Project is a controlled action or can be undertaken in a particular manner to adequately mitigate potential impacts. Any referral triggers in terms of the EPBC Act will be assessed during the preparation of the EIS.	Section 4.1
	Approvals not required under section 4.41 of the EP&A Act Section 4.41 of the EP&A Act outlines certain approvals that do not apply to SSD. These include: - an Aboriginal heritage impact permit under section 90 of the <i>National Parks and Wildlife Act 1974</i> - a bush fire safety authority under section 100B of the <i>Rural Fires Act 1997</i> - a water use approval under section 89, a water management work approval under section 90 or an	Section 4.3

Matter	Application to the Project	Discussed further in:
	activity approval (other than an aquifer interference approval) under section 91 of the <i>Water Management Act 2000</i>. Regardless, these approvals would not have been required for the Project.	
	Approvals required under section 4.42 of the EP&A Act Section 4.42 of the EP&A Act provides that certain approvals cannot be refused if an SSD Project is approved and that these approvals must be substantially consistent with the SSD approval. It is unlikely that any of these approvals would be required under section 4.42 of the EP&A Act.	Section 4.1.2 Table 4-2
Pre-condition to exercising the power to grant consent	<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i> Section 2.6(2) of this SEPP provides guidance regarding the clearing of vegetation in non-rural areas that requires authority under the SEPP. An investigation will be undertaken in accordance with the Biodiversity Assessment Method (BAM) to determine whether the Project exceeds the Biodiversity Offset Scheme (BOS) threshold. In the event the BOS is triggered, a Biodiversity Development Assessment Report (BDAR) will be prepared to accompany the EIS.	Section 4.2.1.2
	<i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> <u>Chapter 2</u> The southern portion of the site is located within an area mapped as a 'Coastal Wetland Proximity Area' and the site is adjacent to an area mapped as Coastal Environment Area. Land mapped as the Coastal Use Area is located approximately 250 m north of the site. The EIS will consider the matters contained under section 2.10(1) & (2) and section 2.11(1) of this SEPP with regards to potential indirect impacts resulting from the Project. Section 2.10(1) of the SEPP states that consent may not be granted for development on land within the coastal environmental unless the consent authority has considered whether the development is likely to adversely impact the coastal environment. Section 2.10(2) states that development approval must not be granted unless adverse impacts can be avoided, managed, minimised or mitigated. Section 2.11(1) echoes these requirements for development within the coastal use area. <u>Chapter 3</u> Section 3.7 of this SEPP requires consideration of relevant circulars and guidelines in consideration of whether a proposed development represents potentially hazardous or offensive development. Where a conclusion is reached that a project is either, or both, a potentially hazardous or offensive development, a PHA must be prepared for the	Section 4.2.1.3

Matter	Application to the Project	Discussed further in:
	Project. As outlined in Section 6.9.3, a PHA would be prepared for the Project. Chapter 4 Section 4.6 of this SEPP outlines that before determining an application for development consent, the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land guidelines. As part of the EIS an assessment would be prepared in accordance with the Contaminated Land Guidelines: Consultants Reporting on Contaminated Land (NSW EPA, 2020), the National Environment Protection Measure (Assessment of Site Contamination) (NEPC, 2013) and other relevant guidelines	
	<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i> Pursuant to section 2.119(2) of this SEPP, the consent authority must not grant consent to develop on land that has a frontage to a classified road unless the consent authority is satisfied that safe access is possible, that the development will not adversely impact the classified road and that the development itself is not sensitive to traffic noise or vehicle emission or is appropriately designed or located to ameliorate these impacts. Given the Project fronts Apprentice Drive, a local road the requirements of section 2.119 of the Transport and Infrastructure SEPP are not relevant to the Project.	Section 4.2.1.4
	<i>State Environmental Planning Policy (Sustainable Buildings) 2022</i> Section 3.2 of the Sustainable Buildings SEPP seeks to encourage non-residential developments to be designed with sustainability in mind. When deciding whether to grant development consent, the consent authority must consider energy efficiency, waste reduction and the use of renewable resources in relation to the Project. As part of the EIS, an assessment will be undertaken on the embodied carbon and waste output of the Project.	Section 4.2.1.5
	<i>Central Coast Local Environmental Plan 2022</i> The LEP sets out the environmental planning provisions applicable to the Central Coast LGA and is administered by the Central Coast Council. The provisions of the Transport and Infrastructure SEPP prevail over the Central Coast LEP with respect to the permissibility of the development, in the event of an inconsistency.	Section 4.2.2

Matter	Application to the Project	Discussed further in:
Mandatory matters for consideration	Pursuant to Section 4.15 of the EP&A Act, the consent authority must consider the following relevant matters for consideration: • relevant environmental planning instruments for the Project including SEPP and LEPs • relevant development control plans • the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality • the suitability of the site for the development • the public interest. These matters will be duly considered and presented within the EIS.	Section 4.2

4.1 Environmental Planning and Assessment Act 1979

4.1.1 Overview

The EP&A Act and EP&A Regulation provide the framework for land use planning and development control in NSW. The EP&A Act and the Regulation is supported by a number of Environmental Planning Instruments (EPIs), which include State Environmental Planning Policies (SEPPs) and LEPs.

Part 4 of the EP&A Act establishes a framework for assessing development that requires consent and categorises development as either '*exempt development*', '*complying development*', '*development that requires consent*', or '*prohibited development*'. The term '*development*' is defined under section 1.5 of the EP&A Act.

4.1.2 Planning approval pathway

BESS projects are considered electricity storage projects and defined as '*electricity generating works*'. The Project is located within the 'E4 General Industrial' land use zone, under the Central Coast LEP. 'Electricity generating works' are permitted with consent in this land zone under the LEP. On this basis, the Project is permissible with development consent.

Division 4.7 of the EP&A Act defines development that is SSD and notes that development can be declared as such by an EPI. Pursuant to the Planning Systems SEPP, 'electricity generating works' are deemed to be SSD if they have an EDC of more than \$30 million. This Project will have an EDC of more than \$30 million.

Section 4.12(8) of the EP&A Act states that a '*development application for State significant development is to be accompanied by an environmental impact statement prepared by or on behalf of the applicant in the form prescribed by the regulations*'. Part 8, Division 2 of the EP&A Regulation sets out the requirements of an EIS and requires that the content of an EIS is '*subject to the environmental assessment requirements that relate to the EIS*'. Environmental assessment requirements are typically sought through a request for SEARs submitted to the DPHI.

In line with section 4.5 of the EP&A Act, the consent authority for the Project would be the NSW Minister for Planning and Public Spaces or the Independent Planning Commission (IPC) (in the case of greater than 50 public objections to the application, local council objection, and/or reportable political donations made by the proponent in the two years prior to lodgement). As noted in section 4.40 of the EP&A Act, SSD applications are evaluated and determined in line with the requirements of section 4.15 of the EP&A Act. Matters for consideration include relevant EPIs, likely impacts to the built and natural environment and social and economic impacts, submissions made on the application, site suitability and the public interest. These matters will be duly considered and presented within the EIS.

Sections 4.41 and 4.42 of the EP&A Act identify authorisations that are not required for a SSD, and authorisations that cannot be refused, if necessary, for carrying out a SSD, respectively.

A summary of the approval requirements that may relate to the Project has been provided in **Table 4-2**.

Table 4-2: Relevant approval required under section 4.42

Approval	Comment
An aquaculture permit under section 144 of the <i>Fisheries Management Act 1994</i>	The Project would not involve aquaculture. Therefore, no aquaculture permit would be required.
An approval under section 15 of the <i>Mine Subsidence Compensation Act 1961</i>	The Project is not located within a mine subsidence district. An approval under section 15 of the <i>Mine Subsidence Compensation Act 1961</i> would not be required.
A mining lease under the <i>Mining Act 1992</i>	The Project does not include any mining activities. A mining lease would not be required.
A production lease under the <i>Petroleum (Onshore) Act 1991</i>	The Project would not involve petroleum production.
An Environment Protection Licence (EPL) under Chapter 3 of the <i>Protection of the Environment Operations Act 1997</i> (for any of the purposes referred to in Section 43 of that Act)	A review of Schedule 1 of the Protection of the <i>Environment Operations Act 1997</i> (POEO Act) was conducted, and the Project would not include any scheduled activities. Consequently, an EPL is not required.
Consent under Section 138 of the <i>Roads Act 1993</i>	The primary access to the site will be via two new driveways off Enterprise Drive. Consultation with Transport for NSW and the Central Coast Council will be undertaken and any approvals, including Section 138 approvals, associated with this access would be investigated in the EIS. The secondary access to the site is via an existing driveway off Apprentice Drive. No upgrades to this driveway are proposed, therefore consent under the Roads Act is not required.
A licence under the <i>Pipelines Act 1967</i>	No pipelines would be required for the Project and therefore a licence would not be required.

The need for any other approvals or authorisations would be addressed in the EIS.

4.2 Mandatory matters for considerations

4.2.1 State Environmental Planning Policies

The following SEPPs are considered relevant to the Project:

- *State Environmental Planning Policy (Planning Systems) 2021*
- *State Environmental Planning Policy (Biodiversity and Conservation) 2021*
- *State Environmental Planning Policy (Resilience and Hazards) 2021*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021*
- *State Environmental Planning Policy (Sustainable Buildings) 2022*.

Each of these policies is discussed in further detail below.

4.2.1.1 State Environmental Planning Policy (Planning Systems) 2021

The Planning Systems SEPP applies to the whole of NSW.

Chapter 2 of the Planning Systems SEPP relates to State and Regional development and aims to identify development that is significant to the State. Part 2.2 of the Planning Systems SEPP relates to development that is declared SSD. Pursuant to section 2.6(1) of the Planning Systems SEPP, development is declared to be SSD for the purposes of the EP&A Act 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 [EP&A] Act, and*
- b. *The development is specified in Schedule 1 or 2 [of the Planning Systems SEPP].*

As discussed in **Section 4.1.2**, the Project is declared as SSD under section 2.6 of the Planning Systems SEPP. Furthermore, section 2.10 of this SEPP states that Development Control Plans (DCPs) do not apply to SSDs.

4.2.1.2 State Environmental Planning Policy (Biodiversity and Conservation) 2021

Chapter 2, Vegetation in non-rural areas of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (Biodiversity and Conservation SEPP) is relevant to the Project. The application of this chapter is discussed in further detail below.

The aims of Chapter 2 are the protection of the biodiversity values of trees and other vegetation in non-rural areas of the State and the preservation of the amenity of non-rural areas of the State through preserving trees and other vegetation.

Chapter 2 of the Biodiversity and Conservation SEPP does not apply to the Central Coast LGA, however the E4 General Industrial land use zone is included under the list of applicable land zones (section 2.3).

Section 2.6(1) of this SEPP states that *‘a person must not clear vegetation in any non-rural area of the State to which Part 2.3 applies without the authority conferred by a permit granted by the council’*. In addition, section 2.6(2) further states that *‘a person must not clear native vegetation in any non-rural area of the State that exceeds the biodiversity offset scheme threshold without the authority conferred by an approval of the Native Vegetation Panel under Part 2.4.’*

Part 2.3 of the Biodiversity and Conservation SEPP applies to vegetation in any non-rural area of the State that is declared by a development control plan to be vegetation to which [Part 2.3] applies. As detailed in the presiding section related to the Planning Systems SEPP, the Project constitutes SSD and as such the development control plan does not apply. By extension, the requirement to consider vegetation under the Central Coast Council DCP is not applicable.

For completeness however, section 2.6(2) of this SEPP provides guidance regarding the clearing of vegetation in non-rural areas that requires authority under the SEPP, as defined above.

An investigation will be undertaken in accordance with the BAM to determine whether the Project exceeds the BOS threshold. In the event the BOS is triggered, a BDAR will be prepared to accompany the EIS.

4.2.1.3 State Environmental Planning Policy (Resilience and Hazards) 2021

The objective of the *State Environmental Planning Policy (Resilience and Hazards) 2021* (Resilience and Hazards SEPP) is to provide state-wide planning approach to resilience and hazards. The chapters of Resilience and Hazard SEPP relevant to the Project, include:

- Chapter 2: Coastal management
- Chapter 3: Hazardous and offensive development
- Chapter 4: Remediation of land.

The application of each chapter is discussed in further detail below.

Chapter 2 Coastal Management

The aim of this chapter is to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objectives of the *Coastal Management Act 2016*.

As shown in **Figure 4-1**, the southern portion of the site is located within an area mapped as ‘proximity area for coastal wetlands’. Proximity areas for coastal wetlands are part of the coastal zone, as defined

in the *Coastal Management Act 2016*. The site is also immediately adjacent to land mapped as ‘coastal environment area’.

Section 2.8(1) of the SEPP states that development may not be granted for land identified as a proximity area for coastal wetlands unless the consent authority is satisfied that the development will not significantly impact on the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or the quantity and quality of groundwater flows to and from adjacent coastal wetlands.

Section 2.10(1) of this SEPP applies to development on land within the coastal environment area. This section requires the consent authority to consider whether a development will cause adverse impacts on the environment including the coastal environment, coastal processes, public open space and access in the coastal zone, Aboriginal cultural heritage or the use of the surf zone. The site is located beyond the coastal environment area and this section of the SEPP is therefore not applicable.

Section 2.11(1) applies to development within the coastal use area. This section requires the consent authority to consider whether the development will have an adverse impact on safe public access to the coastal zone, result in overshadowing, wind funnelling or loss of views from public places to foreshores, affect visual amenity, affect Aboriginal cultural heritage or cultural and built heritage. The site is located beyond the coastal use area, this section of the SEPP is therefore not applicable.

The SEPP specifies that development consent must not be granted unless the consent authority is satisfied that:

- The development will not result in adverse impacts to the matters listed in 2.10 and 2.11
- Where impacts cannot be avoided, they can be minimised, or
- Where impacts cannot be minimised, the impact can be mitigated through management.

The matters of consideration contained under section 2.8 of this SEPP with regards to potential impacts arising from the Project will be addressed in the EIS.

Chapter 3 Hazardous and offensive development

The aim of this chapter is to ensure that, in considering any development application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact (among others).

Part 3 of Chapter 3 of the Resilience and Hazards SEPP applies to industrial developments that are considered ‘*potentially hazardous or offensive industry*’. The definition of a potentially hazardous industry and potentially offensive industry is provided in section 3.2 of the Resilience and Hazards SEPP.

Development that constitutes a potentially hazardous industry must be accompanied by a Preliminary Hazard Analysis (PHA). Section 3.12 sets out the matters that the consent authority must consider.

For development proposals classified as ‘*potentially hazardous industry*’ the SEPP (and DPHI’s *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33* (January 2011)) establishes a test by way of a preliminary screening assessment and PHA to determine the risk to people, property and the environment. The EIS would include an assessment of the potential hazards and risk of the Project in accordance with the requirements of the Resilience and Hazards SEPP.

Chapter 4 Remediation of land

The objective of Chapter 4 is to provide a state-wide planning approach to the remediation of contaminated land, where the purpose of remediation is to reduce the risk of harm to human health or any other aspect of the environment. Pursuant to section 4.6(1) a consent authority must consider if land is contaminated prior to consenting to development on that land. If the land is contaminated, the consent authority must be satisfied that the land is suitable in its contaminated state (or after remediation) for the proposed development.

If remediation of the land is required prior to the development, the consent authority must be satisfied that remediation will be undertaken prior to the development occurring.

Furthermore section 4.6(2) requires the consent authority to consider a report specifying the findings of a preliminary investigation of the land concerned prepared in accordance with the contaminated land planning guidelines before determining an application.

The EIS would consider contamination risks (based on historic land use and other relevant matters) and appropriate mitigation measures for managing any potential contaminated material that may be encountered on site (but which would not preclude the intended land use).

4.2.1.4 State Environmental Planning Policy (Transport and Infrastructure) 2021

The aim of Chapter 2 of the Transport and Infrastructure SEPP is to facilitate the effective delivery of infrastructure across the State. The application of this Chapter in relation to the Project is outlined below.

The site is zoned 'E4 General Industrial' under the Central Coast LEP. This land use zone is defined as a 'prescribed non-residential zone' for the purpose of considering the permissibility of electricity generating works. While '*electricity generating works*' is not listed as permitted with consent under the LEP for this zoning, it is also not excluded under '*item 2: permitted without consent*' or '*item 4: prohibited*' in the LEP. The Project would fall into the category of '*any other development not specified in item 2 or 4.*' As such the Project is considered permissible with consent at the site under the LEP.

Section 2.48 of this SEPP relates to determination of development applications that are likely to affect an electricity transmission or distribution network. Specifically, section 2.48(1) applies to development applications that may impact electricity transmission or distribution networks. This includes projects involving excavation near power lines or substations, development within or adjacent to electricity easements, or the underground placement of power lines without an existing agreement.

Before approving such developments, the consent authority must notify the electricity supply authority, allowing them to assess potential safety risks. Any response received within 21 days must be considered in the determination process.

The Project is located on property owned by Ausgrid and will connect to an Ausgrid substation (Ausgrid's Berkeley Vale Zone Substation – refer to **Section 3.0**). No easement or leases are required.

Section 2.119 of the Transport and Infrastructure SEPP relates to development in or adjacent to road corridors and road reservations. The objectives of this section are to ensure that development near classified roads does not interfere with their operation, safety, or efficiency, while also minimising the impact of traffic noise and vehicle emissions on adjacent land uses.

Before granting consent for development fronting a classified road, the consent authority must ensure that:

- Vehicular access is provided via an alternative road where practicable and safe
- The design and operation of the development do not negatively impact the safety, efficiency, or function of the classified road
- The development is not sensitive to traffic noise and emissions or incorporates measures to mitigate potential impacts.

As mentioned in **Section 3.1.3**, Apprentice Drive traverses the northern eastern boundary of the site, and Enterprise Drive traverses the southern boundary of the site. Apprentice Drive is a local road managed and operated by Central Coast Council. Enterprise Drive is a regional road managed and operated by Transport for NSW. As a regional road, Enterprise Drive is not a classified road under the *Roads Act 1993*, but is included in the Classified Road Schedule and subject to oversight by Transport for NSW.

4.2.1.5 State Environmental Planning Policy (Sustainable Buildings) 2022

Chapter 3 of the *State Environmental Planning Policy (Sustainable Buildings) 2002* (Sustainable Buildings SEPP) provides standards for non-residential development. Of relevance to the Project is section 3.2. This section requires the consent authority to consider sustainability measures when assessing non-residential developments. Key considerations include minimising construction waste, improving energy efficiency, incorporating passive design, enabling renewable energy generation and storage, monitoring energy use, and reducing potable water consumption. Furthermore section 3.2 (2)

indicates that development consent must not be granted unless the consent authority is satisfied that the embodied emissions relating to the development have been quantified.

As part of the EIS, an assessment will be undertaken on the embodied carbon of the Project.

4.2.2 Central Coast Local Environmental Plan 2012

The Project is located on land that is zoned ‘E4 General Industrial’ under the Central Coast LEP, as shown in **Figure 2-2**. The objectives of the ‘E4 General Industrial’ land use zone, as stated in the LEP are:

- *To provide a range of industrial, warehouse, logistics and related land uses*
- *To ensure the efficient and viable use of land for industrial uses*
- *To minimise any adverse effect of industry on other land uses*
- *To encourage employment opportunities*
- *To enable limited non-industrial land uses that provide facilities and services to meet the needs of businesses and workers*
- *To support and protect industrial land for industrial uses*
- *To ensure non-industrial land uses do not prejudice the viability of industrial land or other centres.*

The Project is considered to be consistent with the objectives above.

The Project is characterised as ‘*electricity generating works*’, which is a type of development that is permissible with consent under the LEP.

In addition to permissibility, the principal development standards and other local provisions under the LEP have been considered in **Table 4-3**.

Table 4-3: LEP Provisions

LEP Provision	Compliance
Clause 4.3 Height of buildings	The site does not have a maximum building height under the LEP. As such, this principal development standard does not apply to the Project.
Clause 4.4 Floor space ratio	The site does not have a floor space ratio under the LEP. As such, this principal development standard does not apply to the Project.
Clause 5.10 Heritage conservation	The site is not mapped under the LEP to contain any objects, items or sites of heritage significance.
Clause 5.21 Flood Planning	The site is not mapped under the LEP in accordance with Flood Planning. Sections of the site are however mapped as falling within the 1 in 100 year flood extent on the Central Coast Council mapping tool. The EIS will consider the potential for the Project to affect and be affected by flooding.
Clause 6.1 Acid sulfate soils	The site is mapped under the LEP to be potentially impacted by Class 4 and 5 Acid Sulfate Soils (as shown in Figure 4-2). The EIS will consider the relevant matters of consideration contained under clause 6.1 of the LEP with regards to the Project.

