



Flora and Fauna Assessment Report

Lot 22 DP 809338 Hume Highway, Holbrook, NSW 2644

08 March 2024



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Prepared for

ACEnergy Pty Ltd

Prepared by

Habitat Environmental Services Pty Ltd

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1 Introduction

1.1 Background

Habitat Environmental Services Pty Ltd (Habitat) have been engaged by ACenergy Pty Ltd (the proponent) to prepare a Flora and Fauna Assessment Report (FFAR) to support a Development Application (DA) to Greater Hume Shire Council for the proposed construction of a battery energy storage system (BESS) in the north east of Lot 22 DP 809338 Hume Highway, Holbrook, NSW 2644 (refer to **Figure 1**).

The DA will be assessed under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The following terms are used throughout this report:

- Lot 22 DP 809338: the legal name of the lot where the BESS is proposed, approximately 58.41 hectares (ha)
- Study Area: the north east corner of Lot 22 DP 809338, approximately 2.72 ha
- Subject Site (proposed development): BESS and associated infrastructure located within the central west portion of the Study Area (refer to **Figure 2**). The Subject Site is approximately 0.47 ha
- Locality: Land within a five kilometre (km) radius of the Study Area.

1.2 Report Objectives

The objectives of this FFAR include:

- Describe the biodiversity values and landscape features within the Study Area
- Identify native vegetation, noting the extent and condition of Plant Community Types (PCTs), and the presence, condition and extent of any Threatened Ecological Communities (TECs)
- Assess the relevance and value of the Study Area for threatened species and ecological communities (and their habitats) listed under the NSW *Biodiversity Conservation Act 2016* (BC Act)
- Assess the potential impacts of the proposed development on threatened species and ecological communities, pursuant to Section 7.3 of the BC Act (5-part test)
- Discuss the occurrence and relevance of matters of national environmental significance (MNES) listed under the Commonwealth *Environment Planning and Biodiversity Conservation Act 1999* (EPBC Act)
- Discuss the potential for impacts to biodiversity values caused by the construction of the unauthorised structures within the Study Area and provide recommendations to mitigate impacts.

1.3 Site Description

The Study Area is located approximately 4.5 km south west of the township of Holbrook on the Hume Highway, between Gundagai and Albury, within the Greater Hume Shire local government area (LGA) (refer to **Figure 1**). The town of Holbrook is approximately 384 km north-east of the city of Melbourne, in southern region of NSW.

Local land use is mainly rural agriculture, the region around Holbrook is well known for its local produce including the production and export of merino wool, wheat and other grains, lucerne, fat cattle and lamb. The town centre contains an eclectic mix of small businesses and historical landmarks, including a collection of submarine memorabilia and the decommissioned HMAS Otway submarine.

Lot 22 is zoned RU1 – Primary Production under the Greater Hume Council Local Environmental Plan (LEP) 2012. The Study Area is located in the north east of Lot 22 and is bordered by the Hume Highway to the east and Bendemeer Lane to the north (refer to **Figure 2**). Two residences and associated access are located within the central and western portion of Lot 22 and the remaining land is mostly agricultural with patches of woodland vegetation.

The site has a predominantly flat topography and contains several constructed dams of various sizes. All of the dams are distant from the proposed development except for one large dam that is located within the Study Area near the eastern boundary. No natural watercourses occur within or immediately adjacent to the Study Area, however, Sandy Creek (a fourth order stream) is mapped through the central portion of Lot 22 and an unnamed first order stream is mapped within western portion of Lot 22. Both waterways converge just north of Bendemeer Lane.

1.4 Proposed Development

The proposal seeks to construct a BESS and associated infrastructure within the north east corner of Lot 22. Access to the BESS would be achieved via construction of an entranceway and a gate off of Bendemeer Lane. The BESS would be surrounded by security fencing. The indicative site plan is shown on **Figure 2**.

The proposed development has been strategically located to reduce the potential for impacts to native vegetation and biodiversity values within the site. The proposed development has also been located to allow the landowner to continue utilising the surrounding areas of the site for agricultural purposes. The total area of the proposed development is approximately 0.47 ha.

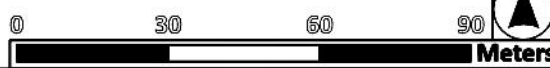


Figure 2 - Study Area and Subject Site (proposed development)



Legend

- | | |
|------------------|----------------------|
| Lot 22 DP 809338 | BESS Security Fence |
| Study Area | Access track |
| Battery | Site access and gate |
| HV Switchgear | Landscaping |
| MVPS | Cadastral Boundary |



2 Legislative Context

2.1 Summary

The assessment was undertaken in accordance and consideration of the following Acts and Policies:

Commonwealth

- *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act)

State

- *Environmental Planning and Assessment Act 1979* (EP&A Act)
- *Biodiversity Conservation Act 2016* (BC Act)
- *Biodiversity Conservation Regulation 2017* (BC Regulation)
- *Biosecurity Act 2015*
- *Water Management Act 2000* (WM Act)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021
 - Chapter 3 Koala Habitat Protection 2020
- State Environmental Planning Policy Amendment (Land Use Zones) 2023

Local

- Greater Hume Council Local Environmental Plan (LEP) 2012
- Greater Hume Development Control Plan (DCP) 2013
- Greater Hume Local Strategic Planning Statement (LSPS) 2020

Information pertaining to the above list is presented in the following subsections.

2.1.1 Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

Under the EPBC Act, an approval is required for actions that are likely to have a significant impact on MNES. An action includes a project, development, undertaking, activity, or series of activities. When a person proposes to take an action, which they believe may need approval under the EPBC Act, they must refer the proposal to the Australian Government Minister for the Environment. The Act identifies the following nine MNES:

- World Heritage properties
- National heritage places
- Wetlands of international importance (Ramsar Convention)
- Listed threatened species and communities
- Migratory species listed under international agreements
- Great Barrier Reef Marine Park
- Commonwealth marine areas
- Nuclear actions
- Water resources in respect to CSG and large coal mines.

The proponent is required to address the EPBC Act as part of their development application to Council. Relevant matters include listed threatened species and communities. An assessment to address relevant matters is summarised in **Section 4.6.2**.

2.1.2 Biodiversity Conservation Act 2016

The NSW BC Act together with the NSW BC Regulation outlines the framework for addressing impacts on biodiversity from development and clearing. The framework details a pathway to avoid, minimise and offset impacts on biodiversity from development through the Biodiversity Offset Scheme (BOS).

Entry into the BOS is triggered by developments, projects and activities that meet criteria or certain thresholds for significant impacts on biodiversity in accordance with Section 6.3 of the BC Act.

Criteria to which the BOS applies include the following:

- Local Development (assessed under Part 4 of the EP&A Act) that triggers the BOS Threshold or is “likely to significantly affect threatened species” (based on a test of significance pursuant to Section 7.3 of the BC Act). The BOS Threshold has two parts, and is triggered by the following:
 - Clearing of vegetation that exceeds an area threshold (based on the minimum lot size), or
 - Impacts are predicted to occur within an area mapped on the NSW Biodiversity Values Map (BV Map) (DPE 2024f).
- State Significant Development (SSD) and State Significant Infrastructure projects (SSI), unless “the Secretary of the Department of Planning, Industry and Environment and the environment agency head determine that the project is not likely to have a significant impact”
- Biodiversity certification proposals
- Clearing of native vegetation in urban areas and areas zoned for environmental conservation that exceeds the BOS threshold and does not require development consent
- Clearing of native vegetation that requires approval by the Native Vegetation Panel under the Local Land Services Act 2013
- Activities assessed and determined under Part 5 of the EP&A Act (generally, proposals by government entities) if proponents choose to ‘opt in’ to the Scheme.

Conclusion

Sandy Creek is mapped on the NSW BV Map; however, the BV mapping is at least 300 m from the western boundary of the Study Area. The minimum lot size for the site is 100 ha and the native vegetation clearing threshold is one ha. The Study Area contains approximately 0.12 ha of native vegetation; however, the proposed development has been designed to avoid direct impact to these areas. A FFAR is appropriate to support the proposed development.