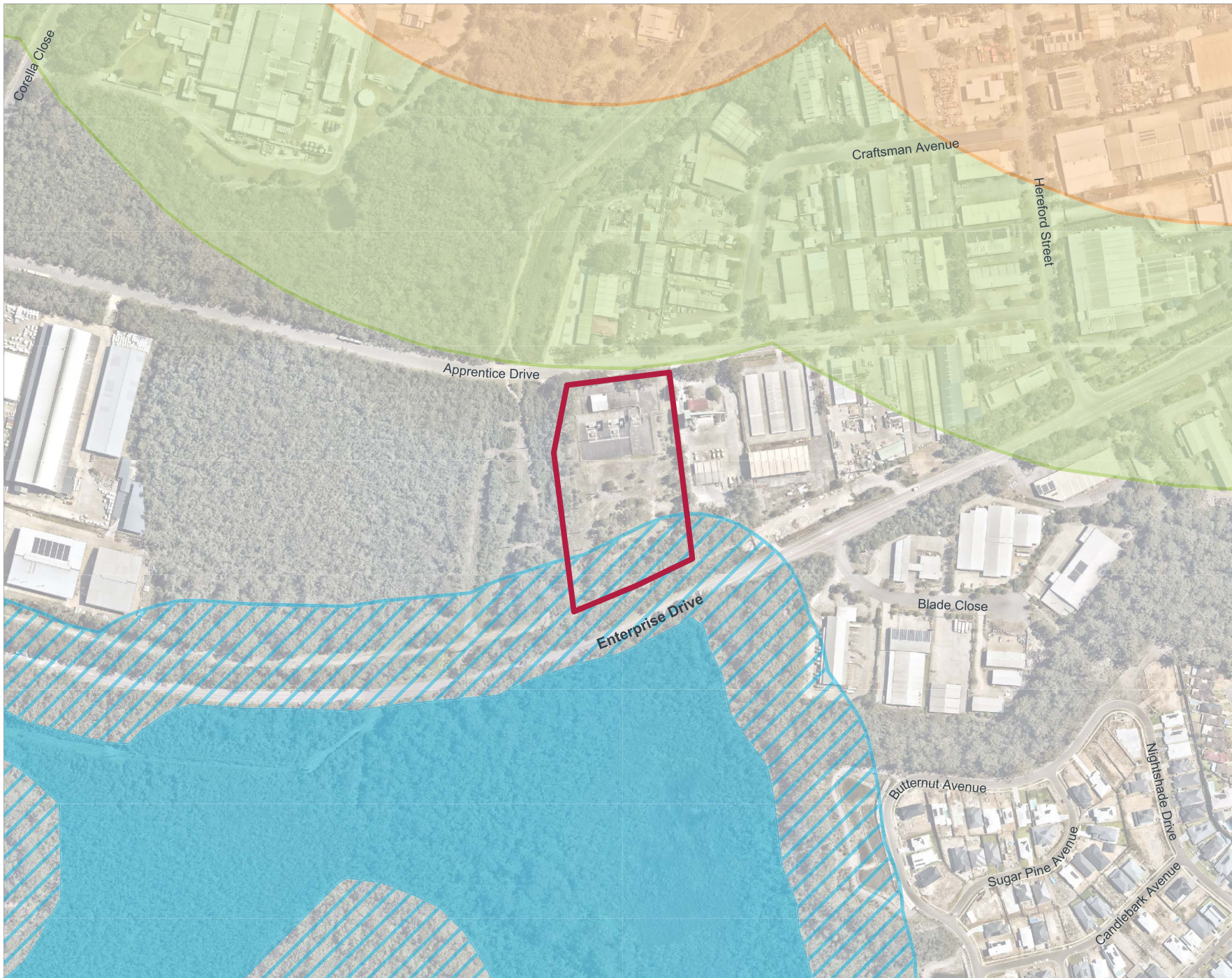


**FIGURE 4-1:
COASTAL ENVIRONMENT
AREA**

Legend

-  The site
- SEPP - Resilience and Hazards (2021)**
-  Coastal Environment Area
-  Coastal Use Area
-  Coastal Wetlands
-  Coastal Wetlands Proximity Area

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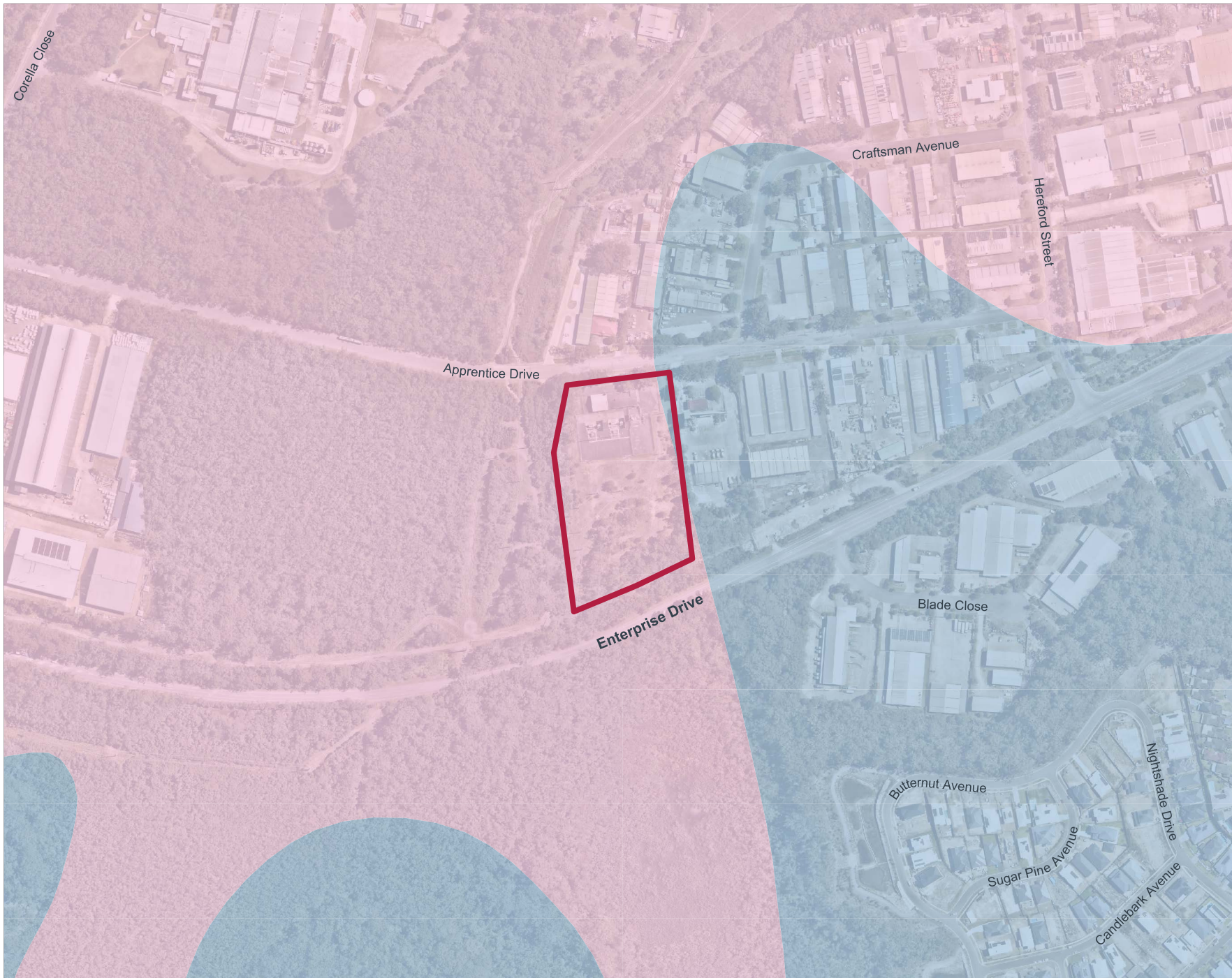


FIGURE 4-2:
ACID SULFATE SOILS

Legend

- The site
- Acid Sulfate Soils Class**
- Class 4
- Class 5

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4.3 Other relevant NSW legislation

4.3.1 Aboriginal Land Rights Act 1983

The *Aboriginal Land Rights Act 1983* (ALR Act) was established to provide land rights to Aboriginal persons, as well as provide for representative Aboriginal Land Councils to vest land in those Councils. The ALR Act, is administered by the NSW Department of Aboriginal Affairs and establishes a compensatory regime, which recognises that land is of spiritual, social, cultural and economic importance to Aboriginal people. The ALR Act established the NSW Aboriginal Land Council (NSWALC) and a network of over 120 Local Aboriginal Land Councils (LALCs) and requires these bodies to:

- *Take action to protect the culture and heritage of Aboriginal persons in the LALC's area, subject to any other law*
- *Promote awareness in the community of the culture and heritage of Aboriginal persons in the LALC's area.*

LALCs constituted under the ALR Act can make claims in respect of 'claimable Crown land'. The Registrar of the ALR Act must maintain the Register of Aboriginal Land Claims under section 166 of the ALR Act. All land claims that have been made under the ALR Act are recorded in the Register. The site is owned by Ausgrid and is not Crown Land.

4.3.2 National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act 1974* (NPW Act), administered by DCCEEW NSW, is the primary legislation for the protection of Aboriginal cultural heritage in NSW. The NPW Act gives the Chief Executive responsibility for the proper care, preservation and protection of 'Aboriginal objects' and 'Aboriginal places', defined as follows:

- An *Aboriginal object* is any deposit, object or material evidence (that is not a handicraft made for sale) relating to Aboriginal habitation of the area that compromises NSW, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction (and includes Aboriginal remains)
- An *Aboriginal place* is a place so declared by the Ministers under section 84 of the NPW Act because in the opinion of the Minister, the place is or was of special significance with respect to Aboriginal culture. It may or may not contain Aboriginal objects.

An Aboriginal Heritage Impact Permit (AHIP) is required under section 90 of the NPW Act before harming or desecrating an Aboriginal object, otherwise, such action is an offence under the NPW Act. Despite this, under section 4.41 of the EP&A Act, an AHIP is not required for SSD. Instead, potential impacts to Aboriginal heritage are typically managed under Aboriginal Cultural Heritage Assessment Reports (ACHARs). An Aboriginal due diligence assessment has been completed for the Project, with the results summarised in **Section 6.6**. An Aboriginal Cultural Heritage Assessment Report (ACHAR) will be prepared for the EIS.

4.3.3 Water Management Act 2000

The *Water Management Act 2000* (WM Act) establishes a framework for managing water in NSW. Section 91 of the WM Act discusses activity approvals and notes that there are two types of approvals, namely controlled activity approvals and aquifer interference approvals.

The WM Act specifies certain activities as controlled activities when carried out on waterfront land. This is defined as within 40 m of the banks of a river, lake or estuary (or are prescribed by the regulations). A controlled activity approval for this Project would not be required by virtue of section 4.41 of the EP&A Act. This section of the EP&A Act specifies certain approvals that are not required for SSD, including an activity approval under section 91 of the WM Act. This section of the EP&A Act however, does not remove the requirement for obtaining an aquifer interference approval. No extraction of groundwater or activities which may result in aquifer interference are proposed as part of the Project, therefore aquifer interference approval is not required. Separate exemptions under the *Water Management (General) Regulation 2018* may apply to the requirement for an aquifer interference approval or water access licence.

The impacts of the Project to surface water, water quality and flooding would be assessed as part of the EIS.

4.3.4 Protection of the Environment Operations Act 1997

The objectives of the *Protection of the Environment Operations Act 1997* (POEO Act) include to rationalise, simplify, and strengthen the regulatory framework for environment protection. Chapter 3 of the POEO Act outlines the specific circumstances under which an EPL must be obtained.

Schedule 1 of the POEO Act provides a list of activities for which an EPL would be required. Clause 17 of Schedule 1 lists general electricity works as a scheduled activity where they exceed the capacity to generate 30 MW. The Project does not involve the generation of electricity. Instead, the Project stores and releases electricity that has already been generated elsewhere. Accordingly, an EPL is not required for the Project.

4.3.5 Contaminated Land Management Act 1997

The general object of the *Contaminated Land Management Act 1997* (CLM Act) is to establish a process for investigating and (where appropriate) remediating land that the EPA considers to be contaminated enough to require regulation under Division 2 of Part 3 of the CLM Act. A search of the NSW EPA contaminated land database (undertaken in March 2025) confirmed that the site is not listed as a notified contaminated site under the CLM Act. Further assessment will be undertaken to support the EIS, which would be based on ground investigation.

Section 60 of the CLM Act also includes a 'duty to notify' where significant contamination is identified. This section would be relevant if any previously unidentified contamination is encountered that exceeds notification thresholds.

4.3.6 Biodiversity Conservation Act 2016

The purpose of the *Biodiversity Conservation Act 2016* (BC Act) is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development (as described in section 6(2) of the *Protection of the Environment Administration Act 1991*).

Section 7.9(2) of the BC Act states that a development application for SSD is to be accompanied by a BDAR (as defined under section 7.1 of the BC Act), unless both the Planning Secretary and the EPA determine that the proposed development is not likely to have any significant impact on biodiversity values.

The indicative area within the site that is likely to be physically disturbed by the Project is approximately 1.6 ha. The Project is likely to directly affect 1.04 ha of land mapped as native vegetation, including three hollow bearing trees. It is not anticipated that the Project would result in significant impacts on biodiversity. Despite this, impacts to biodiversity would be confirmed in a BDAR, which will be prepared to support the EIS.

4.3.7 Roads Act 1993

The *Roads Act 1993* (Roads Act) confers certain functions (in particular, the function of carrying out road work) on Transport for New South Wales and other roads authorities, among others. Section 7 of the Roads Act defines the respective road authorities depending on the classification of the road. Of relevance to this Project is Apprentice Drive, a local road under the management of Central Coast Council and Enterprise Drive, a regional road managed by Transport for NSW.

Section 138 of the Roads Act relates to works and structures, *whereby a person must not erect a structure or carry out a work in, on or over a public road... otherwise than with the consent of the appropriate road's authority*. The Project would require works within road reserve areas associated with the new driveways on Enterprise Drive. As such, it is likely that approval under section 138 of the Roads Act would be required.

4.3.8 Heritage Act 1977

The *Heritage Act 1977* (NSW) aims, among other things, to promote an understanding of heritage, encourage conservation and provide for protection of NSW State heritage. State and/or local heritage significance can relate to historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values of a place, building, work, relic, moveable object or precinct. No heritage items were identified under the NSW State Heritage Register or the Central Coast LEP within the site in a search undertaken in March 2025. The closest heritage item to the site is located 820 m north-east of the site.

4.4 Commonwealth legislation

4.4.1 Airports Act 1996 and Airports (Protection of Airspace) Regulations 1996

The *Airports Act 1996* (Airports Act) and the *Airports (Protection of Airspace) Regulation 1996* (Airports Regulation) establishes a framework for the protection of airspace at and around airports. As Warnervale Airport (located 9.8 km north of the site) and Somersby Airfield (located 11.9 km west of the site) do not meet the definition of ‘airports’ to which Part 12 of the Airports Act applies, the Airports Act and Airports Regulation do not apply.

Notwithstanding the above, the Project would involve the potential use of temporary cranes during construction. Guidance related to the operation of cranes and tall structures in the vicinity of airports and airfields is provided by the Civil Aviation Safety Authority (CASA), pursuant to AC 139.E-01v1.0 – CASA Advisory Circular – Reporting of Tall Structures (Advisory Circular), 2021. Due to the risk posed by tall structures to low flying aircraft the RAAF and Airservices Australia need to be informed of any tall structures in excess of 30 m from ground level within 30 km of an aerodrome or structures in excess of 45 m elsewhere. The site is located within 30 km of the Warnervale Airport and Somersby Airfield. As such, the requirements of the Advisory Circular will be applicable.

Ausgrid will consult with the operator of both airports with respect to the potential impact on the airports that may result from the use of cranes during Project construction.

4.4.2 Environment Protection and Biodiversity Conservation Act 1999

Section 18 of the Environment Protection and Biodiversity Conservation Act (EPBC Act) requires a proponent of a development or action to obtain approval from the Commonwealth Minister for the Environment and Water when undertaking an activity which is likely to cause a significant impact to a Matter of National Environmental Significance (MNES). MNES include threatened species or ecological communities listed under the EPBC Act.

If the Project is likely to result in a significant impact on a MNES, a referral to the Minister would be required to determine whether the Project is a controlled action or can be undertaken in a particular manner to adequately mitigate potential impacts. If the Project constitutes a controlled action the activity will be subject to further assessment before a determination is made by the Minister regarding whether the action can be carried out, generally subject to conditions.

A search of the EPBC Act Protected Matters Search Tool (PMST) was undertaken in May 2025 for a 10 km buffer around the site. The search identified five threatened ecological communities, 118 threatened flora and fauna species, and 73 listed migratory species with potential to occur.

The results of the Protected Matters search are summarised in **Table 4-4**. The Protected Matters Search Report is provided in **Appendix B**.

Any referral triggers in terms of the EPBC Act will be assessed during the preparation of the EIS.

Table 4-4: MNES within 10 km of the site

MNES	MNES within 10 km of the site
World Heritage Properties	None
National Heritage Places	None
Wetlands of International Importance	None
Great Barrier Reef Marine Park	None
Commonwealth Marine Area	None
Listed Threatened Ecological Communities	5
Listed Threatened Species	118
Listed Migratory Species	73

4.4.3 Native Title Act 1993

The *Native Title Act 1993* (NT Act) provides for the recognition and protection of native title for Aboriginal peoples and Torres Strait Islanders. The NT Act recognises native title for land over which native title has not been extinguished and where persons are able to establish continuous use, occupation or other classes of behaviour and actions consistent with a traditional cultural possession of those lands. The NT Act also makes provision for Indigenous Land Use Agreements (ILUA) to be formed, as well as a framework for notifying native title stakeholders for certain future acts on land where native title has not been extinguished.

A search of the National Native Title Tribunal Register was undertaken in March 2025 using the National Native Title Tribunal online system. The search returned no active or historic claims associated with the site. As the site is a freehold it is not the subject of a 'previous exclusive possession act', native title rights will not be impacted by the Project.

5.0 Engagement

This section of the Scoping Report describes the engagement activities carried out to inform the scoping phase of this Project.

5.1 Introduction

A Community and Stakeholder Engagement Plan (CSEP) has been developed to guide the engagement approach for this Project. The full CSEP is in **Appendix C**.

The CSEP is intended to guide Ausgrid, and associated representatives and contractors, with engagement to inform community and stakeholders impacted by or interested in the Project.

Specifically, the engagement activities outlined in the CSEP support the following Project phases:

- Preparation of the Scoping Report (request for Secretary's Environmental Assessment Requirements (SEARs) – **outcomes outlined in this section**)
- Preparation of the Environmental Impact Statement (EIS)
- All project milestones, including throughout construction and operation.

5.2 Engagement approach

Ausgrid seeks to establish and maintain authentic relationships with the community and interested stakeholders through consultation and effective communications from an early stage of the Project. This is to ensure the community is meaningfully included during the project lifecycle.

Ausgrid's engagement approach has been tailored to meet the needs and expectations of the community and stakeholder groups, ensuring all individuals are treated with the same high level of respect.

Ausgrid will provide updates to the local community and stakeholders at key milestones throughout planning, construction and operation, with the aim to demonstrate commitment to transparency and accountability.

Ausgrid will continue to communicate openly, actively solicit feedback from the community, and foster collaborative relationships with local stakeholders.

5.2.1 Understanding the community and environment

Ausgrid's approach was informed by a detailed analysis of the surrounding community and local environment.

A community demographic profile was developed to understand those who may be impacted by or have an interest in the Project.

Based on the community profile (refer to CSEP for detailed analysis), the engagement to inform scoping was:

- **Clear and accessible** – Information was presented in plain English, supported by visuals, to ensure complex and technical content was easy to understand
- **Inclusive and representative** – A broad range of stakeholders were engaged, including those from traditionally hard-to-reach groups and communities
- **Multi-channel and community focused** – A combination of digital and physical formats were used to maximise reach. Additionally, community pop-ups were hosted to encourage face-to-face participation.

5.2.1.1 Early engagement

Engagement activities to inform scoping were undertaken between May and July 2025. Activities were designed to introduce the Project to nearby landowners, local council, Members of Parliament and the local community.

The engagement approach was adapted from the International Association of Public Participation's Public Participation spectrum. The engagement objectives during scoping aligned with the goals of **informing** and **consulting** with stakeholders and the community to obtain public feedback to inform the preparation of the EIS.

Table 5-1: IAP2 Spectrum

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

This engagement methodology and its outcomes were also informed by and are consistent with the NSW Department of Planning, Housing, and Infrastructure (DPHI's) State Significant Development Guidelines – Preparing a Scoping Report and the Undertaking Engagement Guidelines for State Significant Projects.

The engagement approach ensured:

- Adjoining landholders, stakeholders and local communities were provided with timely and relevant information about the Project, in plain English, and have opportunity to provide feedback
- Communication to and from landholders and other community stakeholders was adequately documented
- All interested stakeholders were provided with a responsive point of contact for any enquiries, complaints, or suggestions

- Stakeholders with potential interest in the Project were identified and provided with consistent messages and opportunity to be heard
- Minimal disruption to landholders, other impacted stakeholders, and the wider community
- Engagement activities supported the broader Program to meet planning approval requirements and secure the required approvals from regulators and decision makers in a timely manner.

Ausgrid will continue to implement these engagement objectives throughout the lifecycle of the project.

5.3 Engagement activities

This section summarises the engagement activities undertaken to inform the Scoping Report.

5.3.1.1 Direct neighbour phone calls and emails

On Friday, 30 May 2025, Ausgrid conducted direct phone calls to all businesses located near the proposed site.

In total, seven calls were made. During these discussions, Ausgrid provided an overview of the proposal, detailed information about the consultation process, and offered businesses the opportunity to ask questions and provide feedback.

Each phone call was followed by a direct email that included an introduction to the project and an attached community newsletter. Businesses have been listed in **Table 5-2**.

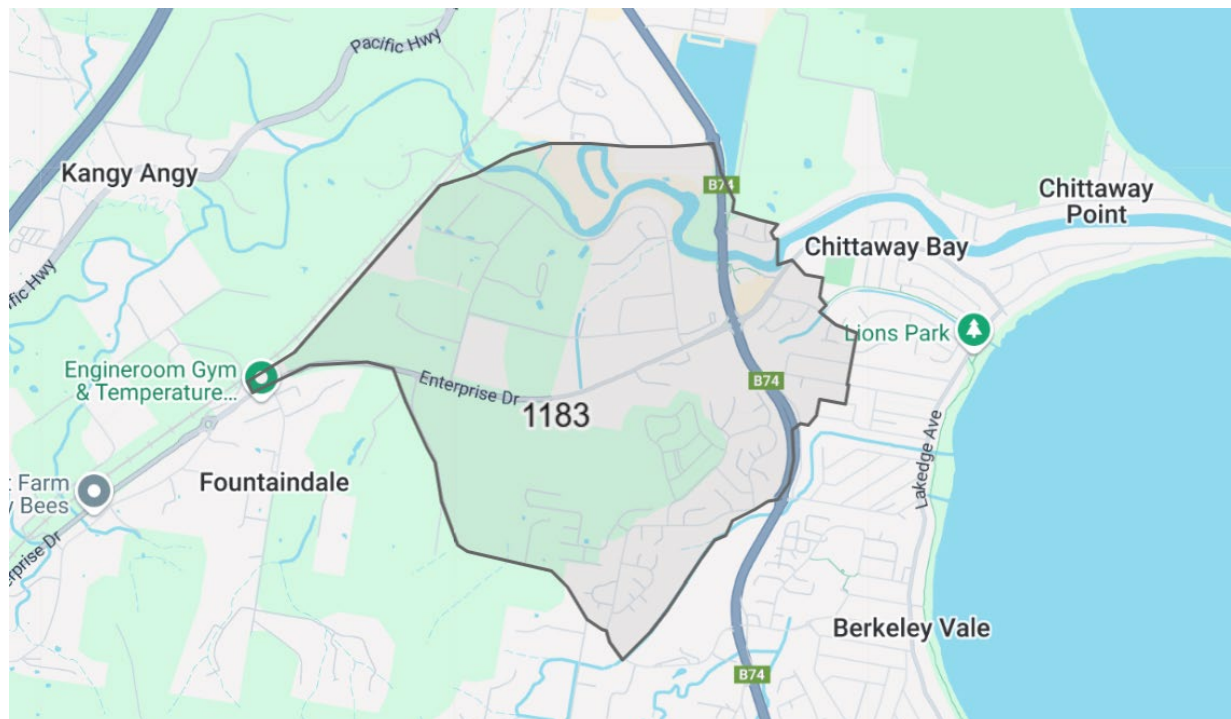
5.3.1.2 Community newsletter

On Thursday, 29 May 2025, a community newsletter was distributed to 1,183 businesses and residents surrounding the site.

Figure 5-1 shows the distribution areas for the community newsletter. This area has been used to identify near neighbours and the surrounding community.

The newsletter shared project details, including a location map, planning and approvals process, contact information (phone, email, website), and details of the community pop-up held at Chittaway Bay Shopping Centre on Thursday, 12 June 2025.

Figure 5-1: Newsletter distribution area – May 2025



5.3.1.3 Surrounding community identification

The nearest homes are around 300m southeast of the Project site (separated by Enterprise Drive), with businesses located around 50m to the east. The distribution area (shown above) considered traffic on Enterprise Drive and Apprentice Drive to ensure all potentially affected stakeholders were consulted.

Residential areas within 1.2 km were included, such as those south of Enterprise Drive (via Bottlebrush Drive) and east of Wyong Road (off Chittaway Road and James Watt Drive), addressing potential impacts at the Enterprise – Wyong Road intersection and raising broader community awareness.

Key emergency services, including Tuggerah Rural Fire Station north of Ourimbah Creek, were also included within the distribution area.

5.3.1.4 Project webpage

A dedicated webpage was established for the Project, outlining the purpose and location of the proposed Berkeley Vale BESS. The webpage also included a copy of the community newsletter, project FAQs, a ‘What is a BESS?’ fact sheet and project contact details (dedicated phone number and email).

5.3.1.5 Pop-up information session

A pop-up information session was held at the local shopping centre in Chittaway Bay to introduce the Project to the local community and capture feedback.

There were four members of the Project team in attendance. 15 members of the community attended and spoke with the team about the proposal.

Figure 5-2: Images from the pop-up in Chittaway Bay on 12 June 2025



5.3.1.6 1800 number and email address

A dedicated 1800 number and engagement email address were established at project inception. At the time of writing this report, no enquiries have been received via the engagement contact details.

5.3.2 Engagement activities register

The consultation activities highlighted in **Table 5-2** have been delivered to introduce stakeholders and community to the Project and provide opportunity to answer questions and understand key concerns.

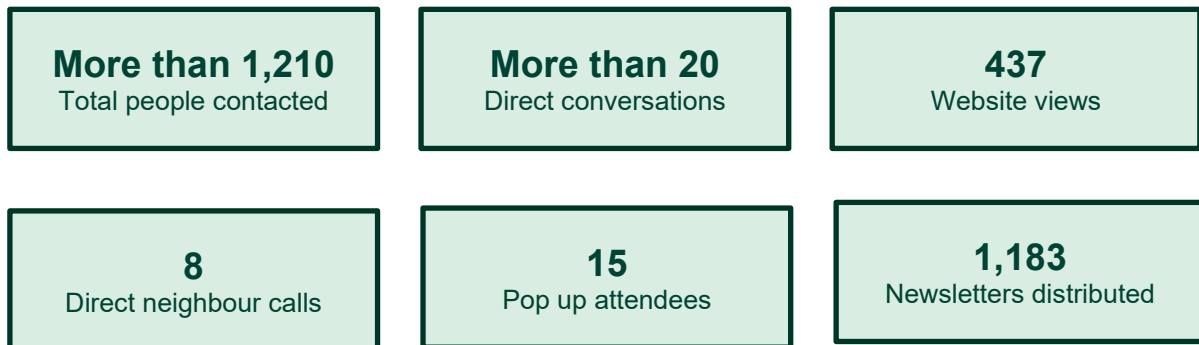
Table 5-2: Scoping report consultation activities

Stakeholder	Date	Details
Adjacent properties/landowners		
Bretts Truck Parts & All Filters (17 Craftsman Ave, Berkeley Vale)	30 May 2025	- Direct phone call to introduce the Project - Direct email following the phone call to provide more information - Community newsletter – letterbox drop - Invitation to attend pop up session

Stakeholder	Date	Details
Heidelberg Materials – Berkeley Vale Concrete (12 Apprentice Drive, Berkeley Vale)	30 May 2025	- Direct phone call to introduce the Project - Direct email following the phone call to provide more information - Community newsletter – letterbox drop - Invitation to attend pop up session
Complete Car Wash Supplies North Coast (7/15 Apprentice Drive, Berkeley Vale)	30 May 2025	- Direct phone call to introduce the Project - Direct email following the phone call to provide more information - Community newsletter – letterbox drop - Invitation to attend pop up session
Onshore Fitness (15 Apprentice Drive, Berkeley Vale)	30 May 2025	- Direct phone call to introduce the Project - Direct email following the phone call to provide more information - Community newsletter – letterbox drop - Invitation to attend pop up session
Capricorn Soap Shop (6/17 Craftsman Avenue, Berkeley Vale)	30 May 2025	- Direct phone call to introduce the Project - Direct email following the phone call to provide more information - Community newsletter – letterbox drop - Invitation to attend pop up session
Supa Cheap Tyres (15 Apprentice Drive, Berkeley Vale)	20 May 2025	- Direct phone call to introduce the Project - Direct email following the phone call to provide more information - Community newsletter – letterbox drop - Invitation to attend pop up session
Coast and Valley Oil, (U16/17 Craftsman Avenue, Berkeley Vale)	30 May 2025	- Direct phone call to introduce the Project - Direct email following the phone call to provide more information - Community newsletter – letterbox drop - Invitation to attend pop up session
Surrounding businesses		
All businesses (commercial, industrial and retail) located on the following streets: - Apprentice Drive - Craftsman Avenue - Hereford Street - Blade Clos - Enterprise Drive	29 May 2025 (newsletter drop) 12 June 2025 (pop up session)	- Community newsletter – letterbox drop - Invitation to attend pop up session - Access to 1800 number and email for ongoing project communications
Members of Parliament		
Emma McBride (Federal Member for Division of Dobell)	20 May 2025	- Letters issued - Meeting scheduled 17 July, 2025

Stakeholder	Date	Details
David Mehan (State Member for The Entrance)	20 May 2025 (letters) 26 June 2025 (meeting)	- Letters issued - Meeting held 26 June (no concern raised)
Local Government		
Central Coast Council	24 March 2025 (email) 30 June 2025 (meeting)	- Letter issued - Pre-DA meeting held 30 June 2025
Surrounding residential community		
Residential community within 1km - Torrellia Way - Ashwood Close - Bottlebrush Drive - Butternut Avenue - Nightshade Drive - Candlebark Avenue - Ghost Gum Street - Scribbly Gum Street - Berkeley Road - Sophia Jane Street - Sovereign Crescent	29 May 2025	- Community newsletter – letterbox drop - Invitation to attend pop up session - Access to 1800 number and email for ongoing project communications
Near neighbours (Education facilities) (1km)		
Chittaway Bay Public School	29 May 2025	- Community newsletter – letterbox drop Invitation to attend pop up session - Access to 1800 number and email for ongoing project communications
Berkeley Vale High School	29 May 2025	- Community newsletter – letterbox drop Invitation to attend pop up session - Access to 1800 number and email for ongoing project communications
First Nations stakeholders		
Darkinjung Local Aboriginal Land Council (LALC)	Underway	Ausgrid is in the process of beginning conversations with Darkinjung LALC and will keep them informed and involved throughout the project lifecycle.

5.4 Early engagement – feedback received



5.5 Key themes

This section summarises the feedback received during engagement to inform Scoping.

General sentiment

- The community in Berkeley Vale demonstrated a relatively high level of understanding regarding battery energy storage systems (BESS) and their role in supporting the electricity network.
- No negative sentiment toward renewable energy or the project was expressed.
- Residents generally recognised the benefits of increased grid storage capacity.
- No concerns were raised about potential localised impacts such as traffic, fire risk, construction disruption, visual impact, or noise.
- No additional concerns or objections were raised during the engagement period.
- The absence of negative feedback, combined with the constructive nature of community questions, suggests a generally supportive or neutral stance toward the project.

Noise generation

- One nearby business owner enquired about potential noise impacts from the BESS once operational.
- Ausgrid noted that BESS do generate some noise, primarily from cooling systems and inverters. However, technical assessments indicate that operational noise levels will remain within acceptable limits as defined by relevant environmental guidelines.
- If required, mitigation measures, such as acoustic barriers and strategic site layout, will be implemented to minimise any potential impact on nearby properties.

Traffic, transport and access

- One nearby business owner asked whether construction would affect access to Apprentice Drive.
- Ausgrid noted that traffic and transport assessments have been conducted, and no long-term access issues are anticipated.
- It was also noted that temporary traffic management measures may be implemented during peak construction periods to ensure safety and maintain access. These will be communicated in advance to affected residents and businesses.

Other questions (raised during the pop up)

- “What does this mean for me and my power bill?”
- “I have solar panels on my home; can I benefit from the storage?”
- “How many times does it charge and discharge over 24 hours?”
- “How much land will be cleared?”

- “Can screening remain on Enterprise Drive?”
- “Who will build and operate the BESS?”

5.6 Revised consultation approach, based on feedback to date

The Community and Stakeholder Engagement Plan (CSEP) (**Appendix C**) outlines the engagement approach for the Project across three phases:

- Preparation of the Scoping Report (request for Secretary’s Environmental Assessment Requirements (SEARs))
- Preparation of the Environmental Impact Statement (EIS)
- All project milestones, including throughout construction and operation.

A monitoring and evaluation process is integrated into Ausgrid’s engagement principles and is included in the CSEP.

Following initial engagement activities, some revisions have been made to the engagement strategy for the EIS preparation:

1. Additional communications will be employed to follow up with the community and stakeholders after engagement in June 2025.
 - The dedicated project website will be updated to summarise feedback received so far.
 - There will be more opportunities to brief the Central Coast Council as the Project progresses.
 - Engagement with the Darkinjung Local Aboriginal Land Council (LALC) is currently underway and will continue throughout planning, construction and operation.
2. Ausgrid will continue to provide information on the dedicated webpage and offer multiple ways for feedback, including:
 - The dedicated project email address and phone number will remain live and active.
 - In-person pop-up information sessions will be held during EIS engagement.
 - A community survey will be conducted.
3. The monitoring and evaluation of engagement activities will be assessed against key metrics, including engagement reach and the effectiveness in capturing feedback. Adjustments will be made as necessary.

Aligned with objectives within the CSEP, the next phase aims continue to:

- Build awareness and understanding of the Project and its benefits alongside broader business commitments with key stakeholders.
- Provide updates on the Project scope (including draft design), timing and potential impacts clearly to potentially affected stakeholders.
- Facilitate a robust engagement process to meet requirements for planning approval.
- Mitigate reputational risk, through timely, clear and transparent communications and engagement.

The engagement plan for the Project is outlined below in **Table 5-3**.

5.6.1 Agency Consultation

Agency consultation will be undertaken with the relevant stakeholder groups identified within the CSEP (refer to **Appendix C**). The agencies will be cross-checked against the SEARs (once realised). Details of the engagement, and the outcomes of the consultation, will be submitted to DPHI as part of the EIS.

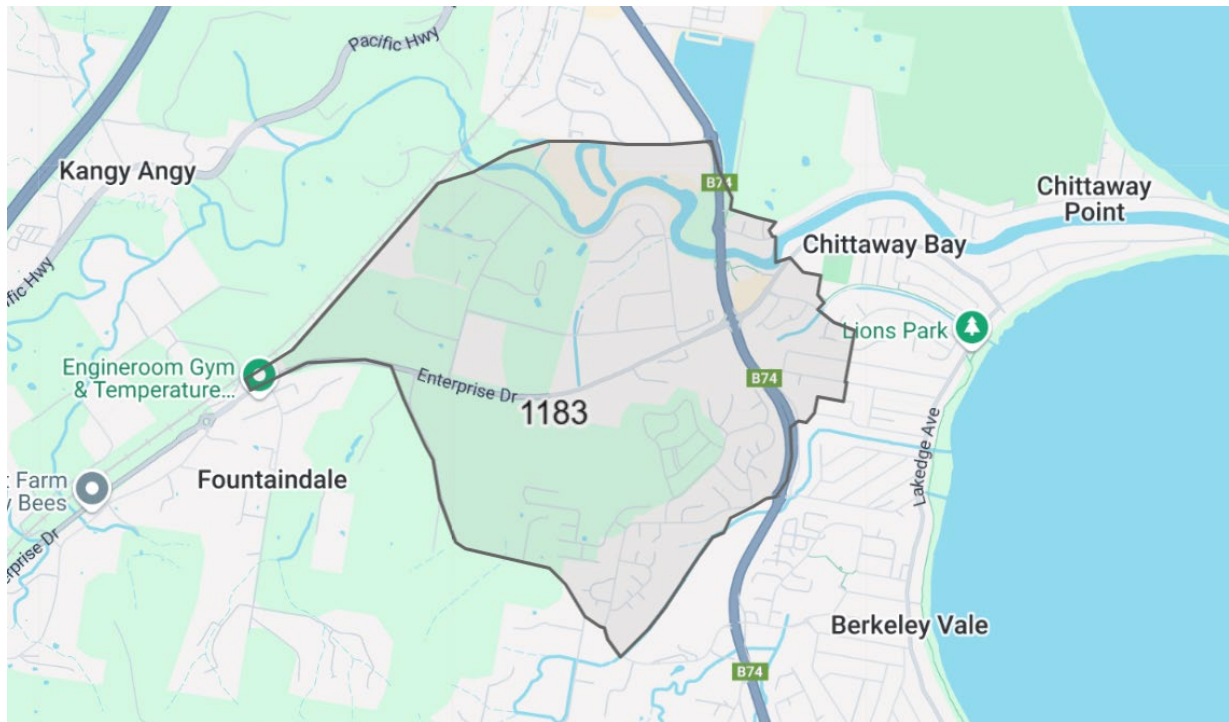


Figure 5-3: Proposed future newsletter distribution

Distribution area for EIS engagement will remain consistent with Scoping Engagement

Table 5-3: Community engagement plan

Timing	Activity and Engagement Methods	Purpose	Target audience
To inform EIS			
July 2025	Stakeholder contact: letters, emails, in-person/virtual meetings, phone call	Provide project update, answer questions, outline EIS process and potential impacts, understand concerns and potential mitigations.	- Non-government organisations (NGOs), utilities and government agencies - Elected officials
July 2025	Community update: newsletter, webpage updates, email to database, dedicated phone / email	Provide project update, answer questions, outline EIS process and potential impacts, promote upcoming engagement opportunities, encourage sign up to EDM for project updates	- Surrounding residential community - Neighbouring businesses
	Direct neighbour phone calls supported by community newsletter	Provide project update, answer questions, outline EIS process and potential impacts, promote upcoming engagement opportunities, encourage sign up to EDM for project updates	Adjoining businesses
August 2025	Community pop-up: FAQs, factsheets, information boards, feedback forms (hard copy and online)	Inform about project, potential impacts and SSDA pathway; understand community values, priorities, concerns, risks and mitigations; capture feedback	- Surrounding residential community - Neighbouring businesses
	Webpage update: website, factsheet, digital advertising, letters / emails / phone calls to registered stakeholders	Thank community and stakeholders for feedback, provide timeline and next steps for engagement	- Non-government organisations, utilities and government agencies - Neighbouring and nearby businesses and properties - Surrounding residential community
September 2025	Community newsletter and webpage updates: newsletter, website, factsheet, digital advertisement, letters / emails / phone calls	Announce EIS submission, provide Planning Portal details, overview key feedback and how it shaped the project, outline next steps	- Non-government organisations, utilities and government agencies - Neighbouring and nearby businesses and properties - Surrounding residential community

Timing	Activity and Engagement Methods	Purpose	Target audience
To inform public exhibition			
Upon exhibition start	Stakeholder letter	Announce EIS exhibition period, invite feedback via Planning Portal, offer briefings or meetings	All stakeholders that have had meetings to date
	Community update: website content, newsletter (subject to timing of exhibition), direct community email (to database)	Announce EIS exhibition period, invite feedback, promote engagement activities and key dates	- Surrounding community - Adjacent properties
Upon determination	Stakeholder letter	Summarise feedback and engagement to date, thank contributors, outline how feedback has been used and next steps	All stakeholders that have had meetings to date
	Webpage and community update: website update, newsletter, community email	Summarise engagement activities, key themes and outcomes, outline how feedback was used and next steps	- Surrounding community - Neighbouring businesses
Ongoing engagement – throughout construction and operation Ausgrid will continue to engage with the community post EIS approval. This will include regular updates, information about construction and detailed enquiry and complaints protocols. At this time, the CSEP will be updated to include an engagement methodology and approach to frequency of communication.			

6.0 Proposed assessment of impacts

6.1 Introduction

The identification of issues to be addressed in the EIS has been undertaken in accordance with the *State significant development guidelines – preparing a scoping report* (DPIE, 2022). This process involved reviewing previous reports, undertaking limited investigations (including site inspections) and desktop searches of relevant environmental databases between July 2024 to May 2025 to identify key issues and sensitive areas. A summary of the key environmental matters identified during the risk assessment is provided in **Section 6.3**, through to **Section 6.9**. Other matters for consideration are identified in **Section 6.10**. A scoping summary table is provided in **Appendix A**.

The intent of the discussion below is to demonstrate Ausgrid's understanding of the relevant environmental matters and the need for further assessment, as well as the requirement for the implementation of mitigation measures for these matters.

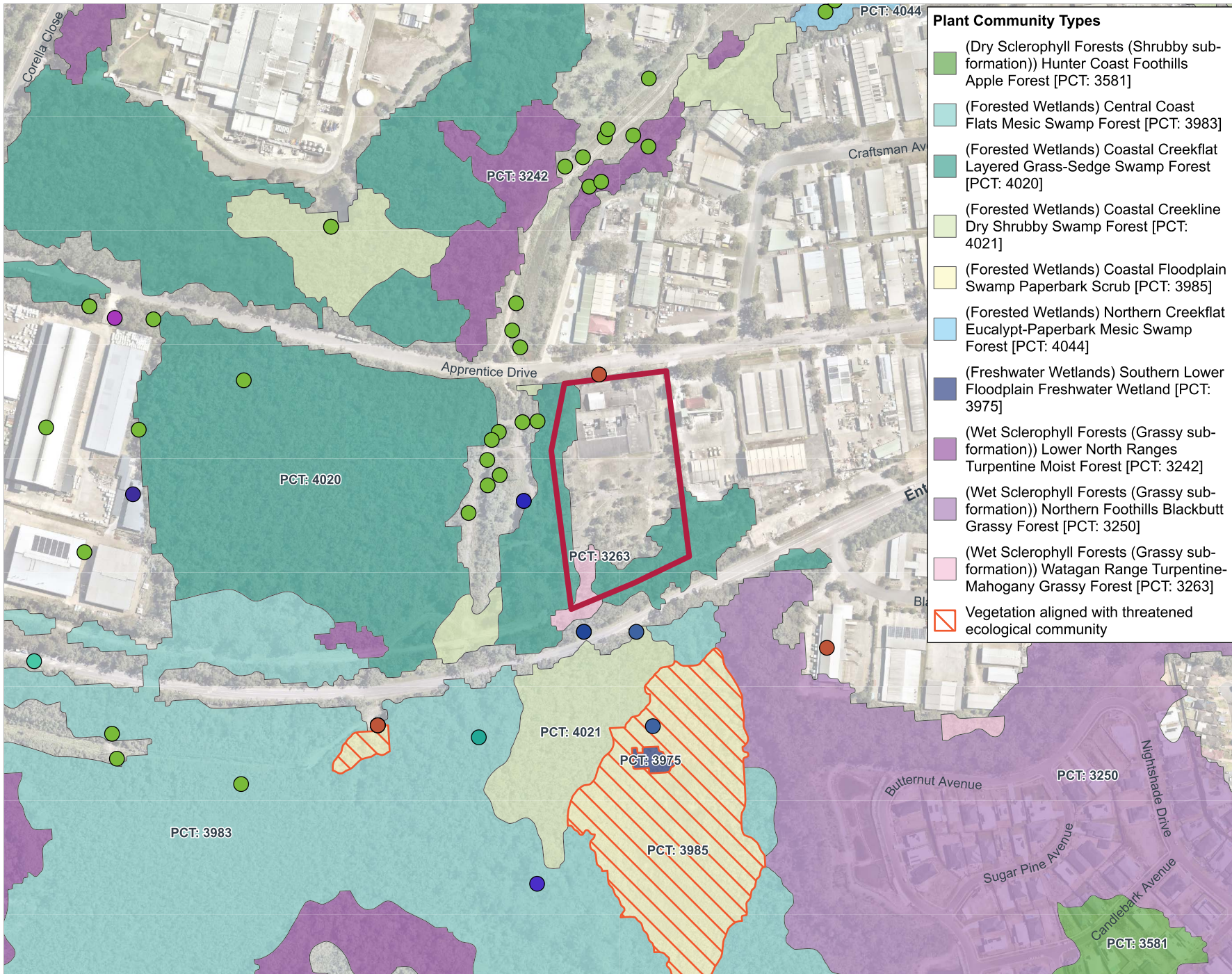
An overview of the relevant environmental constraints is shown on **Figure 6-1**.