2.1.3 Biosecurity Act 2015

Under the *Biosecurity Act 2015* all plants are regulated with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable.

Under the Act, a biosecurity impact is an adverse effect on the economy, environment, or the community that arises, or has the potential to arise, from a biosecurity matter. This legislation is addressed in **Section 4.7**.

2.1.4 Water Management Act 2000

Controlled activities carried out in, on or under waterfront land are regulated by the WM Act. Waterfront land is defined as the bed of any river, lake or estuary, and the land within 40 meters (m) of the riverbanks, lake shore or estuary mean high water mark.

The proposed development does not encroach into areas within 40 m of a mapped waterway (refer to **Figure 2**). Mapped waterways are at least 300 m from the Study Area boundary and the constructed dam is at least 40 m from the proposed development. Mitigation measures to reduce potential indirect impacts to aquatic and riparian environments during construction and operation are discussed in **Section 6**.

2.1.5 State Environmental Planning Policy (Biodiversity and Conservation) 2021

Chapter 3 Koala Habitat Protection 2020

Chapter 3 of the SEPP contains provisions aimed to encourage the conservation and management of areas of natural vegetation that provide habitat for Koalas to support a permanent free-living population over their present range and reverse the current trend of Koala population decline. Where an approved Koala Plan of Management (KPoM) applies to the land, council's determination of the DA must be consistent with the approved KPoM that applies to the land.

The Koala SEPP 2020 applies to LGAs listed under Schedule 2 and that are zoned rural (RU1, RU2 or RU3). The Study Area is zoned RU1 and therefore has been assessed in accordance with the guidelines to determine whether it contains core Koala habitat as defined by the SEPP. The Koala habitat assessment is provided in **Section 4.4.2**.

2.1.6 Greater Hume Council Local Environmental Plan (LEP) 2012

The Greater Hume Council LEP (2012) aims to make local environmental planning provisions for land in Greater Hume in accordance with the relevant standard environmental planning instrument. The particular aims of the LEP include:

- To protect and promote the use and development of land for arts and cultural activity, including music and other performance arts
- To encourage sustainable economic growth and development in Greater Hume
- To protect and retain productive agricultural land
- To protect, conserve and enhance natural assets
- To protect built and cultural heritage assets
- To provide opportunities for the growth of townships.

2.1.7 Greater Hume Development Control Plan 2013

The aim of the Greater Hume Development Control Plan (DCP) 2013 is to

- To reflect the objectives of the EP&A Act
- To implement the Greater Hume Shire Strategic Land Use Plan 2007-2030 (SLUP)
- To assist in the administration of Greater Hume Shire LEP 2012
- To provide good planning outcomes for development in the Shire.

2.1.8 Greater Hume Local Strategic Planning Statement 2020

The Greater Hume Local Strategic Planning Statement (LSPS) 2020 is the key resource to understand how strategic and statutory plans will be implemented at the local level. The LSPS considers land use trends that are currently occurring within the shire and anticipates others that will likely emerge.

3 Methods

3.1 Desktop Assessment

3.1.1 Database Search

Existing information on flora and fauna within the Study Area and the locality, including relevant threatened biota, was obtained from:

- The BioNet Atlas of NSW Wildlife (DPE 2024a) for previous records of threatened species, populations and ecological communities (as listed under the BC Act) within a five km radius of the Study Area
- The Department of Climate Change, Energy, the Environment and Water (DCCEEW 2024a) Protected Matters Search Tool, for MNES within a five km radius of the Study Area
- NSW BioNet Vegetation Classification database
- Mitchell Landscapes Version V3.1
- Soil Landscapes of Central and Eastern NSW - V2.1
- Threatened Biodiversity Data Collection (TBDC)
- Historical aerial imagery (NearMap 2024)

The results of the database searches were used to compile a list of threatened species, populations, and communities, as listed under the BC Act and EPBC Act that could potentially occur within the Study Area (refer to **Appendix A**). The results were used to inform the assessment of suitable habitat for survey requirements of threatened species and populations within the Study Area.

3.1.2 Regional Vegetation Mapping Projects

The NSW State Vegetation Type Map maps most of the agricultural areas within the Study Area as Not Classified. The following Plant Community Types (PCTs) are mapped as occurring within Lot 22:

- PCT 277 - Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- PCT 278 - Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- PCT 633 - Speargrass - Redleg Grass derived grassland on hills in the Jindera to Holbrook region, southern NSW South Western Slopes Bioregion.

The vegetation assessment determined that this mapping is relatively accurate (refer to **Section 4.3**).

3.2 Field Survey

3.2.1 Photo Points

A total of ten photo points were taken throughout the Study Area on 04 January 2024 to demonstrate the condition of vegetation and assist with delineating and/or clarifying vegetation boundaries. Photo point locations are illustrated on **Figure 3** and corresponding photographs are provided in **Appendix B**.

3.2.2 Random Meander

A general search (random meander) for threatened biota was undertaken on 04 January 2024 throughout the Study Area and within the patches of woodland vegetation adjacent to the site's northern boundary. Survey tracks are displayed on **Figure 3**.

3.2.3 Vegetation Mapping Surveys

The boundaries of vegetation were mapped using a combination of rapid data points (RDP) and walking transects, using the polygons produced through aerial photo interpretation (API) to assist in targeting survey effort. The RDPs involved collecting waypoints using a handheld GPS unit and recording dominant species, structure and condition. Walking transects involved verifying polygons where homogenous in floristic composition and condition, as well as walking vegetation ecotones and using the recorded tracks to define vegetation community boundaries. The RDPs and survey tracks were then overlaid on an aerial photograph and used to delineate and/or clarify vegetation boundaries.

3.2.4 Plant Community Type and Determination

In addition to floristic and structural similarity, one plot transect was undertaken to assess attributes such as floristic composition, structure and functionality and determine vegetation condition (refer to **Figure 3**). The closest equivalent PCT for each vegetation community was determined through a comparison of the floristic descriptions of PCTs listed in the BioNet Vegetation Classification Database (DPE 2024b). The landscape position, soil type and other diagnostic features of the vegetation communities on the site were also compared to the descriptions in the database. Threatened ecological communities (TEC) as defined in NSW and Commonwealth legislation were also identified if present.

3.2.5 Floristic Identification and Nomenclature

Floristic identification and nomenclature were based on Harden (1992, 1993, 2000 and 2002) with subsequent revisions as published on PlantNet (<http://plantnet.rbgsyd.nsw.gov.au>).

3.2.6 Habitat Assessment

The BC Act and EPBC Act database search results were used to inform the habitat assessment undertaken throughout the Study Area on 04 January 2024 (refer to **Appendix A**). The survey aimed to identify hollows and their attributes (height, diameter, position), nests, dead standing stags, Koala feed trees, and to inform habitat suitability for threatened species A boundary (refer to **Figure 3**).

Diurnal opportunistic and incidental observations of fauna species were recorded during field surveys. These included opportunistic observations of fauna activity such as scats, tracks, burrows, or other traces and any important habitat features, such as microbat roosting habitat and terrestrial refugia. Searches for potential habitat for threatened fauna species included but were not limited to:

- Foraging trees for threatened bird and hollow-bearing trees
- Koala feed trees (scratches and scats)
- Potential roosts for microbats
- Vegetated ponds, riparian vegetation and drainage lines for frogs and waterbirds
- Woody debris, leaf litter and bush rock.

3.2.7 Survey Limitations

The survey techniques and survey effort applied for this study were commensurate with the nature and condition of the biodiversity values within the Study Area. Due to the low condition and extent of habitat, a reduced survey effort was deemed appropriate. Due to the lack of native vegetation within the Study Area, the limited availability of fauna habitat, and the low number of historical records of threatened species within the locality, targeted surveys for threatened species were not conducted. Opportunistic surveys were conducted during the site inspection and a detailed habitat assessment was conducted for all threatened biota previously recorded or predicted to occur within the locality based on State and Commonwealth information sources.

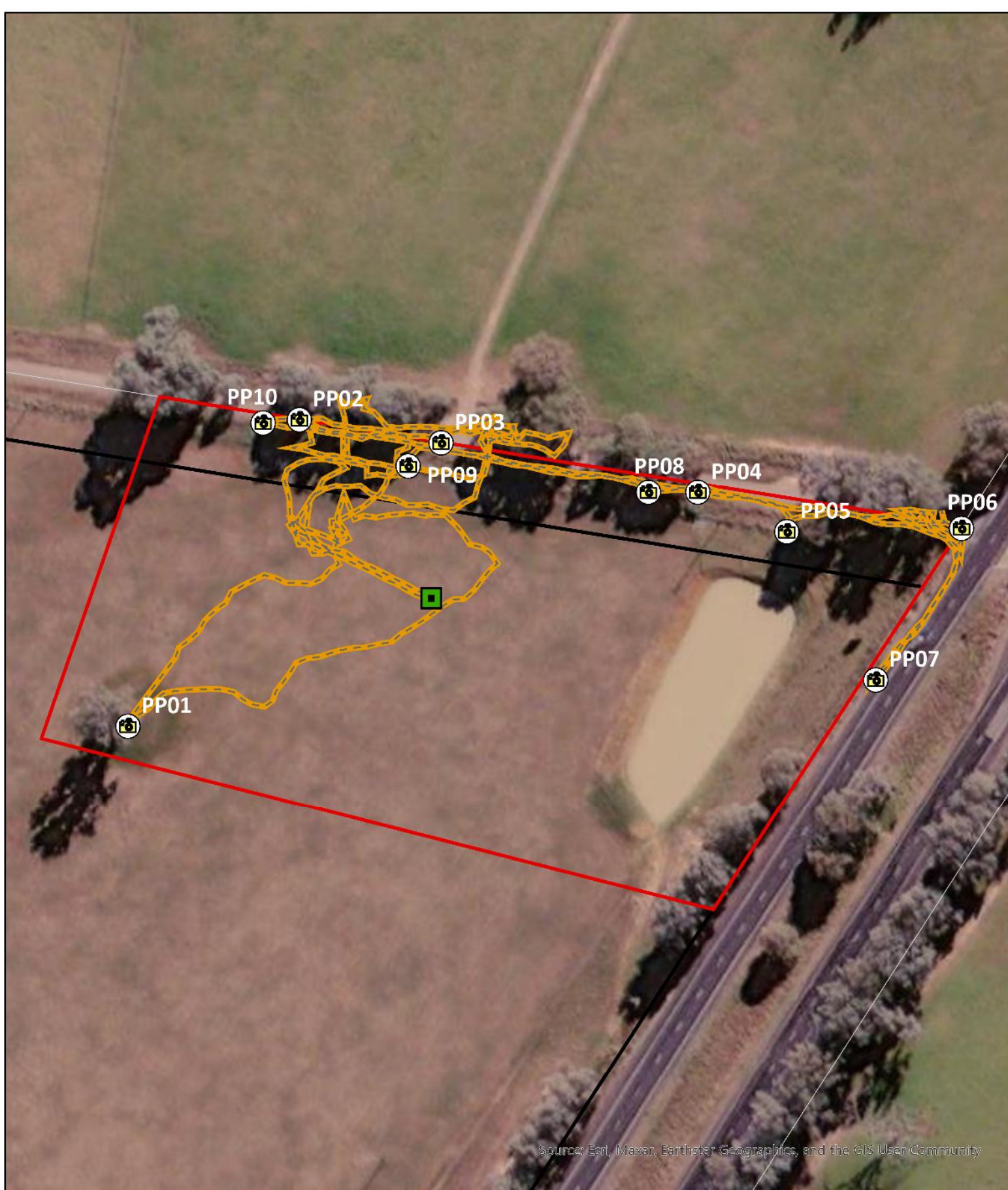


Figure 3 - Survey Effort



Legend

- | | |
|------------------|-----------------------|
| Lot 22 DP 809338 | BAM Plot |
| Study Area | Targeted Survey Track |
| Photo Points | Cadastral Boundary |



4 Results

4.1 Landscape Features

The landscape features that are applicable to the Study Area are described in **Table 1**.

Table 1 **Landscape Features**

Landscape Features	Information
IBRA Region	NSW South Western Slopes Bioregion
IBRA Sub Region	Lower Slopes Sub Region
Local Government Area	Berrigan LGA
Mitchell Landscape	The Study Area lies within the Mitchell Landscape identified as the Brokong Plains. The Brokong Landscape occurs on quaternary alluvial plains, general elevation 170m, local relief <10m. Red-brown texture contrast soils, extensively cleared and cropped, formerly Grey Box (<i>Eucalyptus microcarpa</i>), Yellow Box (<i>Eucalyptus melliodora</i>), Blakely's red gum (<i>Eucalyptus blakelyi</i>) and White Cypress Pine (<i>Callitris glaucophylla</i>) woodland to open forest.
Rivers, streams and estuaries	No waterways are mapped within the Study Area. An unnamed first order stream is mapped approximately 600 m to the west of the Study Area within Lot 22 and Sandy Creek, a fourth order stream, is mapped approximately 300 m west of the Study Area through the central portion of the lot. Both waterways converge just north of Bendemeer Lane. A constructed dam is located near the eastern boundary of the Study Area, the dam is at least 40 m from the proposed development. Mitigation measures to reduce the potential for indirect impacts to aquatic and riparian environments are provided in Section 6 .
Wetlands	The proposed development has been positioned to avoid areas of aquatic and riparian habitat. No mapped coastal wetlands (DPE 2022i) occur within or adjacent to the Study Area. The Hume Dam is located approximately 30 km south of the site. The nearest State listed floodplain wetlands and Commonwealth listed Wetlands of National Importance (Ramsar sites) are the Central Murray Forests Ramsar sites located on the floodplain of the Murray River in south-central NSW. Central Murray Forests Ramsar sites are approximately 170 km west and are comprised of three geographically discrete but interrelated units: Murray Valley National Park and Murray Valley Regional Park (formally the Millewa Forest), Werai Forests, and Koondrook -Perricoota Forests.
Connectivity of different areas of habitat	On a local level the Study Area is situated within an area mostly cleared for rural land and agricultural production and connectivity is limited. The fragmented patches of woodland vegetation, adjacent to the Study Areas northern boundary, are part of local corridor. Although it is fragmented, it provides a disjunct north/south link to other patches within the locality. Woomargama National Park is located approximately 11 km to the south east and Benambra National Park is located approximately 14 km south west of the site. Mitigation measures to reduce the potential for indirect impacts to the woodland vegetation are provided in Section 6 .
Areas of geological significance and soil hazard features	There are no areas of geological significance within the Study Area. There are no significant soil hazard features within the Study Area; no steep slopes occur, and no mapped Acid Sulphate Soil.
Areas of outstanding biodiversity value	There are no areas of outstanding biodiversity value mapped within the Study Area.

4.2 Historical Aerial imagery

Historical imagery of the Study Area and the locality is limited. Online Nearmap imagery covering the Study Area is current (2024), however the image is unavailable to download as the area is not covered by Nearmap.

4.3 Vegetation Assessment

4.3.1 Floristic Diversity

A low diversity of plant species were recorded within the Study Area and the woodland vegetation. A total of 28 plant species comprised of seven native species and 21 exotic species were recorded. A complete list of the flora species identified during the assessment is provided in **Appendix C**. The presence of noxious weeds and priority weeds for the region are discussed further in **Section 4.3.2** below.

4.3.2 Weeds

A total of 21 exotic plant species were detected during the assessment. None of the exotic species identified are priority listed weeds under the NSW *Biosecurity Act 2015* for the Greater Hume Shire LGA or are they Commonwealth listed Weeds of National Significance (WoNS) (further discussed in **Section 4.7**). The most dominant exotic plant species include:

- *Panicum coloratum* (Coolah Grass)
- *Avena barbata* (Bearded Oats)
- *Lolium perenne* (Perennial Ryegrass)
- *Phalaris aquaticus* (Phalaris)
- *Conyza bonariensis* (Flax-leaf Fleabane)
- *Hypochaeris radicata* (Cat's Ear).