6.2 Preliminary mitigation strategies

During the development of the Project, consideration has been given to avoidance of potential environmental and community impacts. Preliminary environmental investigations have been undertaken to identify environmental constraints and recommend measures to avoid or minimise impacts of the Project. Where avoidance is not practicable or feasible, the EIS would include mitigation and management measures to address potential adverse impacts incurred during construction and/or operation.

Preliminary mitigation strategies which would be expanded on in the EIS include:

- Designing the Project layout to avoid sensitive environmental features where feasible
- Avoiding the clearing of native vegetation and native fauna habitat where feasible
- Reducing soil contamination during the construction period through the correct storage of hazardous materials and the maintenance of construction vehicles and equipment to avoid hydrocarbon leaks or spills
- Reducing the extent of excavation and the amount of material stockpiled on site to reduce potential impacts associated with erosion and sedimentation
- Siting the BESS to reduce potential flooding impacts
- Development and implementation of a stormwater management plan for construction of the Project
- Taking practical steps to manage the risk of bushfires and the spread of bushfires such as postponing electrical or hot works during a Total Fire Ban
- Development of a rehabilitation plan for the Project Area, to be implemented at the latter stages of construction.



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**FIGURE 6-1:
ENVIRONMENTAL
CONSTRAINTS**

Legend

The site

**BioNet Threatened Species
Records**

- Botaurus poiciloptilus*
- Crinia tinnula*
- Dasyurus maculatus*
- Falsistrellus tasmaniensis*
- Haliaeetus leucogaster*
- Melaleuca biconvexa*
- Micronomus norfolkensis*
- Miniopterus australis*
- Miniopterus orianae oceanensis*
- Ninox strenua*
- Pandion cristatus*
- Phascolarctos cinereus*
- Pteropus poliocephalus*
- Scoteanax rueppellii*

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6.3 Biodiversity

6.3.1 Existing environment

The site is located within the Sydney Basin Bioregion and the Hunter Sub-bioregion.

A preliminary ecological assessment was completed in May 2024 (Anderson Environment & Planning, 2024). The assessment found that the central area of the site is largely cleared of native vegetation, with remnant native vegetation confined primarily to the site's edges.

Two Plant Community Types (PCTs) have been identified within the site, as shown on **Figure 6-1**. These are:

- PCT 3263 Watagan Range Turpentine-Mahogany Grassy Forest
- PCT 4020 Coastal Creekflat Layered Grass-Sedge Swamp Forest.

PCT 4020 is part of the Swamp Sclerophyll Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions, which is listed as an Endangered Ecological Community (EEC) under the BC Act. It also aligns with the Coastal Swamp Sclerophyll Forests of South-eastern Australia, which is listed as an EEC under the EPBC Act.

A BioNet Atlas search in May 2024 identified nine threatened flora species within a 10 km radius of the site. Of these, only one, *Rhodomyrtus psidioides* (Native Guava) may occur within the site, as it is associated with local vegetation types. However, it was not observed during the preliminary site assessment.

The preliminary site assessment recorded two threatened fauna species as being present: the White-bellied Sea Eagle (*Haliaeetus leucogaster*), observed flying over the site, and the Grey-headed Flying-fox (*Pteropus poliocephalus*), observed foraging within the site. Out of 45 threatened fauna species identified within 10 km of the Project, two bird species and eight mammal species may potentially to occur on site.

Three hollow-bearing trees, containing a total of four tree hollows were also identified on site.

6.3.2 Potential impacts

The construction and operation of the Project may affect habitat for potential threatened fauna species in the locality, as well as threatened ecological communities. The following impacts upon biodiversity may occur during the construction and/or operation of the Project:

- Loss of native vegetation
- Impacts to threatened flora species and/or threatened ecological communities
- Loss of habitat and/or habitat features for native flora and/or fauna including the removal of hollow bearing trees, fallen logs, leaf litter etc
- Loss of habitat connectivity, within or through the site
- Direct disturbance to fauna from noise and/or light spill during construction and/or operation
- Fauna injury or mortality due to construction activities and use of vehicles on site, with slower moving ground-dwelling species being most susceptible
- The facilitation of the spread of invasive plants, animals or diseases
- Erosion and sedimentation impacts to local waterways
- Indirect impacts to biodiversity values off-site.

6.3.3 Assessment approach

A BDAR would be produced to support the EIS. The assessment of the potential impacts of the Project on ecological values would be completed in line with the BAM and would be documented within a BDAR.

Targeted surveys will be undertaken as part of the BDAR to confirm the presence/absence of threatened species and ecological communities within the Project Area. Survey effort, timing, and methodology for the targeted surveys will be outlined within the BDAR.

The BDAR will include mitigation measures designed to avoid or reduce biodiversity impacts, prior to the consideration of offsets.

An impact assessment will be carried out in the EIS to evaluate possible impacts to MNES identified, in accordance with the Commonwealth Significant Impact Criteria 1.1.

6.4 Soils, groundwater and contamination

6.4.1 Existing environment

Soils

The Project is mapped as Class 4 and Class 5 Acid Sulfate Soils (ASS) under the Central Coast LEP. The classification of acid sulfate soils is based on the likelihood of acid sulfate soils being present in a particular areas or at certain depths. Class 4 ASS indicate that acid sulfate soils are likely to be found 2 m below the natural ground surface. Areas classified as Class 5 do not typically contain ASS and are located in excess of 500m of Class 1, 2, 3 and 4 land.

Class 4 ASS requires development consent for work more than 2 m below the natural ground surface or for works by which the water table is likely to be lowered more than 2 m below the natural ground surface. Consent is required for works on Class 5 ASS within 500 m of adjacent Class 1, 2, 3 or 4 land that is below 5 m Australian Height Datum and by which the water table is likely to be lowered below 1 m Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

The site falls wholly within the Wyong soil landscape which is characterised by broad poorly drained deltaic floodplains and alluvial flats of Quaternary sediments on the Central Coast Lowlands. Slope gradients are less than 3% (Apex, 2024). The lithology consists of current and recent mud, silt, sand and gravel deposited by river (alluvial) systems (SEED Website, 2025a).

The land is relatively flat, with a slight slope from south (high) to north (low).

Groundwater

The site is mapped as having high potential as a groundwater dependant ecosystem (GDEs) (BoM, 2025). The Tuggerah Lake Hunter Wetlands National Park, located approximately 1.7 km east of the site, has a high potential for a GDEs. No extraction of groundwater is proposed for the construction or operation of the Project.

There is the potential for historical groundwater contamination at the site associated with nearby industrial land use.

Contamination

The Project will occur on land that has been highly disturbed by previous industrial activities and the construction of the Berkeley Vale Zone Substation and associated infrastructure. Asphalt has been used historically on site.

A search of the NSW EPA contaminated land database (undertaken on 18 March 2025) confirmed that the site is not listed as a notified contaminated site under the CLM Act. In addition, there are no contaminated sites listed for Berkeley Vale, and there are no other known contaminated sites within close proximity to the site. The depth of groundwater for the site will be determined as part of geotechnical investigation to inform the detailed design of the Project.

Potential impacts

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

- Excavations, earth movement and vegetation removal may cause soil erosion and sedimentation (including the potential for sediment laden run-off)

- Vehicle movement may cause soil compaction, or disturbance and dispersion of soil including dust generation
- Potential to encounter contaminated soil or groundwater during construction of the project
- Potential for chemical and fuel spills during construction and/or operation, which may result in localised contamination of soils and groundwater
- Potential impact on GDE from vegetation removal, excavations and potential pollution of groundwater
- Potential changes to pH of surface waters resulting from the exposure of potential ASS.

6.4.2 Assessment approach

A preliminary desktop contamination assessment and detailed site investigation would be undertaken, reviewing historical land uses, existing contamination reports, and regulatory databases to determine potential contamination risks. The assessment would be prepared in accordance with the *Contaminated Land Guidelines: Consultants Reporting on Contaminated Land* (NSW EPA, 2020), the *National Environment Protection Measure (Assessment of Site Contamination)* (NEPC, 2013) and other relevant guidelines. Investigation works will be documented in the EIS. Measures to manage potential contamination risks will be identified, if required.

A qualitative assessment of potential erosion and sedimentation risks will be undertaken as part of the EIS. This assessment would discuss key potential impacts and outline management approaches in line with *Managing Urban Stormwater: Soils and Construction* (the Blue Book) (Landcom, 2004).

6.5 Surface water and flooding

6.5.1 Existing environment

Climate

The site is located within a temperate climatic region, there is no distinct wet or dry season, based on BoM records, annual rainfall is where there is a 'wet' (January to June) and 'dry' (July to December) season (BoM 2025). The mean annual rainfall is 1,098 mm.

Surface water

No prescribed streams or waterbodies are located within the site. The site is located approximately 360 m south of Ourimbah Creek, a perennial watercourse which drains into Tuggerah Lake. The surrounding land uses to Ourimbah Creek are undeveloped areas, and industrial and residential land.

The southern portion of the site is located within an area mapped as proximity area to coastal wetlands (refer to **Figure 4-1**). The Tuggerah Lake wetlands which are classified as nationally important wetlands are located 1.7 km east of site. Coastal wetlands (mapped under the Resilience and Hazards SEPP) are located approximately 55 m south of the site.

Flooding

The western and southern portion of the site are located within the 1 in 100 year flood extent of the Ourimbah Creek (Central Coast Council, 2025). Flooding of the site may therefore occur.

6.5.2 Potential impacts

The Project has the potential to affect the quality and quantity of surface water during construction and operation. The following surface water impacts have been considered as having potential to occur during construction and/or operation of the Project:

- Accidental spill or discharge of chemicals or hydrocarbons, such as fuels and oils from vehicles and/ or equipment with the potential to contaminate surface water and/or groundwater
- Erosion of soil and sedimentation through run off and transport of eroded sediments to waterways particularly during high rainfall events

- Flooding during construction of the BESS resulting in the inundation of the construction site and increased flood hazard for construction workers. Flooding during the operational phase has the potential impact the BESS and associated infrastructure.

6.5.3 Assessment approach

Potential impacts to surface water quality and flooding on surrounding land, including impediments to the flow of water will be considered in the EIS. The impact assessment would include:

- An assessment of the potential construction impacts related to surface water and water quality. The Project's potential impact on surface water flows, water quality and stormwater retention requirements during operation will also be considered
- The NSW Flood Risk Management Manual and associated Flood Impact and Risk Assessment Guideline (LU01) typically require assessment of potential operational flood impacts across a range of flood events up to and including the probable maximum flow (PMF). This will be assessed as part of the EIS in a surface water and flooding assessment. The EIS will also include a qualitative assessment of flooding impacts during construction
- The EIS will also quantify and identify sources of water required for construction and operation of the Project.

6.6 Aboriginal heritage

6.6.1 Existing environment

The Project is located within the Darkinjung Local Aboriginal Land Council area.

Ground disturbance within the central portion is high due to the development of the Berkeley Vale Zone Substation and previous land practices, it is unlikely that intact archaeological sub-surface deposits remain within this area. The southern and western sections of the site have lower levels of ground disturbance.

A search of the Aboriginal Heritage Information System (AHIMS, 2022) for the site in April 2024 did not identify any previously registered Aboriginal sites within 200 m of the site boundary.

6.6.2 Potential impacts

There are no known Aboriginal items or areas within the Project Area and due to historic disturbance, there is a low chance of intact sub-surface deposits being present within the central portion of the site. The southern and western section of the site and the footprint of the proposed new driveways cross areas with lower levels of disturbance. There is a risk that undocumented subsurface archaeological deposits occur in these areas. If such deposits are present, there is risk they would be impacted by construction activities.

6.6.3 Assessment approach

An ACHAR and consultation with Registered Aboriginal Parties will be completed as part of the preparation of the EIS. The ACHAR would be prepared to meet the requirements of the SEARs. The SEARs are expected to require an assessment of the Aboriginal heritage values of the site in accordance with Heritage NSW's *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* and *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*. Accordingly, archaeological survey of the site and an assessment of cultural values would be undertaken, with the outcomes of the ACHAR summarised in the EIS. Evidence of consultation in determining and assessing impacts, options assessment, and mitigation measures will also be provided as part of the ACHAR.

6.7 Noise and vibration

6.7.1 Existing environment

The existing ambient noise sources at the site are from the operation of the existing substation, vehicles on Apprentice Drive and Enterprise Drive and adjacent mixed industrial uses.

Sensitive receivers within 500 m of the Project are:

- Residential properties located around 240 m south
- Industrial and commercial properties located within the adjacent Industrial Area, the closest being 40 m east of the site boundary.

6.7.2 Potential impacts

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

- Construction noise associated with construction activities
- General operational noise from the Project (including the operation of cooling fans for the BESS).

6.7.3 Assessment approach

A Noise and Vibration Impact Assessment (NVIA) will be prepared as part of the EIS. The NVIA will be undertaken in accordance with the requirements of the applicable legislation, policies and guidelines, including:

- *Interim Construction Noise Guideline* (Department of Environment, Climate Change and Water, 2019)
- *NSW Noise Policy for Industry* (EPA, 2017)
- *NSW Road Noise Policy* (DECCW, 2011)
- *NSW EPA Guideline Assessing Vibration: A Technical Guideline (AVTG)* (DEC, 2006)
- *The German Standard DIN 4150 Part 3-2016 Structural Vibration – Effects of vibration on structures* (Deutsches Institute for Normung, 1999).

The NVIA will assess the potential noise and vibration impacts from the Project during the construction and operational phases. Baseline monitoring will be used to determine background noise levels and establish site-specific noise criteria. The NVIA will model Project noise emissions to understand the magnitude of the potential impacts and to support reasonable and feasible mitigation measures, as required.

6.8 Traffic and transport

6.8.1 Existing environment

The Project is located between Apprentice Drive and Enterprise Drive with access proposed off both of these roads. Apprentice Drive is a local road which connects to Enterprise Drive (a regional road) via Hereford Street and Corella Close. Enterprise Drive in turn connects to Wyong Road (B74) to the east of the site which in turn connects to the Pacific Motorway (M1) located north of the site.

The Pacific Motorway (M1) forms part of the major transport connection between Sydney and Newcastle. **Figure 6-2** shows the local transport network surrounding the site and the indicative access point.

Public transport near the site includes the route number 47 bus service which is routed along Enterprise Drive and Apprentice Drive. The closest bus stop to the site is located on Corella Crescent approximately 605 m west of the site and the second closest bus stop is located approximately 375 m east on Hereford Street. This service connects the University of Newcastle's Ourimbah Campus to Tuggerah and Chittaway Point. The closest rail connection is at Tuggerah Station, located approximately 2.5 km north of the site.

6.8.2 Potential impacts

With the exception of two new driveways off Enterprise Drive no road upgrades are required to facilitate the Project; however, the proposed works may result in the following traffic impacts:

Construction of the Project would generate increased traffic volumes on nearby roads. This would include both light-duty vehicles used to transport workers and materials, as well as heavy vehicle movements to transport equipment and construction materials

During operation, the Project would generate low levels of traffic and mainly involve light vehicle movements for personnel.

There is the potential for cumulative impacts with other construction projects, where the construction periods of those projects overlap. The potential cumulative impacts associated with the Project are discussed in **Section 6.11**.

Operation of the Project is not expected to affect the capacity of the local road network.

6.8.3 Assessment approach

A transport impact assessment would be undertaken for the EIS to consider traffic impacts during construction and operation. The assessment would be informed and undertaken in accordance with the Project SEARs. Any required road upgrades would be confirmed in the transport impact assessment.

The assessment would consider proposed route and swept paths for any oversized vehicles required, outline expected traffic volumes during construction, assess the capacity of the existing road network to accommodate construction traffic, and provide mitigation measures as appropriate.

As part of the assessment, the requirement for a Road Occupancy Licence (ROL) will be determined. Consultation with Transport for NSW and Central Coast Council will be undertaken where required. Mitigation measures will be identified as required.

As operation of the Project is not expected to affect the capacity of the local road network, operational impacts will be considered in a qualitative manner only.

The transport impact assessment will include a standard assessment of cumulative impacts of the Project as per the *Cumulative Impacts Assessment Guidelines for State Significant Development Projects* (DPIE, 2022).



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FIGURE 6-2:
EXISTING ROAD NETWORK

Legend

- The site
- Primary road
- Local road
- Site access point

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6.9 Hazards and risk

6.9.1 Existing environment

6.9.1.1 Bushfires

The Project is located within an area that is mapped as bushfire prone land (category 1 and category 2). Category 1 land represents the highest risk for bush fire. Vegetation in this category consists of areas of forest, woodlands, heaths (tall and short), forested wetlands and timber plantations. Category 2 land has a lower bush fire risk than Category 1 and consists of rainforests and lower risk vegetation.

Bushfire risk is heightened during periods of drought or extreme weather, where dry vegetation becomes more flammable and can act as a fuel source for fast-moving fires.

6.9.1.2 Hazards

Installation, commissioning, and operation of BESS can present hazards associated with overheating, fire, hazardous chemicals and gas emissions.

The Project is located within an area containing hazards associated with existing infrastructure. The most prominent is likely to be the Berkeley Vale Zone Substation located on the site.

6.9.1.3 Electromagnetic fields

Electric and magnetic fields (EMFs) are associated with a range of sources and occur both naturally and as a result of human activity. Sources of EMF include power lines, electrical wiring, and electrical appliances; therefore, people are constantly exposed to EMFs in their home and work environments.

The major existing source of EMF at the site is the Berkeley Vale Zone Substation and overhead transmission infrastructure located adjacent to the Project.

6.9.1.4 High pressure gas mains

There is a high pressure gas main along Enterprise Drive and a medium pressure gas main on Apprentice Drive. Further investigation will be undertaken as part of the EIS.

6.9.2 Potential impacts

6.9.2.1 Bushfire

During construction, earthworks, machinery operation, and potential ignition sources could increase the risk of bushfire outbreaks, particularly in dry and windy conditions. The presence of flammable materials and disturbed vegetation may also contribute to fire spread, posing risks to nearby infrastructure, workers, and surrounding areas.

The edges of the site are heavily vegetated and classified as category 1 bushfire prone land and present a bushfire risk that could affect the construction and operation of the Project. Environmental hazards

Installation, commissioning, and operation of BESS can present hazards associated with fire and/or the release of hazardous chemicals and gas emissions.

Specifically, environmental hazards may include the risk of fire associated with thermal runaway of LiFePO₄ battery units. Hydrogen release is possible under fault conditions could result in a potential fire/ explosion hazard.

6.9.2.2 Electromagnetic fields

The BESS would generate significantly lower levels of EMF compared to the existing Berkeley Vale Zone Substation and is therefore unlikely to produce EMF at levels of concern.

6.9.3 Assessment approach

A Bushfire Assessment will be prepared as part of the EIS in accordance with *Planning for Bushfire Protection 2019* (NSW RFS). The assessment will identify bushfire hazards, evaluate potential risks to the BESS infrastructure, and recommend mitigation measures, such as asset protection zones, fire-resistant design, and emergency response procedures.

A PHA would be prepared as an appended technical report to the EIS to assess potential environmental hazards from the BESS facility, including EMF. The PHA would be prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 4 – Hazard Analysis* (HIPAP 4), and *Hazardous Industry Planning Advisory Paper No. 6 – Hazard Analysis* (HIPAP 6). Relevant controls to avoid or reduce the likelihood and/or consequence of these hazards would be identified to ensure risks are acceptable.

The Project's detailed design will seek to minimise risk from hazards through the provision of suitable spacing between the battery units (as recommended by the manufacturer) and through the provision of adequate space for fire-fighting access.

6.10 Other matters

This section provides an overview of other environmental matters that, based on existing information and description of the Project, would require limited or no further assessment in the EIS.

Table 6-1: Summary of relevant information for issues and other environmental matters

Environmental matter	Existing environment	Potential impacts	Level of assessment / assessment approach
Non-Aboriginal heritage	A search of the State Heritage Register and Central Coast LEP was undertaken in March 2025 to determine the location of registered or known non-Aboriginal heritage items within or near the site. There are no records of non-Aboriginal heritage items within the site.	It is considered unlikely that the site contains historic heritage values due to historic disturbance. As no heritage items were identified during the site assessment or through database searches on the State Heritage Register and Central Coast LEP, the construction and operation of the Project is considered unlikely to result in direct or indirect impacts to known items of historic heritage.	No further assessment related to historic heritage is considered necessary to support the Project and EIS.
Social and economic impacts	The Project is located within the Central Coast LGA which has a population of approximately 346,596 (ABS 2021). The site is located approximately 55 km south-west of Newcastle. The major areas of employment are retail trade, construction and manufacturing. The site is located within an industrial area which comprises largely of light industrial land uses. The Project is not located in an area noted for tourism or agriculture.	A preliminary social impact scoping exercise has been undertaken to identify the likely social impacts and benefits of the Project. This involved an initial desktop assessment in the form of a Social Impact Assessment Scoping Worksheet in accordance with the Social Impact Assessment Guideline for Major Projects (DPIE, 2023). The completed worksheet, which outlines potential social and economic impacts can be viewed at Appendix D. The following social and economic impacts have been considered as having potential to occur during the construction and operation of the Project. Positive: The employment of a construction workforce.	A social and economic impact assessment will be prepared as a specialist report as part of the EIS. This report will be prepared in accordance with the <i>Social Impact Assessment Guideline for Major Projects</i> (DPIE, 2023). The result of this report will be summarised within the body of the EIS.