Recommendations to prevent the introduction or the spread of exotic plant species during the construction phase of the project are provided in **Section 6**.

4.3.3 Plant Community Type Identification

As the Study Area has been used for agriculture for some time, most of the vegetation present does not contain an assemblage of native plant species with a floristic composition or structure representative of a native PCT, as defined by the BioNet Vegetation Classification Database (DPE 2024b). However, small patches of native vegetation occurring within the Study Areas eastern boundary and directly north of the Study Area.

Based on floristic and structural composition of vegetation within these areas were assigned to one PCT:

- PCT 277 - Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion.

Further information pertaining to the floristic composition of the vegetation within the Study Area and PCT 277 is summarised in **Table 2** and **Table 3** below. Representative photographs of the vegetation are presented in **Plates 1** through to **4**. The extent of each vegetation type is illustrated on **Figure 4**.

Table 2 Non-native Agricultural Cropland

Criteria	Information
PCT	The agricultural areas of the Study Area do not contain native vegetation commensurate with a PCT.
Area within the Study Area	2.22 ha
Area within the Subject Site	0.47 ha
Floristic description	<p>The Study Area is vegetated throughout with agricultural land (refer to Plate 1 and Plate 2). The groundcover is dominated throughout by exotic grasses and forbs. The dominant grass species include <i>Panicum coloratum</i> (Coolah Grass), <i>Phalaris aquaticus</i> (Phalaris), and <i>Lolium perenne</i> (Perennial Ryegrass). Introduced forbs included <i>Conyza bonariensis</i> (Flax-leaf Fleabane), <i>Cirsium vulgare</i> (Spear Thistle) and <i>Malva parviflora</i> (Small-flowered Mallow). Minor occurrences of <i>Lactuca serriola</i> (Prickly Lettuce), <i>Hirshfeldia incana</i> (Hairy Brassica), <i>Sonchus oleraceus</i> (Common Sowthistle) were also observed along the fence lines bordering the site.</p> <p>Native species were limited to occasional occurrences of <i>Portulaca oleracea</i> (Pigweed), <i>Einadia nutans</i> (Climbing Saltbush), and <i>Lythrum hyssopifolia</i> (Hyssop Loosestrife).</p>
Condition	The vegetation is in a low condition state and contains of low diversity of native species and lacks structural complexity.
Status	<p>BC Act: Not applicable</p> <p>EPBC Act: Not applicable</p>



Plate 1 **Agricultural cropland within the Study Area (Q01 - start)**



Plate 2 **Agricultural cropland within the Study Area (Q01 - end)**

Table 3 PCT 277 - Blakelys Red Gum - Yellow Box grassy tall woodland

Criteria	Information
PCT	PCT 277 - Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
Area within the Study Area	0.12 ha – canopy of tree species only
Area within the Subject Site	0.0 ha
Floristic description	The canopy is dominated by <i>Eucalyptus polyanthemos</i> (Red Box) and <i>Eucalyptus blakelyi</i> (Blakely's Red Gum) (refer to Plate 3 and Plate 4). The shrub layer is largely absent. The groundcover is dominated throughout by native and introduced grass species such as <i>Panicum coloratum</i> (Coolah Grass), <i>Phalaris aquaticus</i> (Phalaris), and <i>Lolium perenne</i> (Perennial Ryegrass). A low cover of native grass species occurs, including sparse occurrences of <i>Microlaena stipoides</i> var <i>stipoides</i> (Weeping Grass) and <i>Rytidosperma caespitosum</i> (Ringed Wallaby Grass). A sparse coverage of native forbs occurs, including <i>Sida corrugata</i> (Corrugated Sida) and <i>Oxalis perennans</i> .
Condition	Due to the fragmented state of the woodlands and the lack of plant diversity present, the vegetation is in a low condition state.
Status	<p>BC Act: Commensurate with the Critically Endangered Ecological Community (EEC):</p> <ul style="list-style-type: none"> White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions <p>Note that disturbed remnants of the EEC are still considered to form part of the community including remnants where the vegetation, either understory, overstorey or both, would, under appropriate management, respond to assisted natural regeneration, such as where the natural soil and associated seed bank are still at least partially intact (further discussed in Section 4.6).</p> <p>EPBC Act: Not applicable (further discussed in Section 4.6).</p>

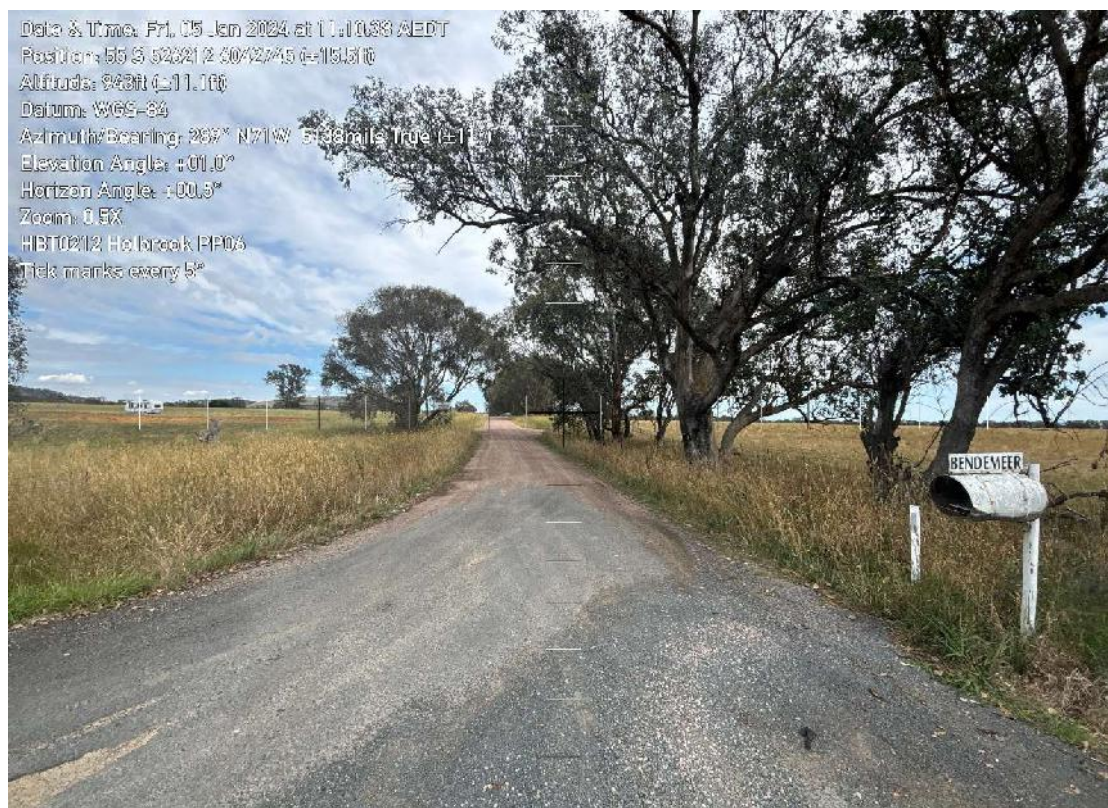


Plate 3 PCT 76 woodland vegetation east of the Study Area (PP07)

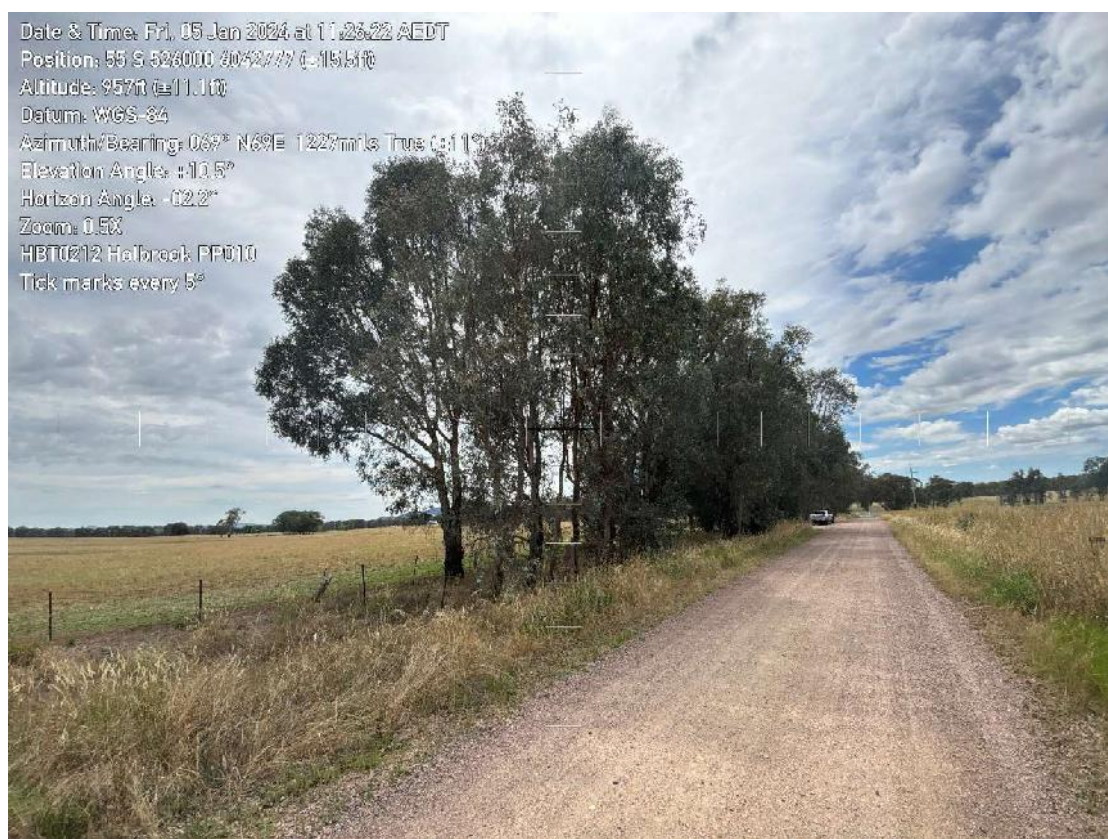


Plate 4 PCT 76 woodland vegetation east of the Study Area (PP05)

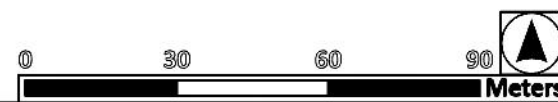


Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure 4 - Vegetation Mapping and Habitat Features



Legend	
Lot 22 DP 809338	Non-native Agricultural Grassland
Study Area	PCT 277 Blakely's Red Gum Yellow Box grassy tall woodland of the NSW SW Slopes Bioregion
HBT	EEC - White Box Yellow Box Blakely's Red Gum Woodland
Dam	Cadastral Boundary



4.4 Habitat Assessment

4.4.1 Habitat Features

The vegetation within the Study Area lacks key habitat features for flora and fauna species, including a complex vegetation structure, dense groundcover, leaf litter, stags, nests and habitat logs for the provision of shelter and refugia. The native vegetation that is present is fragmented and mostly comprised of canopy trees. Only one hollow bearing tree (mature Blakely's Red Gum), containing a small sized hollow, was identified near the south western boundary of the Study Area (refer to **Figure 4**).

The constructed dam to the east of the Study Area contains no aquatic or emergent native vegetation and is likely to hold water on a semi-to permanent basis. Although the dam may provide a source of water for local fauna, no breeding habitat for waterbirds or migratory species is present.



Plate 5 hollow bearing tree in the south west of the Study Area

4.4.2 Koala Habitat

The definition of core Koala habitat under the Koala SEPP 2020 includes a reference to highly suitable habitat. Highly suitable habitat is where 15% or greater of the total number of trees within any PCT are the regionally relevant species of those listed in Schedule 2. Greater Hume Shire LGA is within the Central and Southern Tablelands Koala management area.

The patches of woodland (PCT 277) vegetation within and adjacent to the Study Areas northern boundary contains two species of Koal feed trees (*Eucalyptus blakelyi* and *Eucalyptus albens*). These species do not constitute greater than 15% of the canopy cover within the Study Area and therefore the site does not meet the definition of highly suitable habitat as defined by the SEPP. The patches of woodland vegetation adjacent to the northern boundary is within the roadside verge of Bendemeer Lane and less than one ha in area. Consequently, it also does not constitute highly suitable habitat as defined by the SEPP.

A review of historical Koala records (DPE 2023g) from within a five km radius of the Study Area was undertaken. The review returned no records of Koala locations within five km's of the Study Area. The closest Koala record is from 2023 and is located approximately 20 km south of the site. No signs of Koala activity, such as scats or scratches, were identified during the assessment and no areas of native woodland would be impacted by the proposed development. No further assessment under the Koala SEPP 2020 is required.

4.5 Threatened Species

As areas of native woodland vegetation within and adjacent to the Study Area will not be impacted by the proposed development, the threatened species assessment has been limited to a discussion of the habitat values present within the Study Area. Mitigation measures to reduce the potential for indirect impacts to the woodland vegetation are provided in **Section 6**.

4.5.1 Threatened Flora

No threatened flora species were detected during the assessment. A search of the BioNet Atlas of NSW Wildlife (DPE 2024a) returned no threatened flora species within a five km radius of the Study Area. An EPBC Protected Matters Search returned a list of eleven threatened plant species predicted to occur within five km of the Study Area.

Vegetation clearing for agriculture has facilitated the growth of exotic ground cover species and caused a decline in native species richness throughout the Study Area. The remaining areas of native vegetation are small and fragmented and unlikely to be large enough to support viable populations of threatened flora species.

4.5.2 Threatened Fauna

No threatened fauna species were detected during the assessment. A search of the BioNet Atlas of NSW Wildlife (DPE 2024a) returned a total of three threatened species, comprising two birds and one mammal within a five km radius of the Study Area (refer to **Appendix A**). An EPBC Protected Matters Search returned a list of 25 threatened fauna species, comprised of 18 birds, two amphibians, three mammals, one insect, and one reptile species predicted to occur within a five km radius of the Study Area.

The likelihood of occurrence assessment determined that the threatened fauna species have a low potential to occur within the Study Area (refer to **Appendix A**). Clearing for agriculture has diminished the habitat quality and the biodiversity value of the Study Area for these species. Threatened fauna species are likely to forage within the Study Area as part of a broader network of habitats within the locality.

The proposed development will not impact on potential foraging or breeding habitat and the proposed BESS layout has been designed to avoid all direct impacts to native vegetation and aquatic habitat while ensuring that connective areas of habitat within the locality are maintained. Mitigation to reduce the potential for indirect impacts are provided in **Section 6**.

4.6 Threatened Ecological Communities

4.6.1 NSW BC Act

The patches of PCT 277 woodland vegetation within and adjacent to the Study Area's northern boundary are commensurate with the NSW BC Act listed Critically Endangered Ecological Community (CEEC):

- White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions

Although the woodland vegetation is fragmented and contains a primarily exotic groundcover, it is still considered to form part of the CEEC based on the final determination (NSW Scientific Committee 2020). Relevant listing criteria are summarised below:

- The vegetation occurs within the NSW South Western Slopes Bioregion where the CEEC is known to occur
- The vegetation has a grassy woodland structure and occurs on fertile soils that typically support the CEEC
- The canopy vegetation is dominated by *Eucalyptus blakelyi* (Blakely's Red Gum) and *Eucalyptus polyanthemos* (Red Box Box) which are characteristic tree species within the CEEC
- The shrub layer is sparse, which is a characteristic of the CEEC
- The groundcover is dominated by mostly exotic plant species, however one of the key diagnostic species, *Microlaena stipoides* (Weeping Grass), is present.

No areas of the CEEC will be directly impacted by the proposed developed (further discussed in **Section 5**).

4.6.2 Commonwealth EPBC Act

The patches of PCT 277 woodland vegetation within and adjacent to the Study Area's northern boundary is not commensurate with the Commonwealth EPBC Act listed EEC White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland.