Environmental matter	Existing environment	Potential impacts	Level of assessment / assessment approach
		- Some job creation during the operation of the Project. - Benefits to nearby businesses such as increased passing trade from construction workers and business trade opportunities during operation and maintenance activities. Negative: - Temporary disruptions to road users and potential changes to access for businesses. - Visual impact on the surrounding area (albeit industrial). - Noise from the operation of the BESS - Impacts to nearby residents and businesses from construction activity such as increased noise and vibration, dust, and construction traffic.	
Air quality and greenhouse gases	A search of the National Pollutant Inventory (NPI) maintained by DCCEEW, undertaken in March 2025 using a 5 km radius from the site identified 5 sources emitting 44 air pollutants within the 2022-2023 reporting period. Existing sources of air pollution would include vehicle emissions and emissions from nearby commercial and industrial activities.	Excavation has the potential to generate dust resulting in short term, localised impacts to air quality during construction. The operation of construction machinery has the potential to generate emissions to air from vehicle, plant and equipment exhausts. The backup diesel generator would generate emissions during use.	The EIS will provide a qualitative air assessment to consider the impacts of the construction and operation of the Project. This will be undertaken within the body of the EIS.
Visual amenity	The visual character of the site is dominated by industrial operations and existing electricity infrastructure, including the existing Berkeley Vale Zone substation and overhead power lines. The surrounding topography is relatively flat.	The following construction elements and activities have the potential to result in visual impacts during construction of the Project: - Removal of vegetation - Construction facilities, including portable structures and laydown areas. - Excavations and earthworks. - Construction machinery.	The EIS will include a visual impact assessment considering impacts to surrounding sensitive receivers. This will be undertaken in the body of the EIS.

Environmental matter	Existing environment	Potential impacts	Level of assessment / assessment approach
		Construction impacts would be temporary and limited to the duration of the construction period. Operational impacts, including maintenance activities may also result in landscape and visual impacts. No residential receivers are likely to have views of the site due to the presence of vegetation and existing industrial land uses located between the site and the receivers. The closest residential receiver is located approximately 240 m south of the site. During the operational phase the Project would be a long term change in the visual character of the site and surrounding area.	
Waste management	Not applicable	Waste would be generated by the Project during both construction and operation, including: • Construction waste including small quantities of hazardous waste such as used oil, paints or chemicals • Green waste from clearing of vegetation • General waste during operation and construction.	The EIS will provide an assessment of the waste generated during the construction and operation of the Project. This will be undertaken in the body of the EIS.

6.11 Cumulative impacts

Cumulative impacts may arise if the Project is developed concurrently alongside other projects nearby, or where operational impacts of two or more projects affect the same receptor. In this case, the combined impact of these projects may become greater than each project's individual impact.

Cumulative impacts of the Project would be assessed in the EIS. The cumulative assessment would depend on residual impacts from the Project and the potential of these to generate cumulative impacts with other proposed but not yet operational projects in the vicinity. The cumulative assessments may be qualitative or quantitative depending on the environmental aspect being assessed.

A search of the DPHI Major Projects website was undertaken on 7 February 2025 to identify SSD and SSI projects within 10 km of the Project that may be relevant for the EIS cumulative impact assessment. A search of the Central Coast Council Development Application Tracker was also conducted on 7 February 2025 for relevant Development Applications (DAs) with 1 km of the Project, approved in 2024 or 2025. These projects are outlined in **Table 6-2**.

Table 6-2: Relevant future projects for cumulative impact assessment

Future project	Approximate distance to the Project	Project status / indicative timing / potential for overlap
DPHI Major Projects Database Entries		
New Eileen O'Connor School SSD-67173718 Prepare EIS	3.1 km north	Stage 1 development for a new Special Education school to cater for 200 students from Kindergarten to Year 12. The date for construction and potential for an overlap with the Project is unknown.
Mingara Recreation Club Seniors Housing, Tumby Umbi SSD-63475709 Project in Response to Submissions Phase	4.4 km south	Mingara Recreation Club proposes the development of a retirement living development at 14 Mingara Drive, Tumby Umbi. Construction is anticipated to commence in late 2025/early 2026 with a duration of 42 months. There will be overlap between the construction period for this development and the Project.
Central Coast Council		
Mars Australia Whole OC Hardstand Surface 4 Corella Close OC/67/2025	500 m north-west	No details available. The construction period for this development is unknown.
ADW Johnson Pty Ltd DA/1857/2024 DA/2348/2023/A	990 m east	Alterations to an existing food processing facility. The construction period for this development is unknown.
PMANDO Holdings Pty Ltd 15 Apprentice Drive DA/53/2020/B Under assessment	115 m north	Construction of 5 industrial units for light industrial use. The construction period for this development is unknown.

Future project	Approximate distance to the Project	Project status / indicative timing / potential for overlap
Trade Wastewater Treatment Plant Australian Health & Nutrition Assn Ltd DA/1398/2024	990 m east	Construction of a trade wastewater treatment plant. The construction period for this development is unknown.
PM Anderson Consulting Pty Ltd Addition to Existing Industrial Development DA/378/2024 Under assessment	620 m north-east	Addition to existing industrial development. The construction period for this development is unknown.

7.0 Conclusion

Ausgrid proposes to construct and operate a BESS with a capacity of approximately 150 MW adjacent to the Berkeley Vale Zone Substation in Berkeley Vale, NSW.

This scoping report has been prepared in accordance with *State significant development guidelines – preparing a scoping report* (DPIE, 2022), in support of an application for SEARs for the Project.

The matters that have been identified for further detailed assessment during the preparation of the EIS are:

- Biodiversity
- Soils, groundwater and contamination
- Surface water, flooding and water use
- Noise and vibration
- Traffic and transport
- Aboriginal Heritage
- Social and economic
- Visual amenity
- Hazards and risk
- Bushfire risk.

Other matters that will be considered in the EIS are:

- Air quality
- Non-Aboriginal Heritage
- Waste management.

In preparing the EIS for the Project, the key focus would be avoidance and minimisation of potential impacts on the environment and local communities, where practicable and feasible. Consultation with stakeholders including the local community would continue throughout the Project assessment, design and construction phases.

It is requested that DPHI confirm the Project as SSD and issue SEARs to facilitate the preparation of an EIS.

8.0 References

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DPIE (2021d) Cumulative Impact Assessment Guidelines for Significant Projects.

DPIE (2021e) Social Impact Assessment Guideline.

DPIE (2021f) Undertaking Engagement Guidelines for State Significant Projects.

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Infrastructure NSW (2022) NSW State Infrastructure Strategy (SIS) 2022-2042.

NSW EPA (2014) Waste Classification Guidelines. NSW Government.

NSW EPA (2017) NSW Noise Policy for Industry. NSW Government.

NSW Department of Planning and Environment (2022) Central Coast Regional Plan 2041.

OEH (2011) Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW.
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Appendix A

Scoping Summary Table

Appendix A Scoping Summary Table

Matter	Level of assessment	Cumulative impact assessment	Engagement	Relevant government plans, policies and guidelines	Scoping report reference
Biodiversity	Detailed	Yes	General	Biodiversity Assessment Method (Department of Planning, Industry and Environment 2020)	Section 6.3
Soils, groundwater and contamination	Detailed	No	General	<i>National Environment Protection (Assessment of Site Contamination) Measure</i> (National Environment Protection Council 2011) <i>Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997</i> (Environment Protection Authority 2015) <i>Guidelines for the Assessment and Management of Groundwater Contamination</i> (NSW Environment Protection Authority 2007)	Section 6.4
Surface water and flooding	Detailed	No	General	<i>Managing Urban Stormwater: Soils and Construction – Volume 1</i> (Landcom 2004) <i>Australian and New Zealand guidelines for fresh and marine water quality</i> (ANZECC & ARMCANZ 2000) <i>Acid Sulfate Soils Assessment Guidelines</i> (Acid Sulfate Soils Management Advisory Committee 1998)	Section 6.5
Aboriginal heritage	Detailed	No	Specific	<i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales</i> (Office of Environment and Heritage 2011) <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i> (Department of Environment, Climate Change and Water 2010)	Section 6.6

Matter	Level of assessment	Cumulative impact assessment	Engagement	Relevant government plans, policies and guidelines	Scoping report reference
Noise and vibration	Detailed	Yes	General	<i>Noise Policy for Industry</i> (Environment Protection Authority 2017) <i>Interim Construction Noise Guideline</i> (Department of Environment, Climate Change and Water 2019) <i>NSW Road Noise Policy</i> (Department of Environment, Climate Change and Water 2011) <i>Assessing vibration: A technical guideline</i> (Department of Environment, Climate Change and Water 2006)	Section 6.7
Traffic and transport	Detailed	Yes	Specific	<i>Guide to traffic management Part 12: Integrated Transport Assessments for Developments</i> (Austroads 2020)	Section 6.8
Hazards and Risk	Detailed	No	General	<i>Planning for Bushfire Protection</i> (NSW Rural Fire Service 2019) <i>Assessment Guideline: Multi-Level Risk Assessment</i> (Department of Planning and Infrastructure 2011)	Section 6.9
Non-aboriginal heritage	No further assessment	No	General	<i>Assessing Significant for Historical Archaeological Sites and 'Relics'</i> (Heritage Branch of the Department of Planning 2009)	Section 6.10
Social and economic	Standard	No	Specific	<i>Social Impact Assessment Guideline – For State Significant Developments</i> (Department of Planning and Environment 2021)	
Air quality	Standard	No	General	<i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i> (Environment Protection Authority 2016)	
Visual amenity	Standard	No	General	<i>Guidelines for Landscape and Visual Impact Assessment – 3rd Edition</i> (Institute of Environmental Management and Assessment 2013)	

Matter	Level of assessment	Cumulative impact assessment	Engagement	Relevant government plans, policies and guidelines	Scoping report reference
Waste Management	Standard	No	General	• <i>Waste Classification Guidelines Part 1: Classifying Waste</i> (NSW Environment Protection Authority 2014) • <i>NSW Waste Avoidance and Resource Recovery Strategy 2014-2021</i> (NSW Environment Protection Authority 2014)	

Appendix B

Protected Matters Search Report



Australian Government

Department of Climate Change, Energy,
the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 22-May-2025

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	5
Listed Threatened Species:	118
Listed Migratory Species:	73

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	17
Commonwealth Heritage Places:	None
Listed Marine Species:	100
Whales and Other Cetaceans:	13
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	6
Regional Forest Agreements:	1
Nationally Important Wetlands:	4
EPBC Act Referrals:	25
Key Ecological Features (Marine):	None
Biologically Important Areas:	5
Bioregional Assessments:	1
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community likely to occur within area	In feature area
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community likely to occur within area	In feature area
Coastal Upland Swamps in the Sydney Basin Bioregion	Endangered	Community may occur within area	In buffer area only
River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria	Critically Endangered	Community likely to occur within area	In feature area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area	In buffer area only

Listed Threatened Species

[Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Ardeenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris tenuirostris Great Knot [862]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Erythrorhynchus radiatus Red Goshawk [942]	Endangered	Species or species habitat may occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area	In feature area
Fregetta grallaria grallaria White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat known to occur within area	In feature area
Limosa limosa Black-tailed Godwit [845]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat may occur within area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pluvialis squatarola Grey Plover [865]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area	In buffer area only
Pterodroma neglecta neglecta Kermadec Petrel (western) [64450]	Vulnerable	Foraging, feeding or related behaviour may occur within area	In buffer area only
Pycnoptilus floccosus Pilotbird [525]	Vulnerable	Species or species habitat known to occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area	In feature area
Sternula albifrons Little Tern [82849]	Vulnerable	Breeding known to occur within area	In buffer area only
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
FISH			
Epinephelus daemeli Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Macquaria australasica Macquarie Perch [66632]	Endangered	Species or species habitat may occur within area	In buffer area only
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Seriolella brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
FROG			
Heleioporus australiacus australiacus Giant Burrowing Frog, Eastern Owl Frog [92013]	Endangered	Species or species habitat known to occur within area	In feature area
Litoria aurea Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Litoria littlejohni Northern Heath Frog, Littlejohn's Tree Frog [64733]	Endangered	Species or species habitat may occur within area	In buffer area only
Mixophyes balbus Stuttering Frog, Southern Barred Frog (in Victoria) [1942]	Vulnerable	Species or species habitat known to occur within area	In feature area
Mixophyes iteratus Giant Barred Frog, Southern Barred Frog [1944]	Vulnerable	Species or species habitat known to occur within area	In feature area
Uperoleia mahonyi Mahony's Toadlet [89189]	Endangered	Species or species habitat may occur within area	In buffer area only
MAMMAL			
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat known to occur within area	In feature area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Notamacropus parma Parma Wallaby [89289]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat known to occur within area	In feature area
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat known to occur within area	In feature area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area	In feature area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area
Potorous tridactylus tridactylus Long-nosed Potoroo (northern) [66645]	Vulnerable	Species or species habitat known to occur within area	In feature area
Pseudomys novaehollandiae New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area
PLANT			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Acacia bynoeana Bynoe's Wattle, Tiny Wattle [8575]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Angophora inopina Charmhaven Apple [64832]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Asterolasia elegans [56780]	Endangered	Species or species habitat may occur within area	In buffer area only
Baloskion longipes Dense Cord-rush [68511]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Caladenia tessellata Thick-lipped Spider-orchid, Daddy Long-legs [2119]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Corunastylis insignis Wyong Midge Orchid 1, Variable Midge Orchid 1 [84692]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat known to occur within area	In feature area
Cynanchum elegans White-flowered Wax Plant [12533]	Endangered	Species or species habitat likely to occur within area	In feature area
Diuris praecox Newcastle Doubletail [55086]	Vulnerable	Species or species habitat known to occur within area	In feature area
Eucalyptus camfieldii Camfield's Stringybark [15460]	Vulnerable	Species or species habitat known to occur within area	In feature area
Euphrasia arguta [4325]	Critically Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Genoplesium baueri Yellow Gnat-orchid, Bauer's Midge Orchid, Brittle Midge Orchid [7528]	Endangered	Species or species habitat likely to occur within area	In feature area
Genoplesium branwhiteorum listed as Corunastylis sp. Charmhaven (NSW 896673) [93200]	Critically Endangered (listed as Corunastylis sp. Charmhaven	Species or species habitat known to occur within area	In buffer area only
Grevillea parviflora subsp. parviflora Small-flower Grevillea [64910]	Vulnerable	Species or species habitat known to occur within area	In feature area
Grevillea shiressii [19186]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Melaleuca biconvexa Biconvex Paperbark [5583]	Vulnerable	Species or species habitat known to occur within area	In feature area
Melaleuca deanei Deane's Melaleuca [5818]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Micromyrtus blakelyi [6870]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Persicaria elatior Knotweed, Tall Knotweed [5831]	Vulnerable	Species or species habitat may occur within area	In feature area
Persoonia hirsuta Hairy Geebung, Hairy Persoonia [19006]	Endangered	Species or species habitat may occur within area	In buffer area only
Pimelea curviflora var. curviflora [4182]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Prostanthera askania Tranquillity Mintbush, Tranquility Mintbush [64958]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Prostanthera junonis Somersby Mintbush [64960]	Endangered	Species or species habitat known to occur within area	In buffer area only
Rhizanthella slateri Eastern Underground Orchid [11768]	Endangered	Species or species habitat may occur within area	In feature area
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Rutidosis heterogama Heath Wrinklewort [13132]	Vulnerable	Species or species habitat known to occur within area	In feature area
Syzygium paniculatum Magenta Lilly Pilly, Magenta Cherry, Daguba, Scrub Cherry, Creek Lilly Pilly, Brush Cherry [20307]	Vulnerable	Species or species habitat known to occur within area	In feature area
Tetratheca juncea Black-eyed Susan [21407]	Vulnerable	Species or species habitat known to occur within area	In feature area
Thelymitra adorata Wyong Sun Orchid [84724]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Hoplocephalus bungaroides Broad-headed Snake [1182]	Endangered	Species or species habitat may occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

SHARK			
Carcharias taurus (east coast population) Grey Nurse Shark (east coast population) [68751]	Critically Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Galeorhinus galeus School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark [68453]	Conservation Dependent	Species or species habitat may occur within area	In buffer area only
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only

Listed Migratory Species		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat known to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sternula albifrons Little Tern [82849]	Vulnerable	Breeding known to occur within area	In buffer area only
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Migratory Marine Species			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area	In buffer area only
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only
Carcharias taurus Grey Nurse Shark [64469]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat likely to occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris alba Sanderling [875]		Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area	In feature area
Calidris ruficollis Red-necked Stint [860]		Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris tenuirostris Great Knot [862]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Charadrius bicinctus Double-banded Plover [895]		Foraging, feeding or related behaviour known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
Gallinago megala Swinhoe's Snipe [864]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Gallinago stenura Pin-tailed Snipe [841]		Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Limosa limosa Black-tailed Godwit [845]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Numenius phaeopus Whimbrel [849]		Foraging, feeding or related behaviour known to occur within area	In feature area
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In feature area
Pluvialis fulva Pacific Golden Plover [25545]		Foraging, feeding or related behaviour known to occur within area	In feature area
Pluvialis squatarola Grey Plover [865]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Tringa brevipes Grey-tailed Tattler [851]		Foraging, feeding or related behaviour known to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Foraging, feeding or related behaviour known to occur within area	In feature area
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands

[[Resource Information](#)]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land Name	State	Buffer Status
Communications, Information Technology and the Arts - Australian Postal Corporation		
Commonwealth Land - Australian Postal Commission [11748]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [11747]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [11772]	NSW	In buffer area only
Communications, Information Technology and the Arts - Telstra Corporation Limited		
Commonwealth Land - Australian & Overseas Telecommunications Corporation [11744]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11749]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11752]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [16063]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11753]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11750]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11751]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11754]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11746]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Australian Telecommunications Commission [11765]	NSW	In buffer area only
Defence - Defence Housing Authority		
Commonwealth Land - Defence Housing Authority [11775]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [11745]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [11774]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [11773]	NSW	In buffer area only

Listed Marine Species		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus			
Common Noddy [825]		Species or species habitat likely to occur within area	In feature area
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna carneipes as Puffinus carneipes			
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea as Puffinus griseus			
Sooty Shearwater [82651]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Arenaria interpres			
Ruddy Turnstone [872]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Bubulcus ibis as Ardea ibis			
Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris alba Sanderling [875]		Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area overfly marine area	In feature area
Calidris ruficollis Red-necked Stint [860]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Calidris tenuirostris Great Knot [862]	Vulnerable	Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only
Charadrius bicinctus Double-banded Plover [895]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Charadrius ruficapillus Red-capped Plover [881]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea antipodensis gibsoni as Diomedea gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area	In buffer area only
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Gallinago megala Swinhoe's Snipe [864]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In feature area
Gallinago stenura Pin-tailed Snipe [841]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Limosa limosa Black-tailed Godwit [845]	Endangered	Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat likely to occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius phaeopus Whimbrel [849]		Foraging, feeding or related behaviour known to occur within area	In feature area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat known to occur within area	In feature area
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Foraging, feeding or related behaviour known to occur within area	In feature area
Pluvialis squatarola Grey Plover [865]	Vulnerable	Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Stercorarius antarcticus as Catharacta skua Brown Skua [85039]		Species or species habitat may occur within area	In buffer area only
Sterna striata White-fronted Tern [799]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Sternula albifrons as Sterna albifrons Little Tern [82849]	Vulnerable	Breeding known to occur within area	In buffer area only
Symposiachrus trivirgatus as Monarcha trivirgatus Spectacled Monarch [83946]		Species or species habitat may occur within area overfly marine area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche bulleri platei as Thalassarche sp. nov. Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Tringa brevipes as Heteroscelus brevipes Grey-tailed Tattler [851]		Foraging, feeding or related behaviour known to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Fish			
Acentronura tentaculata Shortpouch Pygmy Pipehorse [66187]		Species or species habitat may occur within area	In buffer area only
Festucalex cinctus Girdled Pipefish [66214]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Filicampus tigris Tiger Pipefish [66217]	Endangered	Species or species habitat may occur within area	In buffer area only
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In buffer area only
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area	In buffer area only
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area	In buffer area only
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]		Species or species habitat likely to occur within area	In buffer area only
Histiogamphelus briggsii Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area	In buffer area only
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only
Notiocampus ruber Red Pipefish [66265]	Endangered	Species or species habitat may occur within area	In buffer area only
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Solenostomus cyanopterus Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		Species or species habitat may occur within area	In buffer area only
Solenostomus paradoxus Ornate Ghostpipefish, Harlequin Ghost Pipefish, Ornate Ghost Pipefish [66184]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In buffer area only
Trachyrhamphus bicoarctatus Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area	In buffer area only
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Mammal			
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In buffer area only
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area	In buffer area only
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Hydrophis platura as Pelamis platurus Yellow-bellied Sea Snake [93746]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Whales and Other Cetaceans			[Resource Information]
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In buffer area only
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]	Endangered	Species or species habitat may occur within area	In buffer area only
Eubalaena australis Southern Right Whale [40]		Species or species habitat likely to occur within area	In buffer area only
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves		[Resource Information]	
Protected Area Name	Reserve Type	State	Buffer Status
Jilliby	State Conservation Area	NSW	In buffer area only
Tuggerah	Nature Reserve	NSW	In buffer area only
Tuggerah	State Conservation Area	NSW	In buffer area only

Protected Area Name	Reserve Type	State	Buffer Status
Wamberal Lagoon	Nature Reserve	NSW	In buffer area only
Wambina	Nature Reserve	NSW	In buffer area only
Wyrabalong	National Park	NSW	In buffer area only

Regional Forest Agreements
[Resource Information]

Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.