In accordance with the listing criteria from the Commonwealth Conservation Advice for the EEC (Commonwealth Scientific Committee 2021), a woodland patch is defined as follows:

- A patch is considered to be dominated or co-dominated by the identified Eucalypt species where one, or a combination of these species are collectively the most abundant trees in the canopy – in terms of either crown cover (at least 50% of the canopy cover), or stem/trunk density (at least 50% of the trees in the patch).

In accordance with the condition thresholds for the EEC the woodland patches within and adjacent to the Study do not form part of the CEEC due to the following:

- The patch size for the largest patch of woodland (adjacent to the northern boundary) is 0.36 ha, all of the other patches are less than 0.1 ha
- The understory of all woodland patches is predominantly comprised of non-native species and no areas contain more than 12 native non-grass species.

4.7 Biosecurity Act

Several exotic plant species were detected during the assessment; however, none are listed under the NSW *Biosecurity Act 2015* for the Greater Hume Shire LGA as priority weeds. Additionally, none of the species are listed WoNS under the Commonwealth EPBC Act. Recommendations to prevent the introduction or spread of weeds during the construction phase of the project are provided in **Section 6**.

5 Impact Assessment

5.1 Direct Impacts

Mitigation and management measures are presented in **Section 6** to reduce the potential for these impacts.

5.1.1 Removal of Native Vegetation

The construction and operation of the proposed development would impact on 0.47 ha of non-native agricultural cropland. No native vegetation would be directly impacted (refer to **Figure 4**).

5.1.2 Removal of Habitat

No hollows or other important habitat features within the Study Area will be directly impacted by the proposed development. The site does not represent important habitat for locally occurring species. Direct impacts to fauna habitat include soil disturbance during construction and the potential displacement of ground-dwelling fauna such as amphibians and reptiles.

5.1.3 Impacts to Threatened Species

No BC Act listed species were identified within the Study Area. The location of the proposed development ensures that connective areas of habitat within the locality are maintained however indirect impacts to species may occur if not managed.

Indirect impacts from the construction and operation of the proposed development are considered not to be significant. The implementation of mitigation measures provided in **Section 6** will reduce the potential for indirect impacts to the species.

5.1.4 Impacts to Threatened Ecological Communities

A total of 0.12 ha of the NSW BC Act listed CEEC White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions occurs within the Study Area.

An assessment of significance in accordance with Section 7.3 of the BC Act for the CEEC is provided in **Appendix D**. The assessment determined that significant impacts to the CEEC, as a result of the proposed development are unlikely given that no areas of CEEC will be directly impacted. Mitigation measures provided in **Section 6** to reduce the potential for indirect impacts associated with the proposed development.

5.2 Indirect impacts

5.2.1 Edge Effects

Edge effects may cause adverse changes to the structure and function of areas of retained vegetation from factors such as increased light intensity and duration, increased exposure to wind, dust and weed invasion in edge habitats and adjoining vegetation.

The construction and operation of the proposed development are unlikely to have caused a change in abiotic conditions, as the habitat within the Study Area is cleared of native vegetation and the retained woodland vegetation has already been subjected to long-term edge effects. Site conditions following construction are unlikely to substantially have changed or modified the abiotic conditions of any retained vegetation.

5.2.2 Loss of hollows

Hollows represent important microhabitat features and provide potential nesting and breeding sites for arboreal fauna and bird species. No hollow-bearing trees will be directly impacted from the proposed development.

5.2.3 Transport of Weeds and Pathogens

The activities associated with clearing vegetation and increased human presence during construction and operation have potential to introduce waste and weeds into adjacent vegetation outside the proposed development as well as increase the risk of introducing plant and animal diseases carried on machinery.

A consolidated list of plant species from the flora survey identified several exotic species. If not managed, weed incursion and the introduction of waste and disease during construction activities can reduce the viability and vegetation integrity of the adjacent woodland habitat.

5.2.4 Noise and Vibration

Anthropogenic noise can alter the behaviour of animals or interfere with their normal functioning. During construction of the proposal there will likely be increased noise and vibration levels due to vegetation clearing, ground disturbance, machinery and vehicle movements, and general human presence. Noise impacts during operation are expected to be minimal.

5.2.5 Contamination

During the construction phase localised release of contaminants (hydraulic fluids, oils, drilling fluids, etc.) into the surrounding environment (aquatic, riparian and terrestrial habitats) may accidentally occur. Accidental release of contaminants is considered low risk, and if it did occur would likely be localised and able to be contained. Control measures will include ensuring that accidental spills are immediately reported and remediated.

5.2.6 Cumulative Impacts

Cumulative impacts arise from the interaction of individual elements associated with the unauthorised development and the additive effects of other external projects. The potential for cumulative impact is low due to the historical and current land use of the Study Area and the surrounding rural environment

6 Mitigation Measures

Mitigation measures proposed to minimise and avoid potential impacts associated with the proposed development are summarised below and detailed in **Table 4**.

Table 4 Mitigation Measures

Potential Impacts	Mitigation Measures	Responsibility	Timing
Adverse impacts to native vegetation in areas adjacent to the Study Area	<ul style="list-style-type: none"> Clearly delineate the boundaries of the project footprint to prevent any unnecessary clearing beyond its extent. This includes the installation of appropriate fencing along the extent of the Study Area. Fencing should prohibit entry into the adjacent retained vegetation and minimise indirect impacts during construction such as the movement of dust and rubbish into the forest. Ensure vehicle and equipment parking areas and stockpile areas are identified and positioned to avoid areas containing ecological value, i.e., no stockpiling or parking in retained forest. Stockpiling must not occur within, or in close proximity (5m) to, areas of native vegetation in adjacent habitat. Appropriate signage such as 'no-go zone' should be installed around the boundaries of the adjacent vegetation and communicated during site inductions. Tree protection measures should be implemented where appropriate to protect retained trees on the boundary of any construction areas. Tree protection measures should consider allowances for Tree Protection Zones in accordance with AS4970 (Standards Australia, 2009). 	Construction site manager	Prior to and during vegetation clearing
Impacts to surface and groundwater quality and quantity due to sediment run-off and/or contaminant runoff into adjacent watercourses	<ul style="list-style-type: none"> Source controls such as sediment fences, mulching and jute matting should be utilized where appropriate. Site-based vehicles should carry spill kits. Erosion and sediment control will be required for future construction activities in accordance with Managing Urban Stormwater: Soils and Construction (Landcom 2004) prior to commencement of construction. Limit the use of pesticides in the project footprint where possible to avoid contamination off site. 	Construction site manager	During vegetation clearing, construction and operation

Potential Impacts	Mitigation Measures	Responsibility	Timing
Vehicle collision with fauna	<ul style="list-style-type: none"> Speed limits within the Study Area should be limited to 20 km/hr. This limit should be clearly signed at all entry points to site The Study Area should be separated from vegetated and riparian areas throughout the construction and operational phases of the future development. This separation should be achieved through physical barriers including fencing and appropriate signage. 	Construction site manager	During construction and operation
Transfer of weeds and pathogens to and from site	<ul style="list-style-type: none"> The fungal pathogens <i>Phytophthora cinnamomi</i> and Myrtle Rust (<i>Puccinia psidii</i>) are known to occur in the region, however, it is unknown if they occur within the Study Area. These pathogens can have devastating impacts on native plant communities and inhabiting fauna if not properly managed. Vehicles and equipment should arrive clean and leave clean. Vehicles should follow formed tracks / driveways where appropriate. High-threat weeds occur within the Development Site. Topsoil is to be disposed of appropriately and not stored within retained vegetation. Any stored topsoil piles should be covered or threatened regularly for emerging weeds. 	Construction site manager	During vegetation clearing, construction, and operation
Noise, vibration, lighting, waste and air pollution impacts to adjacent sensitive habitat areas	<ul style="list-style-type: none"> Increased human activity (from workers and traffic levels) directly adjacent to sensitive habitat areas may cause disturbance to flora and fauna species in adjoining habitat. Measures to mitigate impacts on flora and fauna from noise, vibration, waste, light and air pollution such as: <ul style="list-style-type: none"> Enforce 'carry-in, carry-out' policy regarding rubbish and waste materials generated on-site during construction to avoid waste materials entering adjacent vegetation. Restriction of public access and associated impacts from domestic pets, waste dumping and damage to adjoining vegetation must be enforced pre, during and post construction. Fence sensitive areas to delineate 'no-go' zones. Levels of lighting within the site should be reduced to a minimal level to reduce any adverse effects upon the essential behavioral patterns of light-sensitive fauna. Lighting should comply with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting. Noise minimisation practices in accordance with DPE recommendations. 	Construction site manager	During construction and operation

Potential Impacts	Mitigation Measures	Responsibility	Timing
	<ul style="list-style-type: none"> Dust control measures should involve covering loads where required; stopping operations under excessive wind conditions including ceasing operations if required; use of water tankers as required to control dust; truck wheel washes or other dust removal measures. 		