RFA Name	State	Buffer Status
North East NSW RFA	New South Wales	In feature area

Nationally Important Wetlands
[Resource Information]

Wetland Name	State	Buffer Status
Budgewoi Lake Sand Mass	NSW	In buffer area only
Tuggerah Lake	NSW	In buffer area only
Wamberal Lagoon	NSW	In buffer area only
Wyong Racecourse Swamp	NSW	In buffer area only

EPBC Act Referrals
[Resource Information]

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Torrens Title 8-Lot Industrial Subdivision	2023/09648		Post-Approval	In buffer area only
Wyong Regional Distribution Centre Expansion	2023/09473		Referral Decision	In buffer area only

Controlled action

414 Old Maitland Road Residential Subdivision	2021/8968	Controlled Action	Proposed Decision	In buffer area only
New Intercity Fleet Maintenance Facility Kangy Angy, NSW	2016/7681	Controlled Action	Post-Approval	In buffer area only
Residential subdivision, Lot 2 DP1100181 Berkeley Road, Glenning Valley, NSW	2016/7829	Controlled Action	Post-Approval	In feature area
Stages 6-16 of a retirement village/Bellevue Road, Forresters Beach	2003/946	Controlled Action	Post-Approval	In buffer area only
Wallarah 2 Coal Project	2012/6388	Controlled Action	Post-Approval	In buffer area only
Wallarah 2 Coal Project	2007/3881	Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Not controlled action				
Central Coast Highway Upgrade from Ocean View Dve to Matcham Rd	2009/4815	Not Controlled Action	Completed	In buffer area only
Demolition of Ablutions Block, Snapper Island, NSW	2018/8303	Not Controlled Action	Completed	In buffer area only
development of stages 1 - 5 of a retirement village	2003/945	Not Controlled Action	Completed	In buffer area only
Development of Westfield Limited land holdings at Tuggerah	2010/5562	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Magenta Shores Integrated Tourist Facility and golf course	2003/995	Not Controlled Action	Completed	In buffer area only
Mardi-Mangrove Link Project	2009/5112	Not Controlled Action	Completed	In buffer area only
Residential subdivision of Lot 22 DP 740435 Berkeley Road, Glenning Valley, NSW	2017/7992	Not Controlled Action	Completed	In buffer area only
Subdivision	2000/90	Not Controlled Action	Completed	In buffer area only
Subdivision, clearing and development of industrial zoned land Lot 3 DP 1007500	2008/4385	Not Controlled Action	Completed	In buffer area only
Terrigal Sewer Pumping Station Upgrade	2001/128	Not Controlled Action	Completed	In buffer area only
Tuggerah Business Park - Carpark	2000/61	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
330kV Transmission Line	2002/863	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Magenta Shared Pathway Stage 2, NSW	2017/7926	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Residential Development	2002/711	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Referral decision				

Breeding program for Grey Nurse Sharks	2007/3245	Referral Decision	Completed	In buffer area only
Residential Subdivision Dickson Road Lots 231 & 233 DP755271	2003/1105	Referral Decision	Completed	In buffer area only

Tursiops aduncus				
Indo-Pacific/Spotted Bottlenose Dolphin [68418]		Breeding	Likely to occur	In buffer area only

Ardenna pacifica				
Wedge-tailed Shearwater [84292]		Foraging	Likely to occur	In buffer area only

Ardenna tenuirostris				
Short-tailed Shearwater [82652]		Foraging	Likely to occur	In buffer area only

Sharks				
Carcharias taurus				
Grey Nurse Shark [64469]		Foraging	Known to occur	In buffer area only

Megaptera novaeangliae				
Humpback Whale [38]		Migration (north and south)	Known to occur	In buffer area only

Bioregional Assessments			[Resource Information]	
SubRegion	BioRegion	Website	Buffer Status	
Hunter	Northern Sydney Basin	BA website	In feature area	

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on the contents of this report.

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded breeding sites; and
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- [-Other groups and individuals](#)

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact us](#) page.

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Appendix C

Community and Stakeholder Engagement Plan



Wired for good.™

Berkeley Vale BESS

Community and Stakeholder Engagement Plan

May 2025

Document control

Document status	Final
Document type	Plan
Approval Authority	Emma Forbes, Stakeholder and Engagement Manager
Release date	May 2025
Review period	Quarterly
Review due by	July 2025

Approved by



Emma Forbes

Stakeholder Engagement Manager

16 May 2025

Revision	Date	Revised by	Description of changes
1.0	May 2025	Issy Langton Kendall and Emma Lannan	Revised implementation plan
2.0	May 2025	Hayley Kardash	Updated implementation plan and finalised CSEP
3.0	May 2025	Emma Forbes	Reviewed

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Acknowledgement of Country

We acknowledge the Traditional Custodians of the lands where the Ausgrid distribution network is located, and we pay our respects to the elders, past, present and emerging. Our network and operations span the traditional country of 17 languages, tribal and nation groups in Sydney, the Central Coast and Hunter regions of New South Wales.

We want to lead and foster a workforce, and approach to our operations, that embraces the learnings, voices, cultures and histories of these Traditional Owners into our own organisation. We acknowledge the profound and enduring contributions of Indigenous peoples to our shared communities and commit to working collaboratively towards reconciliation, justice, and respect for all First Nations peoples. We commit to planning and delivering engagement that is respectful of First Nations people and works toward reconciliation.

Acronyms

ABS	Australian Bureau of Statistics
AEMO	Australian Energy Market Operator
BESS	Battery Energy Storage Systems
CSEP	Community and Stakeholder Engagement Plan
DNSP	Distributed Network Service Provider
DPHI	Department of Planning, Housing and Infrastructure
EIS	Environmental Impact Statement
EP&A Act	Environmental Protection and Assessment (NSW) Act 1979
EWO	Energy and Water Ombudsman
IAP2	International Association of Public Participation
MWh	Megawatt-hour
NEM	National Energy Market
NECF	National Energy Customer Framework
SAL	Suburbs and Localities area for ABS Census data
SEAR	Secretary's Environmental Assessment Requirements
SEIA	Social Economic Impact Assessment
SEM	Stakeholder Engagement Manager
SSDA	State Significant Development Application

1. Introduction

Ausgrid is proposing grid-scale Battery Energy Storage Systems (BESS) connected to existing Ausgrid zone substations across its network. Grid-scale storage is critical to supporting the continued growth of renewables and broader energy transition, while continuing to ensure a safe and reliable electricity network. Ausgrid is leading the planning, design and approvals processes for BESS sites, with the intention to hand over the construction, operation and maintenance to a third party.

Ausgrid's BESS portfolio includes projects across three tranches (the Program). The BESS are being proposed by Ausgrid via the State Significant Development Application (SSDA) pathway. The proposals will be assessed by the NSW Department of Planning, Housing, and Infrastructure (DPHI).

1.1. Plan purpose and objectives

This Community and Stakeholder Engagement Plan (CSEP) outlines the communications and engagement approach for the proposed Berkeley Vale BESS (the Project). It is intended to guide Ausgrid, and associated representatives and contractors, in the delivery of engagement activities to inform community and stakeholders impacted by or interested in the Project during the environmental planning and approval stage.

Specifically, the engagement activities outlined in this CSEP support the following Project phases:

- Preparation of the Scoping Report (request for Secretary's Environmental Assessment Requirements (SEARs))
- Preparation of the Environmental Impact Statement (EIS)
- All project milestones, including throughout construction and operation.

This CSEP will also ensure:

- Adjoining landholders, stakeholders and local communities are provided with timely and relevant information about the Project, in plain English, and have opportunity to provide feedback.
- Communication to and from landholders and other community stakeholders is adequately documented.
- All interested stakeholders are provided with a responsive point of contact for any enquiries, complaints, or suggestions.
- Stakeholders with potential interest in the Project are identified and provided with consistent messages and opportunity to be heard.
- Minimal disruption to landholders, other impacted stakeholders, and the wider community.
- Engagement activities support the broader Program to meet planning approval requirements and secure the required approvals from regulators and decision makers in a timely manner.
- Communications procedures and protocols are followed.

The CSEP is a living document and will be updated iteratively at the start and end of project phases, and at key milestones and hold points. The focus of this version is community and stakeholder engagement to support the early planning and approvals process for the proposed Berkeley Vale BESS.

1.2. Project description

Ausgrid is seeking development consent to facilitate the construction, operation and maintenance of a Battery Energy Storage System (BESS) with a capacity of 150MW at Berkeley Vale. The proposed location of the BESS is at 14 Apprentice Drive, Berkeley Vale.

A BESS is a group of large, rechargeable batteries connected to form one very large battery. The proposed BESS is on property owned by Ausgrid, next to an existing Ausgrid-owned substation.

The Project comprises a BESS facility that would store electricity from the grid and release electricity during periods of high demand. Key features of the Project would include but not be limited to:

- Construction and operation of a BESS with a capacity of approximately 150MW (construction of the Project may be carried out in stages)
- Connection of the BESS to the existing Berkeley Vale substation via a 132 kV overhead connection
- Other ancillary infrastructure and services required such as internal access roads, laydown areas, control and operational buildings.

The Project is expected to result in significant benefits to the State and local community, including:

- Improved network security and diversified energy supply and storage within New South Wales
- Support for increased renewable power generation during daytime peak periods, placing downward pressure on wholesale electricity prices in accordance with the NSW Integrated System Plan
- Support economic development within NSW, through the creation of new jobs during the construction and operation phase.



Figure 1 Proposed site location

1.3. Surrounding context

The site is located within the Central Coast LGA, approximately 17km north-east of Gosford. The site, known as Lot 60 DP262025, is surrounded by a mix of residential (to the south-east) and industrial properties (to the north, east and south-east).

Berkeley Vale is a small peninsula on the western shore of Lake Macquarie. The proposed location of the BESS is on property owned by Ausgrid, near to an Ausgrid-owned existing substation.

1.4. Applicable legislation, policy and codes

Federal and state government regulations require all major infrastructure projects to undergo a robust environmental assessment before approval is considered. Projects within the BESS Program will be classified as State Significant Infrastructure under Part 4 of the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act) and Clause 94 of the State Environmental Planning Policy (Infrastructure) 2007.

As an Authorised Network Operator, Ausgrid's engagement is informed by a number of regulatory requirements, listed below. As the Project progresses, this table will be updated to reflect changes.

Act	Description
Electricity Supply Act 1995	- Section 45 requires that written notice of the proposal to carry out works (other than routine repairs or maintenance works) is given to the local council. The relevant local council must be given a reasonable opportunity (40 days from the date on which the notice was given) to make submissions on the proposal. - All submissions must be considered prior to the start of the works. A second notification providing at least 21 days' notice to both council and nearby residents (requires that councils be notified and provided with 40 days to comment on certain projects).
Electricity Infrastructure Investment Act 2020 (NSW)	Section 3 of the Electrical Infrastructure Investment Act sets out the overall object of the Act which relates to Renewable Energy Zone (REZ) projects. Clause (1) (d) to foster local community support for investment in new generation, storage, network and related infrastructure, and clause (2) to improve employment and consultation with traditional Aboriginal owners of land which infrastructure may be built and operated on.
Environmental Planning and Assessment Act (NSW) 1979	Section 5.16 of the EP&A Act outlines the requirements for assessment of a project against the Secretary's Environmental Assessment Requirements (SEARs). SEARs typically include requirements for consultation with stakeholders and community that may be impacted by or have an interest in a project. Further detail is provided in the NSW DPHI <i>Undertaking engagement guidelines for state significant projects</i> (March 2024)
State Environmental Planning Policy (Transport and Infrastructure) 2021	- Clauses 2.10-2.12 and 2.14 of the SEPP require that consultation is undertaken with the relevant local council if the development has impacts on council-related infrastructure or services, local heritage, flood liable land or certain land within the coastal zone. - Clause 2.15 of the SEPP requires that consultation is undertaken with relevant public authorities other than council, in certain circumstances. - Clause 2.45 of the SEPP provides that written notification must be given to the relevant local council and the occupiers of adjoining land for development for the purpose of a new or existing electricity substation. Any responses received within 21 days after the notice is given must be taken into consideration; and - The written notification required under the SEPP and the 40-day notification required under the Electricity Supply Act 1994 are usually issued concurrently.

National Energy Customer Framework (NECF) legislation	Ausgrid must notify customers and retailers at least four clear business days before all planned interruptions unless the customer signs a waiver agreeing for the work to proceed with less notice. The previous notification requirement for this activity was two business days. Breaches of the legislation may attract civil penalties or result in enforceable undertakings being issued against Ausgrid.
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Table 1: Applicable legislation and policy

1.5. SSDA community participation requirements

In accordance with the EP&A Act, State Significant Developments (SSDs) are required to carry out a comprehensive assessment process involving extensive community participation. Community participation includes informing, consulting and involving those who are interested in, or affected by, the proposed changes to an area as a result of a proposed project. Community participation also includes obtaining expert advice from relevant public authorities including local, state and federal government agencies.

The NSW Government SSD assessment process is summarised in Figure 2.

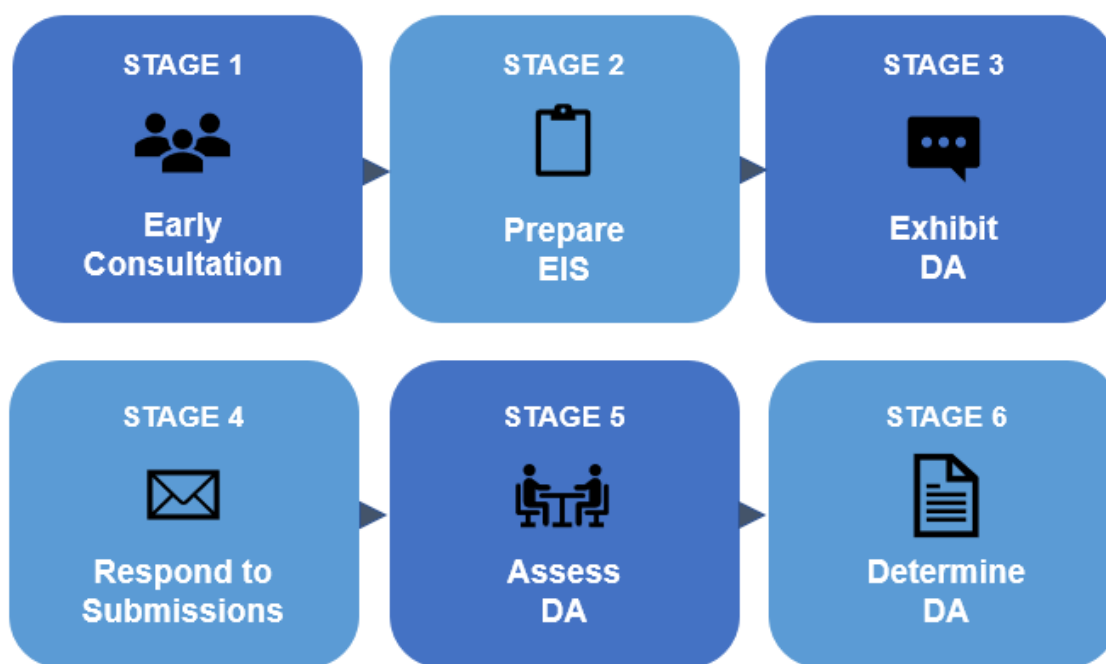


Figure 2 NSW State Significant Development Assessment process

Requirements for stakeholder engagement and community participation are prescribed in the Secretary's Environmental Assessment Requirements (SEARs), issued by the NSW Department of Housing, Planning and Infrastructure (DPHI). SEARs are issued following submission and consideration of the Project's Scoping Report.

Typically, SEARs require consultation with stakeholders (local councils, utilities and infrastructure services), Traditional Owners and Local Aboriginal Land Councils (LALC), adjoining and potentially impacted landowners and the wider community.

Community and stakeholders who may be impacted or have an interest in the Project should have opportunities to provide feedback about the Project, its potential impacts and proposed mitigation measures or safeguards.

DPHI's *Undertaking Engagement Guidelines for State Significant Projects* outline DPHI's expectations for engagement across the approvals process. These are that proponents should facilitate effective engagement by:

- Engaging as early as possible
- Providing clear and concise information about the Project and its impacts
- Delivering engagement activities that are accessible and inclusive to encourage participation
- Reporting back to community and stakeholders on what was heard, what has or has not been changed and why.

Engagement should be proportionate to the scale and likely impacts of the Project and provide a suitable geographic reach and number and range of activities, for each stage of engagement.

1.6. Project timeline

Table 2 Project indicative timeline

Timing	Phase
May-June 2025	Preparation of the Scoping Report
August 2025	Submit Scoping Report and request SEARS
Late 2025	Prepare EIS and completion of technical assessments, and submit to DPHI
Early 2026	EIS Public Exhibition Prepare and lodge Submissions Report
2026	Project determination
2027	Construction (if approved)
From 2027	Earliest BESS is operational (if approved)

2. Communications and engagement approach

Ausgrid's Engagement Principles, which will be applied to all engagement for this Project, have been developed to align closely with:

- Ausgrid's Community Engagement Handbook
- Ausgrid's Environmental Handbook NS174c
- Ausgrid's Engagement Framework 2024 – 2029 Regulatory Proposal
- DPHI's Community Participation Plan
- International Association for Public Participation (IAP2).

Our approach will be tailored to meet the needs and expectations of each community and stakeholder group, ensuring all individuals are treated with the same high level of respect. In addition to these principles, engagement should be risk-based and proportionate.

To ensure best practice, the CSEP has been developed in accordance with the NSW Premier's Department Regional Communities Consultation Guide (April 2025). This includes prioritising inclusive community engagement, incorporating impact assessments, and ensuring culturally appropriate engagement with First Nations peoples. These efforts are supported through transparent information sharing, active listening, and the responsive management of community concerns.

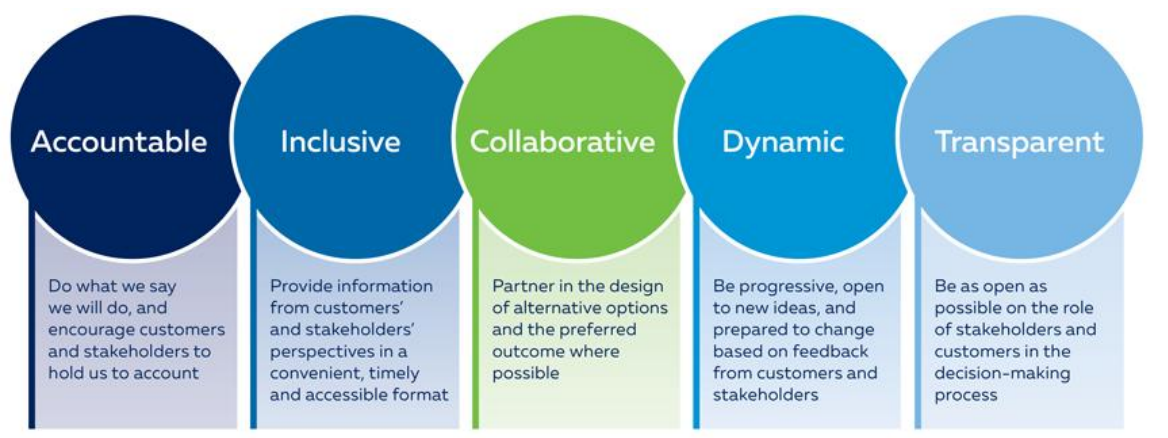


Figure 3: Ausgrid's Engagement Principles

2.1. Objectives

The CSEP's overarching objectives are to:

- Build awareness and understanding of the Project and its benefits alongside broader business commitments with key stakeholders
- Communicate Project scope, timing and potential impacts clearly to potentially affected stakeholders
- Facilitate a robust engagement process to meet requirements for planning approval
- Mitigate reputational risk, through timely, clear and transparent communications and engagement.

2.2. IAP2 Spectrum

Our engagement approach aligns with the International Association of Public Participation (IAP2) spectrum.

This established method of engagement helps to identify and define the public's role in any consultation processes. It also helps proponents:

- Tailor engagement strategies to the specific needs, circumstances and stakeholders
- Promote inclusivity and responsiveness
- Encourage transparency and accountability by clearly outlining the level of involvement stakeholders can expect.

For the proposed Berkeley Vale BESS, engagement objectives align with **inform**, **consult** and **involve**.

Table 3 IAP2 spectrum as applied to Berkeley Vale BESS

Inform	Consult	Involve	Collaborate	Empower
Provide balanced and objective information to assist understanding of the problem, opportunities and solutions.	Obtain feedback on analysis, alternatives and decisions.	Work directly with stakeholders to ensure their aspirations are understood and considered.	Partner with stakeholders in each aspect of the decision including development of alternatives and identification of the preferred solution.	Place final decision-making in the hands of the stakeholder.
Our commitment for Berkeley Vale BESS				
Community and stakeholders	Community and stakeholders	Select stakeholders	Select stakeholders	Project team and government decision-makers
Accessible and inclusive information about the Project including: • Scope • Benefits • Progress • Non-negotiable elements, clearly explaining why these elements are set • Project decision making process.	Seek feedback to inform negotiable aspects of the Project, including during the SSDA process. Provide updates about how feedback has been considered in decision making and Project development.	Testing ideas and options, to understand aspirations, values, concerns and issues and ensure these are considered.	Work together to develop solutions or alternatives for relevant aspects of the Project.	Decision-making such as SSDA.

2.3. Negotiables and non-negotiables

The scope of communication and engagement activities for this Project clearly outlines what the engagement process will focus on, what Ausgrid is seeking input on, and how feedback will be considered in the decision-making process.

To inform the consultation with community and stakeholders, the following table outlines the items that can and can't be influenced (shaped or changed) throughout engagement:

- **Negotiables:** Negotiable items can be influenced in response to feedback.

- Non-negotiables: Non-negotiable items cannot be influenced in response to feedback.

Table 4 Berkeley Vale BESS negotiables and non-negotiables

Negotiables	Non-negotiables
• Safeguards to mitigate environmental and community impacts, as required, including: ○ Noise treatments ○ Traffic, access and parking mitigation strategies ○ Tree planting, or re-vegetation initiatives in the local area	• BESS capacity, layout or configuration within site or technical design aspects • Site suitability assessment • Planning pathways • BESS operations and maintenance activities and parameters.

3. Stakeholders

3.1. Local community and neighbours

The Project is located within the Berkeley Vale SAL (Suburbs and Localities area for ABS Census data). This has been used to provide a community demographic profile. The Central Coast LGA is profiled, for comparison, and in recognition there is a wider area of community interest for the project.

Broadly, the Berkeley Vale community is:

- Made up of young families and middle-aged residents, with a median age of 36 years.
- Home to a slightly higher Aboriginal and Torres Strait Islander population (5.6% in Berkeley Vale vs. 4.9% in the Central Coast).
- Predominantly Australian-born (84.1%), with strong English language proficiency (91.9%).
- Mostly homeowners, with 30.1% owning outright and 47% paying off a mortgage. A further 21.2% rent privately – higher than the Central Coast average of 27.5%.
- Of roughly average education levels, with 39.3% having completed tertiary studies or holding a Certificate III or IV, and 31.8% having completed Year 10 to 12 as their highest level of education.
- Workforce force participation (56.4%), with hospitals being the largest local industry.

3.2. Community demographic profile

		Berkeley Vale (SAL 10304)	Central Coast LGA
Total population		8,951	346,596
Median age (years)		36	43
Aboriginal and Torres Strait Islander people		5.6%	4.9%
Country of birth	Australia	84.1	79%
	Overseas	15.9%	21%
Languages other than English spoken at home (Top five)		- Spanish (0.6%) - Italian (0.3%) - German (0.2%) - Tagalog (0.2%) - Punjabi (0.2%)	- Mandarin (0.6%) - Spanish (0.5%) - Italian (0.3%) - Tagalog (0.3%) - Cantonese (0.3%)
English proficiency (speaks English only, well or very well)		91.9%	87.7%
Median household income (weekly)		\$1,791	\$1,507
Housing tenure	Owned outright	30.1%	34.5%
	Owned with mortgage	47%	34%
	Private renting	21.2%	27.5%
Highest education level attained	Years 10 to Year 12	31.8%	31%
	Bachelor's degree and above	14.2%	17.9%
	Certificate III and IV	25.4%	21%
Employment status	Full time	50.7%	50.1%

	Part time	32.2%	33.4%
	Unemployment rate	3.9%	4.7%
	Workforce participation rate	55.5%	55.7%
Employment by industry (Top three)	- Hospitals (except Psychiatric Hospitals) (4.4%) - Aged Care Residential Services (3.5%) - Other Social Assistance Services (3.3%)	- Hospitals (except Psychiatric Hospitals) (5%) - Other Social Assistance Services (3.4%) - Aged Care Residential Services (3.2%)	

ABS Census 2021, Census of Population and Housing 2021

3.3. Considerations for community engagement

Based on the community profile, communications material should be:

- Accessible and easy to understand, using plain English and visuals, where available, to communicate complex or technical content
- Use a multimedia approach – using a digital library while also making efforts to provide hard copy materials in key community venues and locations, such as libraries, town centres or community halls.

Engagement with near neighbours, or those residents, property and business owners living within proximity of the Berkeley Vale substation, will also fall in the 'involve' and 'consult' section of the IAP2 Spectrum of Public Participation. These community stakeholders may be impacted by construction activities such as traffic, noise and amenity.

The broader community around the site may take a keen interest in the Project due to general interest in growing renewable projects, and Ausgrid will work closely with community representatives, key interest groups, councils, local MPs and other key stakeholders.

3.4. Distribution area

Figure 3 below shows the community newsletter distribution area. This area captures nearby residential and business properties within Berkeley Vale in close proximity to the Project site.

This area has been used to identify sensitive receivers and the surrounding community. The closest residential properties are around 300m to the south-east of the Project site and the closest businesses are around 20-50m (adjoining) east of the Project site.



Figure 4 below shows the community newsletter distribution area

3.5. Stakeholder identification

In DPHI's *Undertaking Engagement Guidelines for State Significant Projects*, stakeholders are defined as individuals, groups or organisations who are affected by, have an interest in, or have the potential to influence the outcome of a Project.

For the purposes of this CSEP, stakeholders have been categorised by:

1. Close neighbours (within 200m)
2. Surrounding community (within 1.5km)
3. First Nations
4. Elected officials
5. Agency stakeholders

Table 5 Engagement aims and potential interests, by stakeholder category

Stakeholder	Engagement aim	Influence / interest	Potential interests or concerns
Close neighbours (within 200m)			
Near business neighbours (adjacent) - Bretts Truck Parts & All Filters (17 Craftsman Ave) - Heidelberg Materials – Berkeley Vale Concrete (12 Apprentice Drive) - Complete Car Wash Supplies North Coast (7/15 Apprentice Drive) - Onshore Fitness (15 Apprentice Drive,) - Capricorn Soap Shop (6/17 Craftsman Avenue)	To inform Scoping Report - Upfront engagement to provide accurate information about the proposal and potential impacts - Manage concerns and initial questions To inform EIS - Provide an update on the proposal and potential impacts - Inform about technical studies, including relevant outcomes, implication to stakeholder and next steps	- Medium interest - Medium influence	- Construction impacts (traffic, noise, vibration) - Operational impacts (noise)

Stakeholder	Engagement aim	Influence / interest	Potential interests or concerns
	- Understand concerns and issues and mitigate, where possible Throughout construction and operation - Regular updates at each project milestones - Proactive information sharing - Ongoing enquiry management and complaints handling		
Surrounding community (within 1.5km)			
Residential (not directly affected) - Torrellia Way - Ashwood Close - Bottlebrush Drive - Butternut Avenue - Nightshade Drive - Sugar Pine Avenue - Candlebark Avenue - Scribbly Gum Street - Berkeley Road - Sophia Jane Street - Sovereign Crescent Industrial/ commercial Sanitarium Drive - Sanitarium Health Food Company (1 Sanitarium Drive)	To inform Scoping - Upfront engagement to provide accurate information about the proposal and potential impacts - Manage concerns and initial questions To inform EIS - Provide an update on the proposal and potential impacts - Inform about technical studies, including relevant outcomes, implication to stakeholder and next steps - Understand concerns and issues and mitigate, where possible	- Medium interest - Low influence	- Visual amenity - Noise - Traffic impacts

Stakeholder	Engagement aim	Influence / interest	Potential interests or concerns
Craftsman Avenue • EBH Environmental Group (60 Donaldson Street, 13 Craftsman Avenue) • ALL Food Engineering PTY Ltd (2/15 Craftsman Avenue) • Central Coast Waste Transfer Station (13 Craftsman Avenue) • ECP Studios (6/4 Craftsman Ave) • Nature's Extract (8/11 Craftsman Avenue) • Lewis Boats (7 Craftsman Avenue) • Aramex Central Coast (1/3 Craftsman Avenue) Apprentice Drive • Mumma's Burgers and Takeaway (7 Apprentice Drive) • Coastal Laser Cutting and Engraving (6/7 Apprentice Drive, Berkeley Vale) • Gassed Automotive (4/9 Apprentice Drive)			

Stakeholder	Engagement aim	Influence / interest	Potential interests or concerns
- Marineline Boat Upholstery (6/9 Apprentice Drive) - Skip Bin Hire Wyong (6/5 Apprentice Drive) - Berkeley Vale Auto Centre (1/5 Apprentice Drive) - Tuggerah Lakes Packaging PTY Ltd, (6/3 Apprentice Drive) - Warren Ridge Auto Centre (1/3 Apprentice Drive) - D&C Motorcycles (7/3 Apprentice Drive) - Supa Cheap Tyres (1 Apprentice Drive) Blade Close - BP truck stop / service station (1 Blade Close) - Team Global Express (7 Blade Close) - Stella Engineering (6 Blade Close) - Followmont Transport (5 Blade Close) - Lawdex Displays - Pinboards & Whiteboards (4 Blade Close)			

Stakeholder	Engagement aim	Influence / interest	Potential interests or concerns
- Industree Group Pty Lt (3 Blade Close) - Singing Bowl (2 Blade Close) - National Storage Berkeley Vale (A23/2 Blade Close) - Wildbean café (1 Blade Close) Hereford Street - Caddy Storage, Tuggerah NSW (4 Hereford Street) - Star Scientific Unlimited (4 Hereford Street) - Community Transport Central Coast Limited (Unit 1/6 Hereford Street)			
Educational institutions - Chittaway Bay Public School - Berkeley Vale High School - Glenning Valley Child Care Centre - Tuggerah Public School - Oz Education Childcare and Preschool	For Scoping Report and EIS - To proactively identify any potential impacts - To identify and manage any community concern early in the process - To provide an opportunity to build social license - Build the Ausgrid brand as an employer of choice	- Medium interest - Low influence	

Stakeholder	Engagement aim	Influence / interest	Potential interests or concerns
Community and environmental groups Berkeley Vale Tidy Towns	Interested in what Ausgrid is doing and how it will impact their suburb	- Low interest - Low influence	
Places of worship - The Lakes Church - Tuggerah	Interested in what Ausgrid is doing and how it will impact their suburb	- Low interest - Low influence	
Recreational facilities Ashwood Close Reserve (Central Coast Council)	Interested in what Ausgrid is doing and how it will impact the suburb/ use of the reserve	- Low interest - Low influence	
Road users - Drivers - Cyclists - Pedestrians	- To proactively identify any potential impacts. - Manage impacts through the traffic management plan	- Medium interest - Medium influence	Traffic impacts
Health care - Berkeley Vale Private Hospital - Berkeley Vale Care Community	- To proactively identify any potential impacts. - To identify and manage any community concern early in the process	- Low interest - Low influence	- Potential impacts of construction or operation on properties, customers or visitors - Opportunities to participate in community benefits
First Nations stakeholders			
Traditional Owners of the land where the project is taking place	To actively show respect and acknowledge their role as custodians of the land we work on	- Medium interest - High influence	- Visual amenity - Noise - Traffic impacts

Stakeholder	Engagement aim	Influence / interest	Potential interests or concerns
	- To proactively identify any potential impacts. - To identify and manage any issues of concern early in the process		
Darkinjung Local Aboriginal Land Council (LALC)	- To actively show respect and acknowledge their role as custodians of the land we work on - To proactively identify any potential impacts - To identify and manage any issues of concern early in the process	- Medium interest - High influence	- Visual amenity - Noise - Traffic impacts
Elected officials			
Local Government Central Coast Council - Mr David Farmer (CEO) - Mr Jamie Loader (Director Planning) - Councillors (The Entrance Ward) - Cr Margot Castles (Labor) - Cr Rachel Stanton (Liberal) - Cr Corinne Lamont (Independent)	Throughout project lifecycle - Proactively manage Ausgrid's relationship and reputation in the region - Coordinate engagement across Ausgrid work - Proactive manage risk of opposition to the Project - Inform about scope, potential impacts and next steps - Understand concerns and issues and mitigate, where possible - Provide updates at each project milestone	- High interest - High influence	- Access to and from the site (use of Enterprise Drive) - Proactively manage Ausgrid's relationship and reputation in the region - Coordinate engagement across Ausgrid work - Proactive manage risk of opposition to project - Inform about project scope, potential impacts and next steps - Understand concerns and issues and mitigate, where possible

Stakeholder	Engagement aim	Influence / interest	Potential interests or concerns
Local State MPs David Mehan (State Member for The Entrance)		- High interest - High influence	- Community concern - Alignment with state energy commitments
Federal MPs Emma McBride (Federal Member for Division of Dobell)		- Medium interest - High influence	- Community concern - Alignment with federal energy commitments
Agency stakeholders			
Other utilities - Jemena - Sydney Water - Hunter Water - NBN - Telstra	To inform EIS - To proactively identify any potential impacts on their operation or assets - To provide the opportunity to coordinate work delivery - Inform about scope, potential impacts and next steps - Discuss implication on agencies services - Understand concerns and issues and mitigate, where possible - Collaborate to address risk mitigation and safeguards in local context and at Program level - Build on working relationships built throughout Tranche 1 (if applicable) to inform Tranche 2 projects.	- Medium Interest - High influence	- Potential service disruption - Location of assets - Potential impacts of construction or operation on properties, customers or visitors - Impacts to customer bills - Opportunities to participate in community benefits
Transport stakeholders - Transport for NSW (TfNSW) - Private bus companies - Active transport groups		- Medium Interest - High influence	- Potential traffic impacts - Potential impacts of construction or operation on properties, customers or visitors
Emergency Services Fire and Rescue NSW Berkeley Fire Station (8 Craftsman Avenue)		- Medium interest - High influence	- Fire risk - Potential traffic impacts

For Official Use Only



Stakeholder	Engagement aim	Influence / interest	Potential interests or concerns
- Ambulance - Rural Fire Services - NSW Police Force			

For Official use only

3.6. First Nations engagement

Ausgrid is aware of its responsibility as an infrastructure planner to involve First Nations communities in our project planning and delivery. We will do this by forming ongoing and meaningful relationships with the Indigenous communities whose Country the BESS projects are located on.

Through meaningful stakeholder engagement, Ausgrid will demonstrate purposeful co-creation within our organisation, building on existing relationships held with Local Aboriginal Land Councils (LALC), and establishing new relationships with other community groups.

First Nations engagement for this Project will be guided by:

- Advice and best practice informed by Indigenous Energy Australia (IEA)
- Aboriginal Heritage consultant (in line with Aboriginal Cultural Heritage Assessment Report (ACHAR) requirements)

Table 6 First Nations stakeholders

Stakeholder	Potential Interest	Reason for engaging
Darkinjung LALC	LALCs that cover areas impacted by the BESS projects and will want to ensure the projects achieves outcomes for their communities.	Aboriginal LALCs have the right to be consulted about developments on their traditional lands.
Traditional Owners and Aboriginal Groups	Traditional Owners may want input on how development on their traditional lands is designed and constructed.	Traditional Owners need to be consulted on how they want development on their traditional lands to be designed and constructed.
Regional community groups	Smaller community groups throughout the areas.	Some smaller community groups don't feel represented through LALCs and the larger corporations. Need to ensure we engage with a broad group of First Nations stakeholders.

4. Risks and mitigation

Following completion of the environmental assessments and technical studies (to inform the EIS), this risk and opportunities assessment will be revised.

At the time of writing this CSEP, the risks at this site in Berkeley Vale are largely associated with:

- Potential change of road conditions (particularly during construction)
- Potential impacts during construction (noise, traffic / trucks and vibration) on nearby industrial and commercial neighbours
- Environmental impacts
- Traffic management (during construction), particularly use of Enterprise Drive and Apprentice Drive
- Safety and hazard management (during construction and operation)
- Community concerns about hazards during operation, given BESS are an emerging technology.

As one of the first proposed BESS sites in Berkeley Vale and the Central Coast LGA, there is opportunity to educate community and stakeholders about BESS technology – how it works, the benefits and its role in supporting the clean energy transitions – to address potential scepticism and concern about new technology.

Measures to mitigate identified potential risks include:

- Proactive and tailored engagement with stakeholders to build relationships and keep them informed about the Project
- Timely and clear communications that make technical information accessible for all community and stakeholders
- Being clear about what is negotiable, not negotiable, what is known, unknown and not yet decided as the Project progresses from concept design and planning approvals to detailed design, construction and operation
- Early collaboration with community and stakeholders to develop, and deliver, community benefits.

Berkeley Vale BESS presents an opportunity for Ausgrid to launch a state-of-the-art grid-scale battery technology through a proactive engagement strategy that encourages public participation and transparently incorporates stakeholder feedback. This approach also strengthens Ausgrid's social license as a key player in Australia's clean energy transition.

This section summarises the key risks and opportunities for consideration when communicating and engaging with community and stakeholders.

4.1. Key risks

Table 7 Key risks for community and stakeholder engagement

Risk	Stakeholders affected	Mitigation measure
Engagement fatigue in areas impacted by other energy infrastructure projects	• Local, State and Federal stakeholders • Residential and business communities	• Coordinated approach with other Ausgrid projects for engagement, timing and frequency • Clear communications about scope and purpose of all engagement activities

Risk	Stakeholders affected	Mitigation measure
Confusion between BESS and community batteries, and how customers may benefit or interact	- Residents with PV systems - Ausgrid customers	Clear communication about scope and benefits, and key messages differentiating the projects
Delayed project approvals	- State, Federal and Local elected representatives - EWO - Neighbouring properties - Residential and business community	- Early engagement with elected representatives to clearly explain assessment processes, impacts and mitigation measures - Clear communication about scope and process for assessments - Records of communications and engagement with directly impacts stakeholders
Complaints about proposed sites due to perceived impacts (wildlife and vegetation, noise, vibration, visual, traffic flow etc)	- Neighbouring properties - Residential and business community	- Early communications about impacts/interactions, assessment process and mitigations/safeguards for construction and operations - Accessible technical studies for impacted stakeholders to understand extent of impacts
Opposition to proposed site due to perceived increase in bushfire risk and location surrounded by Vegetation Category 1	- Neighbouring properties - Residential and business community	- Early communications about impacts/interactions, assessment process and mitigations/safeguards for construction and operations - Accessible technical studies for impacted stakeholders to understand extent of impacts
Confusion about Ausgrid BESS and other BESS projects in areas	Residential and business community	- Clear project identity and branding - Clear and consistent communications about project scope, location and timing
Changes in timing, plans and impacts results in frustration from stakeholders	- Local, State and Federal stakeholders - Agency stakeholders - Residential and business communities	- Internal information sharing protocols in place to facilitate regular updates - Communications across teams encouraged by leadership - Scheduled regular workshops and other communications to update stakeholders

1.1. Key opportunities

Table 8 Key opportunities for community and stakeholder engagement

Opportunity	Potential benefits	Recommended actions
Launch of BESS technology and Ausgrid's combined efforts in enabling renewables transition (particularly with	Generate social license	- Early engagement that builds understanding and trust - Seeking feedback, incorporate feedback, showcase how feedback was incorporated

Ausgrid's involvement in the HCCREZ)		• Permanent site signage promoting projects benefits
Community education about BESS technology and its benefits	• Build awareness and interest in new technology • Test community education content for more complex sites	• Community education campaign to explain how technology works and benefits, tailored for lay audience and potentially schools
Build meaningful relationships	• Build long term relationships with neighbours, First Nations community and stakeholders	• Early engagement that builds understanding and trust • Consider feedback (where possible) to understand drivers and community needs to create shared benefits and outcomes

5. Key Messages

5.1. Strategic narrative

- Ausgrid is planning for the energy network of the future, now.
- As we switch to more renewable sources, like solar and wind, we need energy storage. In fact, NSW needs six times more energy storage before 2030.
- We're proposing large energy storage, Battery Energy Storage Systems (BESS), connected to the distribution network, to improve the reliability, stability and affordability of the electricity network.
- By connecting BESS to our existing substations, we are reducing the impact on our communities and the environment and decreasing the need to build more large transmission and distribution lines, which helps reduce costs and makes electricity more affordable.
- Ausgrid is committed to investing in new technologies to make the network more sustainable, reliable and affordable. We also need to make sure the network is ready for customers' future needs.

5.2. Why grid-scale BESS

- A Battery Energy Storage System (BESS) is a group of large rechargeable batteries, connected to form one very large battery. BESS collect energy, store it when there is a lot and then release it when there is high demand for electricity. These large batteries are critical to ensuring the reliability of electricity supply for households and businesses.
- By connecting BESS to our existing substations, we are reducing the impact on our communities and the environment and decreasing the need to build more large transmission and distribution lines, which helps reduce costs and makes electricity more affordable.
- BESS enable more renewable energy to come online by storing energy when there is more than we need and releasing it when it's required. This keeps the power supply steady, even when the sun isn't shining or the wind isn't blowing, providing a more resilient and reliable electricity network.
- BESS connected to Ausgrid's current network better utilises existing infrastructure, reducing the need for additional infrastructure investment making the cost of electricity cheaper over time.
- BESS enable more renewable energy like wind and solar to connect to the energy network. By connecting to our existing substations, it avoids the need for new transmission lines, reducing the environmental and community impacts of large infrastructure projects.
- Distribution-connected grid-scale storage can deliver improved network reliability and stability, helping defer more expensive network investment. Co-locating grid-scale storage next to substations also has less environmental and community impact than new transmission lines.
- There is a clear opportunity for the distribution network to leverage existing capacity and do more of the heavy lifting in the energy transition.
- With substations across the network, internal expertise in the design and planning of electricity connections and external partnerships in place, we are strongly positioned to facilitate the planning and design for BESS and accelerate their delivery.

5.3. Project description

- Ausgrid is proposing a Battery Energy Storage Systems (BESS) on its own land near existing substations. We are preparing to take the Berkeley Vale BESS site through the planning and approval process, providing opportunity for our customers and local communities to better understand this technology and the Project.
- The proposed Berkeley Vale BESS can store up to 150MW / 300MWh – that's enough electricity to power up to 20,250 Ausgrid customers per day.
- We're planning for BESS to be located next to Ausgrid-owned substations, minimising impacts to private property by using existing transmission and energy infrastructure, where possible.
- We're considering a range of factors to select suitable sites for BESS. These include available space within Ausgrid-owned property, connections to the network, existing background noise levels and cumulative impacts on noise and vibrations.
- This project is in the planning phase, with ongoing studies to understand the potential environmental and community impacts. Findings will be shared with local community and stakeholders through a SSDA process.
- Construction is expected to start in 2027, with the Berkeley Vale BESS expected to be operating from 2028, at earliest. Ausgrid is evaluating the environmental impacts, including noise, vibration, traffic, and visual amenity, and how we will mitigate these through an EIS process, seeking feedback from stakeholders and the community.

5.4. The planning process

The Berkeley Vale BESS is being proposed by Ausgrid via the State Significant Development Application (SSDA) pathway. The proposal will be assessed by the NSW Department of Planning, Housing, and Infrastructure (DPHI).

- **Early engagement** – We're starting early conversations with the community and stakeholders to help shape our initial studies. These early assessments help us understand what might be possible on the site.
- **(We are here) Lodging the Scoping Report** – After early engagement, we will submit a Scoping Report to the DPHI. The Scoping Report includes what we've learned so far and asks for the Secretary's Environmental Assessment Requirements (SEARs). The SEARs guide what needs to be covered in the Environmental Impact Statement (EIS), and ensure community, government agencies and service providers can provide feedback.
- **Further engagement before the EIS** – Before we submit the EIS, we'll come back to the community and stakeholders to share what the technical studies found and what we're proposing for the site. This is another chance for the community to provide feedback.
- **Lodging the EIS** – After this second round of engagement, we'll submit the EIS as part of our formal development application.
- **Post lodgement** – Plans will go on public exhibition. At this time, formal submissions can be made to DPHI.
- **Determination** – If approved, we will provide regular updates at project milestones, including construction and operation.