7 Summary

ACEnergy Pty Ltd are proposing to construct a BESS in the north east of Lot 22 DP 809338, Hume Highway, Holbrook, NSW. The proposed development is approximately 0.47 ha and is proposed within land already cleared for agriculture.

The vegetation within the Study Area is highly modified and has been subject to long-term agricultural production, most of the vegetation is not representative of a native PCT.

Small patches of native vegetation occur within the Study Areas eastern boundary and directly to the north of the Study Area along Bendemeer Lane. These areas were assigned to one PCT:

- PCT 277 - Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion.

This community is commensurate with the following NSW BC Act listed CEEC:

- White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions.

No direct impacts to the CEEC will occur as a result of the proposed development.

The Study Area does not contain core Koala habitat as defined by the Koala SEPP 2020 and key habitat features are limited throughout the Study Area. Only one hollow bearing tree (mature Blakely's Red Gum), containing a small sized hollow, was identified near the south western boundary of the Study Area. The hollow would not be directly impacted by the proposed development.

No threatened flora or fauna species were identified within the Study Area during the assessment. Due to the absence of several important habitat features, only mobile fauna species are likely to use the Study Area intermittently as part of a broader network of habitat within the locality.

The proposed development is unlikely to cause a significant impact to any threatened species, populations, or ecological communities listed under the NSW BC Act or the EPBC Act. An EPBC Act referral to the Commonwealth Minister for the Environment is not recommended.

Avoidance and mitigation measures have been provided to reduce the potential for indirect impacts to biodiversity values within surrounding environments, including aquatic, riparian and terrestrial habitats.

8 References

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Appendix A – Threatened Species Database Search

A list of threatened species, populations and ecological communities that have been reported or modelled to occur from within a five-kilometre radius of the Study Area was obtained from the DPIE BioNet Atlas: (<http://www.bionet.nsw.gov.au/>).

The table below summarises the likelihood of threatened species occurring within the Subject Site based on the habitat requirements of each species.

Definition of the likelihood of occurrence criteria are provided below:

- Present – species identified within the site during surveys
- High – species known from the area (DPIE BioNet Atlas records), suitable habitat (such as roosting and foraging habitat) present within the site
- Moderate – species may be known from the area, potential habitat is present within the site
- Low – Few recent historical records, species not known from the area and/or marginal habitat present
- Nil – habitat requirements not met for this species within the site.

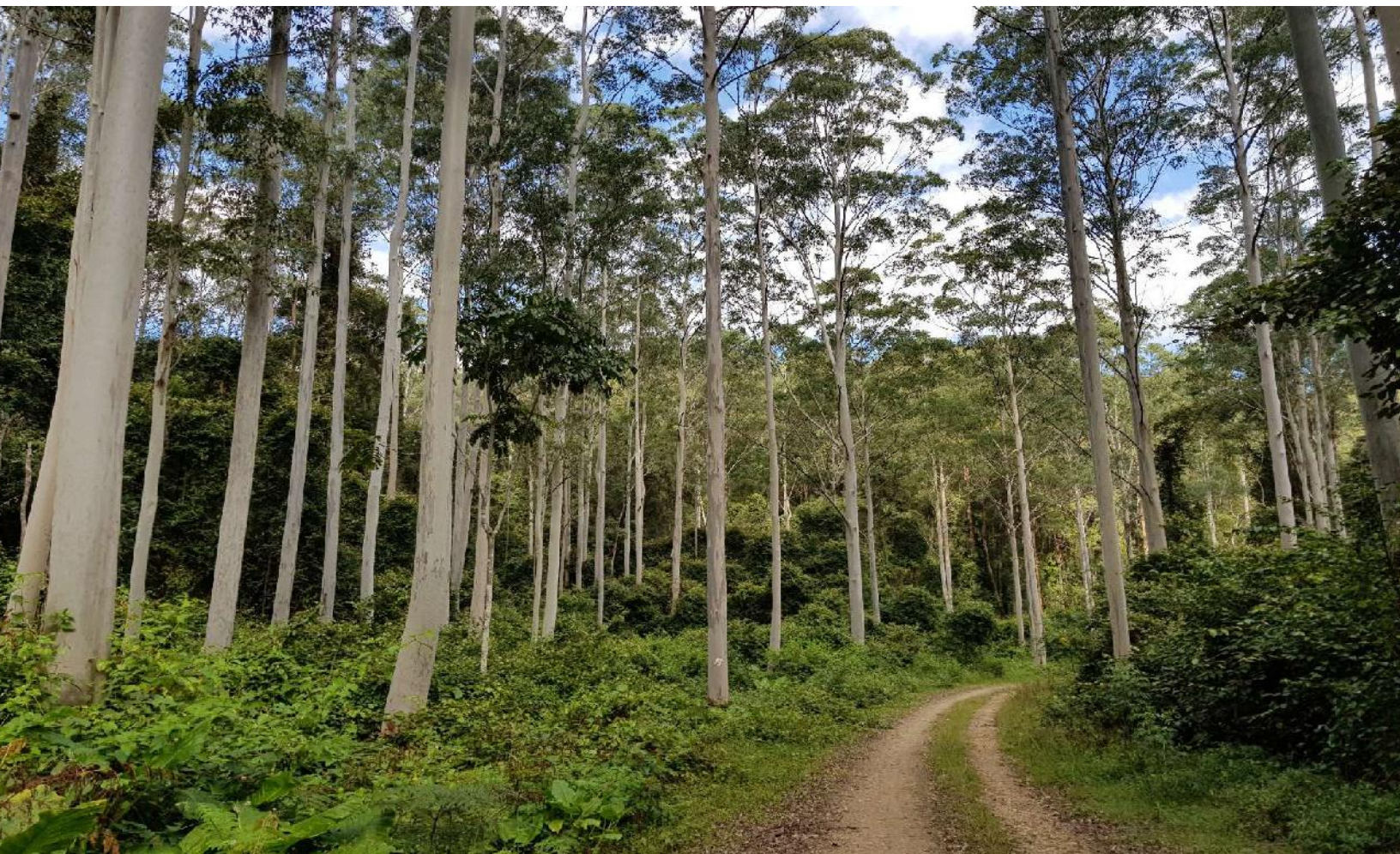
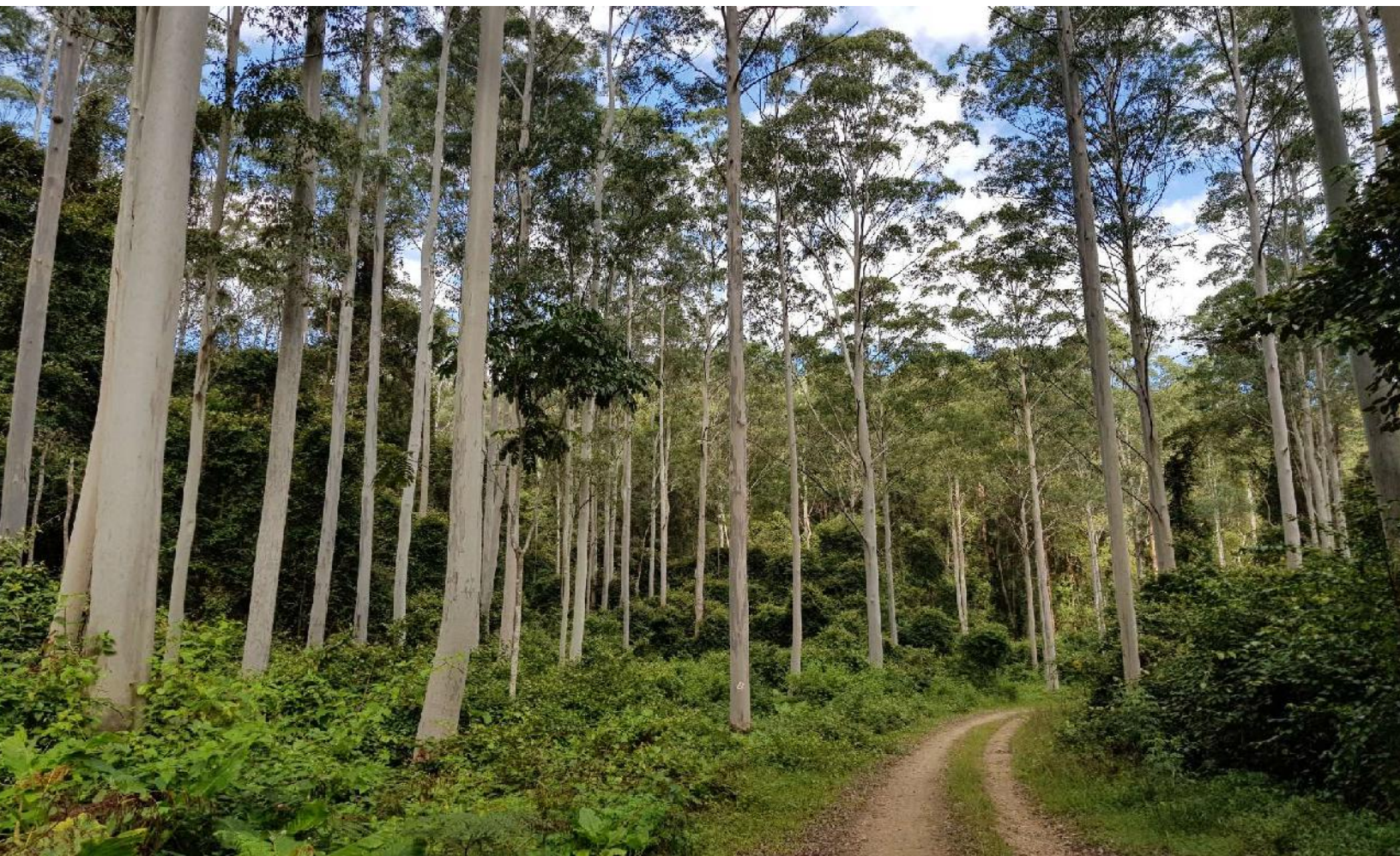