6. Communication tools and protocols

Table 10 outlines the communications tools and maps their use against the IAP2 Spectrum of Public Participation. This is intended to provide community and stakeholders with clarity about the level of influence of their feedback collected via each method.

Table 7 Communications tools and protocols

Engagement method	Audience	Purpose	Participation				
			Inform	Consult	Involve	Collaborate	Empower
Briefings (formal and informal)	All stakeholders	Presentations and discussions with community and stakeholder groups to gather feedback, ideas or options. Formal and informal.	✓	✓			
Door Knocking / letterbox drops	Neighbouring Landholders and residents	Notify neighbouring landholders to raise Project awareness, notify and have their questions answered.	✓				
Interactive online tools	All stakeholders	Online platforms that allow community participation including feedback forms, webinars, public meetings, surveys, submissions, workshops.	✓	✓			
Pop-up stalls	All stakeholders (targeting general public)	Pop-up stalls (staffed) at a physical location in community displaying information, plans, documents and surveys.	✓	✓			
Public Displays	All stakeholders (targeting general public)	Staffed or unstaffed displays of information, plans or documents made publicly available.	✓	✓			
Surveys	All stakeholders	A series of questions suitable for internal and external stakeholders to understand preferences, seek feedback and provide input.		✓			
Workshops	All stakeholders	Structured method suitable for small groups of internal and external stakeholders to explore specific, complex issues.	✓	✓	✓		

7. External Communications

7.1. Media

All media will be managed in a manner that is consistent with Ausgrid's existing media policy.

Ausgrid's community engagement specialists work closely with Public Affairs to inform them about upcoming projects and construction issues to ensure media can be used where appropriate to complement other communication activities. All employees will consider the nature of the work and advise Public Affairs if they expect there to be significant community issues or if any issues arise during works. Media releases will be prepared to announce Project milestones or significant community updates and issued to relevant local, regional, national and industry media as required.

7.2. Social media and website

Ausgrid will use social media and a dedicated webpage to regularly communicate with stakeholders and will include updates and significant Project milestones FAQs and fact sheets will be developed to support social media engagement and website updates to quickly respond to enquiries.

Ausgrid's social and website content is coordinated by Ausgrid's Brand and Reputation team.

7.3. Enquiries and complaints management

Enquiries and complaints provide important feedback to improve project processes, mitigation measures and avoid or minimise further concerns. Ausgrid will put in place processes to ensure that all enquiries and complaints are responded to, mitigated, or completed as soon as possible. These requirements will apply 24 hours a day. Within 24 hours of being notified of a complaint by the customer, either Ausgrid or its contractor will attend to the complaint and propose an action plan to rectify the problem, obtain the complainant's agreement to the proposed actions and the timing of those actions, notify the project manager formally of the agreed method for resolving the complaint, and complete and update Ausgrid's complaint register database. The process is detailed in Figure 5. This process will be made available to the community and stakeholders.

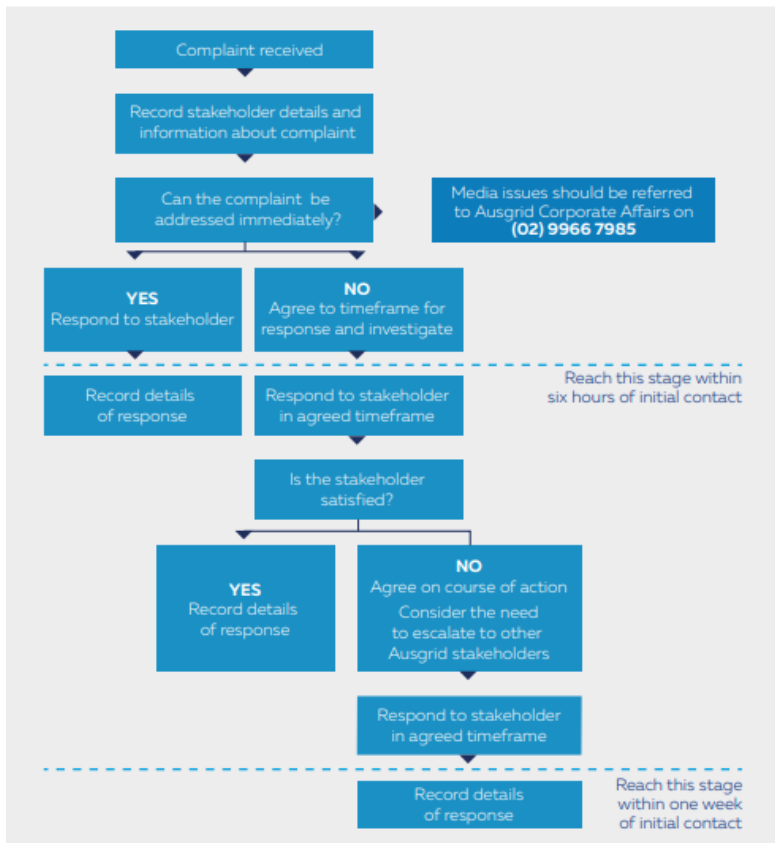


Figure 5 Complaints management approach

8. Reporting and measurement

The Stakeholder Engagement Manager and Community and Stakeholder Engagement Leads will monitor the implementation of this Plan CSEP to ensure the approach is meeting both the engagement and project objectives. The CSEP will be reviewed on a six-month basis, and prior to the start of a new stage of communications and engagement and updated as required.

The outcomes engagement will be communicated back to the community and stakeholders to demonstrate how their feedback was considered. Any feedback or issues identified during the monitoring process will lead to adjustments in processes and communication channels, as needed. Monitored performance indicators will include the responsiveness and effectiveness of communication with stakeholders and the community, as well as information flow.

Ausgrid will prepare communications and stakeholder engagement outcomes reports at key milestones to:

- Provide and track feedback from stakeholders to the project team
- Meet legislative requirements
- Track trending issues
- Look for opportunities to further reduce the impact on the community and key stakeholders
- Improve the quality of communications and engagement.

The complaints register will include a summary of total number of complaints received in the period and overarching statistics including:

- Date and time of the complaint
- Method by which the complaint was made
- Nature of the complaint
- If the complaint was avoidable or unavoidable
- The name, address and contact details of the complainant
- How long the complaint took to close.

Ausgrid will use a stakeholder database to record and report stakeholder interactions, including the management of complaints and inquiries. Reports from this platform will support formal reporting, performance monitoring against the objectives of this CSEP, and the overall project evaluation.

9. Implementation Plan – planning and approvals phase

Timing	Activity	Engagement methods and tools	Purpose	Target Audience
Early consultations				
May 2025	Issue stakeholder letters and host briefings	- Individual stakeholder letters - Site map and/or visualisation - Commence Project briefings (in-person or online) - Phone calls	- Inform about project scope and timing, potential impacts and upcoming further engagement - Provide understanding of scope of engagement, to assist with managing community interest or enquiries - Establish relationship	- Local council, elected officials and LALC - Non-government organisations, utilities and government agencies - Neighbouring and nearby businesses and properties
26 May 2025	Webpage	- Website, establish dedicated phone number and/or email - FAQs - Newsletter and stylised maps	- Inform about project and potential impacts - Promote upcoming opportunities for community engagement - Promote sign up to EDM for project updates	All stakeholders
26 May 2025	Letterbox drop	Issue near neighbour letter and community newsletter	Introduce project and offer in-person or online briefing	Neighbouring properties and nearby businesses
14 June 2025	Pop up information session and/or presenting to special interest groups (if interested)	- Information boards - Slide pack - Fact sheet (project specific) - Fact sheet (specific topics)	Inform stakeholders and community about project scope, benefits and potential impacts, project timeline, upcoming milestones and opportunities for feedback	Local residential and business properties
Early consultation – EIS preparation <i>Note: the consultation approach for the EIS will be revised based on level of community interest following Scoping engagement.</i>				

Timing	Activity	Engagement methods and tools	Purpose	Target Audience
Late 2025	Reconnect with stakeholders – Issue stakeholder letters and host briefings	- Letter and email - Meeting (in-person or virtual) - Phone call	- Provide update about project, answer previous questions - Outline EIS process and potential impacts - Understand concerns, risks and issues, and potential mitigations	- Local council, elected officials and LALC - Non-government organisations, utilities and government agencies - Neighbouring and nearby businesses and properties
Late 2025	Webpage updates	- Website, establish dedicated phone number and/or email - Digital advertising and social media	- Inform about project, EIS process and potential impacts (as a result of studies) - Promote upcoming opportunities for community engagement - Promote sign up to EDM for project updates	- Surrounding residential community - Neighbouring businesses
Late 2025	Letterbox drop	Prepare updated community newsletter (for issue via letterbox drop)	- and potential impacts (as a result of studies) - Promote upcoming opportunities for community engagement - Promote sign up to EDM for project updates	- Surrounding residential community - Neighbouring businesses
Late 2025	Pop up community information sessions	- FAQs and factsheets - Information boards - Feedback forms (hard copy and online)	- Inform about project, potential impacts and SSDA pathway - Understand community values and priorities, concerns, risks and issues, and potential mitigations, and capture feedback	- Surrounding residential community - Neighbouring businesses

Timing	Activity	Engagement methods and tools	Purpose	Target Audience
			Explain EIS exhibition and engagement process to encourage participation	
Late 2025	Community newsletter and webpage updates	- Community newsletter - Website and factsheet - Digital advertising and social media - Letters, emails and phone calls to registered stakeholders	- Thank community and stakeholders for feedback - Provide update to project timeline and next steps for engagement, as needed - Announce EIS submission and provide details for NSW Planning Portal - Overview of key feedback provided and how it has been used to shape the project - Outline next steps (exhibition) and invite feedback, via Planning Portal	- Non-government organisations, utilities and government agencies - Neighbouring and nearby businesses and properties - Surrounding residential community
Post-EIS Exhibition period				
Early 2026	Stakeholder meetings, as required	- Face-to-face meeting - Phone call - Briefing packs	- Provide update on previous issues and questions raised, overview of relevant EIS content - Understand concerns, issues and risks - Encourage to provide formal feedback via Planning Portal	All stakeholders that have had meetings to date
Early 2026	Webpage and community update	- Website update - Newsletter	Summaries engagement activities, key themes and outcomes	- Surrounding community - Neighbouring businesses

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Timing	Activity	Engagement methods and tools	Purpose	Target Audience
		Media release	Outline how feedback has been considered and next steps	

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Appendix D

Social impact
assessment scoping
worksheet

Social Impact Assessment (SIA) Worksheet																		Project name: Berkley Vale BESS										Date: 29 November 2024			
CATEGORIES OF SOCIAL IMPACTS		POTENTIAL IMPACTS ON PEOPLE		PREVIOUS INVESTIGATION OF IMPACT			CUMULATIVE IMPACTS	ELEMENTS OF IMPACTS - Based on preliminary investigation					ASSESSMENT LEVEL FOR EACH IMPACT				PROJECT REFINEMENT	MITIGATION / ENHANCEMENT MEASURES													
what social impact categories could be affected by the project activities	What impacts are likely, and what concerns/aspirations have people expressed about the impact? Summarise how each relevant stakeholder group might experience the impact. NA. Where there are multiple stakeholder groups affected differently by an impact, or more than one impact from the activity, please add an additional row.		Has this impact previously been investigated (on this or other project/s)?	If "yes - this project," briefly describe the previous investigation. If "yes - other project," identify the other project and investigation	Will this impact combine with others from this project (think about when and where), and/or with impacts from other projects (cumulative)?	If yes, identify which other impacts and/or projects	Will the project activity (without mitigation or enhancement) cause a material social impact in terms of its: You can also consider the various magnitudes of these characteristics					Level of assessment for each social impact	What methods and data sources will be used to investigate this impact?			Has the project been refined in response to preliminary impact evaluation or stakeholder feedback?	What mitigation / enhancement measures are being considered?														
	Is the impact expected to be positive or negative	extent i.e. number of people potentially affected?					duration of expected impacts? (i.e. construction vs operational phase)	intensity of expected impacts i.e. scale or degree of change?	sensitivity or vulnerability of people potentially affected?	level of concern/interest of people potentially affected?	Secondary data		Primary Data - Consultation	Primary Data - Research																	
way of life	Potential disruptions to way of life for individuals and the community, caused by temporary disruptions to road users (including pedestrians and cyclists). Increased road traffic may negatively impact tourists perception of the area.	Negative	No	N/A	Yes	Traffic from the following projects: - Mingara Recreation Club - Eileen O'Connor School (if construction periods overlap) -New Warnervale Public School (if construction periods overlap)	No	No	Unknown	No	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Not yet but will be investigated at the EIS stage	Assessment and management of traffic impacts will be provided in the EIS chapter and Transport Impact Assessment Report.														
livelihoods	Potential disruptions to businesses, caused by temporary disruptions to road users (including pedestrians and cyclists). Increase in road traffic may negatively impact the tourism industry in the area, in particular vine yards and wine estates.	Negative	No	N/A	Yes	Traffic from the following projects: - Mingara Recreation Club - Eileen O'Connor School (if construction periods overlap) -New Warnervale Public School (if construction periods overlap)	No	No	Unknown	No	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Not yet but will be investigated at the EIS stage	Assessment and management of traffic impacts will be provided in the EIS chapter and Transport Impact Assessment Report.														
culture	Potential for minor changes to connections to Country for Aboriginal communities, natural values or heritage items, resulting in impacts to cultural elements which are valued by the community	Negative	Yes - this project	Aboriginal due diligence assessment completed by Apex Archaeology in August 2024	No	Not required	No	No	No	Yes	Unknown	Standard assessment of the impact	Required	Targeted consultation	Potentially targeted research	Not yet but will be investigated at the EIS stage	An Aboriginal heritage assessment has been completed and indicated that the Project will not have any impacts on Aboriginal heritage and no further investigation would be required.														
culture	Potential for minor changes to natural values or heritage items, resulting in impacts to cultural elements which are valued by the community	Negative	No	N/A	No	Not required	No	No	Unknown	No	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Not yet but will be investigated at the EIS stage	No further assessment required														
health and wellbeing	Potential temporary health and wellbeing impacts for those who live or use areas within the vicinity of construction activities, such as direct impacts to health associated with dust or ongoing construction noise.	Negative	No	N/A	Yes	Traffic from the following projects: - Clean Energy Precinct Concept - Tomago BESS / Newcastle Power Station - Hunter Valley Hydrogen Hub	No	No	Unknown	No	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Not yet but will be investigated at the EIS stage	Assessment and management of noise and vibration, air quality, visual, etc. will be provided as part of their respective EIS chapters and specific reports. Discussion with affected residents. SIA specific mitigations to be developed as required.														
surroundings	~~Adverse impacts to community members and visitors' sense of place in areas subject to amenity impacts. The site is located in close proximity to tourist attractions such as vineyards and wine farms. Noise and visual impacts may detract from the sense of place and amenity of the area.~~	Negative	No	N/A	No	Not required	No	No	No	No	Unknown	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	Not yet but will be investigated at the EIS stage	Assessment and management of noise and vibration, air quality, visual, etc. will be provided as part of their respective EIS chapters and specific reports. Discussion with affected residents. SIA specific mitigations to be developed as required.														
surroundings	Potential visual impact on the surrounding area from construction activities.	Negative	No	N/A	No	Not required	No	No	No	No	Unknown	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	Not yet but will be investigated at the EIS stage	Assessment and management of visual impacts will be provided as part of the EIS.														
surroundings	Potential impacts on residents, businesses and tourist facilities located close to construction activity due to increased noise and vibration, dust and construction traffic	Negative	No	N/A	No	Not required	No	No	No	No	Unknown	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	Not yet but will be investigated at the EIS stage	Assessment and management of traffic, noise and vibration, air quality, etc. will be provided as part of their respective EIS chapters and specific reports. Discussion with affected residents. SIA specific mitigations to be developed as required.														
livelihoods	Potential benefits to businesses, including benefit from a net gain in passing trade (depending on the business location) during construction owing to the presence of construction workers	Positive	No	N/A	No	Not required	No	No	No	No	Unknown	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	Not yet but will be investigated at the EIS stage	Consultation with business groups to understand local impacts of the development and how they may be enhanced														
livelihoods	Potential benefits for local construction related businesses, such as construction recruitment agencies, construction companies and resource suppliers	Positive	No	N/A	No	Not required	No	No	No	No	Unknown	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	Not yet but will be investigated at the EIS stage	Consultation with business groups to understand local impacts of the development and how they may be enhanced														
livelihoods	Direct and indirect employment opportunities in the area, for example to supply goods, services and materials to the project's construction, which can positively influence the local community's capacity to earn an income in the area	Positive	No	N/A	No	Not required	No	No	No	No	Unknown	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	Not yet but will be investigated at the EIS stage	Consultation with business groups to understand local impacts of the development and how they may be enhanced														
decision-making systems	Community members may express dissatisfaction with their ability to influence the strategic decision making and construction methodology or planning for the project	Negative	No	N/A	No	Not required	No	No	No	No	Unknown	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	Not yet but will be investigated at the EIS stage	Consultation with interested community members as part of project development														
community	Potential for combined and consecutive social impacts on the community with other projects under construction nearby. Specifically noise and vibration, and cumulative traffic impacts are likely to be of concern to residents within the locality.	Negative	No	N/A	Yes	Traffic from the following projects: - Mingara Recreation Club - Eileen O'Connor School (if construction periods overlap) -New Warnervale Public School (if construction periods overlap)	No	No	No	No	Unknown	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	Not yet but will be investigated at the EIS stage	Consideration of cumulative amenity impacts throughout EIS and consideration within SIA in a social context.														
community	Potential noise impacts of BESS impact on the community	Negative	No	N/A	Yes	Noise from the operation of the existing Berkley Vale Zone Substation. Noise from commercial and industrial activities in the noise from within the industrial estate	No	No	Unknown	No	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Not yet but will be investigated at the EIS stage	Assessment and management of noise and vibration will be provided as part the EIS chapters and specific report. Discussion with affected residents. SIA specific mitigations to be developed as required.														
community	Potential visual impacts changing visual amenity of the locality. The closest residential visual receptors are located approximately 300 m south east of the edge of the site. There is existing vegetation between the site and these residences which may provide visual screening. The project may also be visible to vehicles travelling on Enterprise	Negative	No	N/A	No	Not required	No	No	Unknown	No	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Not yet but will be investigated at the EIS stage	Assessment and management of visual impact will be provided as part the EIS chapters and specific report. Discussion with affected residents. SIA specific mitigations to be developed as required.														
health and wellbeing	If community members are affected by amenity impacts (noise or visual) there is a potential health and wellbeing on these community members impact if not avoided or properly managed due to their way of life changing	Negative	No	N/A	No	Not required	No	No	No	No	Unknown	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	Not yet but will be investigated at the EIS stage	Assessment and management of traffic impacts will be provided in the EIS chapter and Traffic and Transport Impact Assessment Report.														

CATEGORIES OF SOCIAL IMPACTS	POTENTIAL IMPACTS ON PEOPLE		PREVIOUS INVESTIGATION OF IMPACT		CUMULATIVE IMPACTS		ELEMENTS OF IMPACTS - Based on preliminary investigation					ASSESSMENT LEVEL FOR EACH IMPACT				PROJECT REFINEMENT	MITIGATION / ENHANCEMENT MEASURES
what social impact categories could be affected by the project activities	What impacts are likely, and what concerns/aspirations have people expressed about the impact? Summarise how each relevant stakeholder group might experience the impact. NB. Where there are multiple stakeholder groups affected differently by an impact, or more than one impact from the activity, please add an additional row.		Has this impact previously been investigated (on this or other project/s)?	If "yes - this project," briefly describe the previous investigation. If "yes - other project," identify the other project and investigation	Will this impact combine with others from this project (think about when and where), and/or with impacts from other projects (cumulative)?	If yes, identify which other impacts and/or projects	Will the project activity (without mitigation or enhancement) cause a material social impact in terms of its: You can also consider the various magnitudes of these characteristics					Level of assessment for each social impact	What methods and data sources will be used to investigate this impact?			Has the project been refined in response to preliminary impact evaluation or stakeholder feedback?	What mitigation / enhancement measures are being considered?
		Is the impact expected to be positive or negative											Secondary data	Primary Data - Consultation	Primary Data - Research		
health and wellbeing	Potential concern regarding risk to the community in the case of hazardous accidents within the Site	Negative	No	N/A	No	Not required	No	No	Unknown	No	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Not yet but will be investigated at the EIS stage	Assessment and management of noise and vibration, air quality, visual etc. will be provided as part of their respective EIS chapters and specific reports. Discussion with affected residents. SIA specific mitigations to be developed as required.
surroundings	Changes to local noise environment as a result of the presence of the operational BESS	Negative	No	N/A	No	Not required	No	No	Unknown	No	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Not yet but will be investigated at the EIS stage	Assessment and management of noise and vibration will be provided as part of the EIS chapter and Noise and Vibration Impact Assessment report. Discussion with affected residents. SIA specific mitigations to be developed as required.
livelihoods	Potential benefits for businesses and community member's livelihoods, such as benefits to businesses associated with operation and maintenance, including landscaping and the follow economic benefit of maintenance workers visiting local businesses	Positive	No	N/A	No	Not required	No	No	No	No	Unknown	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	Not yet but will be investigated at the EIS stage	Consultation with business groups to understand local impacts of the development and how they may be enhanced
community	Potential for cumulative visual, traffic or noise impacts to local community of this project alongside others in the area, particularly new developments in the locality	Negative	No	N/A	Yes	Traffic from the following projects: - Mingara Recreation Club - Eileen O'Connor School (if construction periods overlap) -New Warnervale Public School (if construction periods overlap)	No	No	No	No	Unknown	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	Not yet but will be investigated at the EIS stage	Consideration of cumulative amenity impacts throughout EIS and consideration within SIA in a social context.
INSERT NEW ROWS ABOVE THIS ROW																	