Table A1 Likelihood of Occurrence (Study Area)

Species	BC Act	EPBC Act	BioNet	Habitat	LoO	Summary
<i>Pteropus poliocephalus</i> Grey-headed Flying Fox	V, P	V	1	The Grey-headed Flying-fox is endemic to Australia. It occurs along the east coast from Bundaberg in Queensland to Melbourne, Victoria. In NSW, Grey-headed Flying-foxes have been recorded in numerous conservation reserves along the east coast, and the tablelands and eastern slopes of the Great Dividing Range. The Grey-headed Flying-fox occurs in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps. Urban gardens and cultivated fruit crops also provide habitat for this species.	Low	Not recorded during site assessment. Unlikely to occur within the Study Area based on the low condition of the site, and lack of suitable foraging habitat. No camps are within the local area. Few records for the species within the locality. Potential foraging habitat for the species may occur in the fragmented patches of PCT 277 woodland north of the site.
<i>Ixobrychus flavicollis</i> Black Bittern	V, P	V	1	The Black Bittern has a wide distribution, from southern NSW north to Cape York and along the north coast to the Kimberley region. The species also occurs in the south-west of WA. In NSW, records of the species are scattered along the east coast, with individuals rarely being recorded south of Sydney or inland. Inhabits both terrestrial and estuarine wetlands, generally in areas of permanent water and dense vegetation. Where permanent water is present, the species may occur in flooded grassland, forest, woodland, rainforest and mangroves. During the day, roosts in trees or on the ground amongst dense reeds	Low	Not recorded during site assessment. No suitable habitat within the Study Area. Only one record within the locality.
<i>Petaurus norfolcensis</i> Squirrel Glider	V,P		42	The species is widely though sparsely distributed in eastern Australia, from northern Queensland to western Victoria. Inhabits mature or old growth Box, Box-Ironbark woodlands and River Red Gum forest west of the Great Dividing Range and Blackbutt-Bloodwood forest with heath understorey in coastal areas. Prefers mixed species stands with a shrub or Acacia midstory.	Low	Not recorded during site assessment. No suitable habitat within the Study Area.

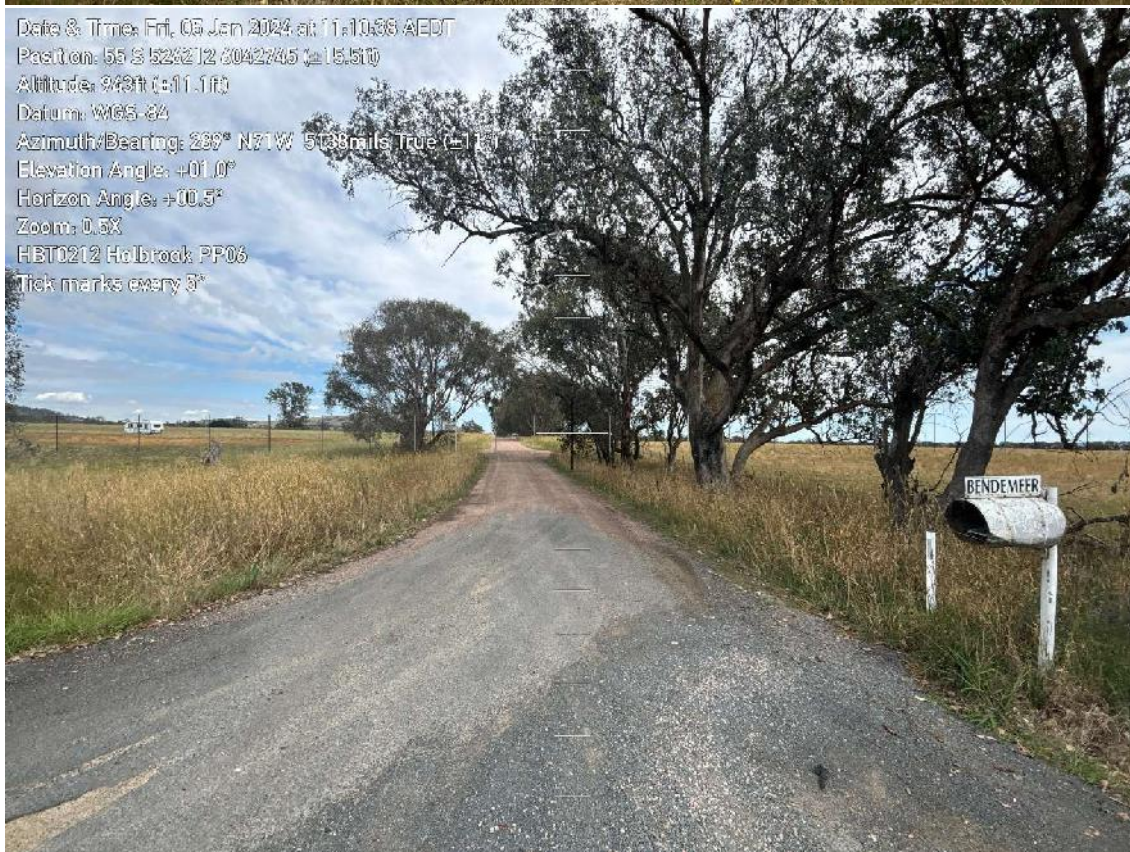
Appendix B – Photo Points



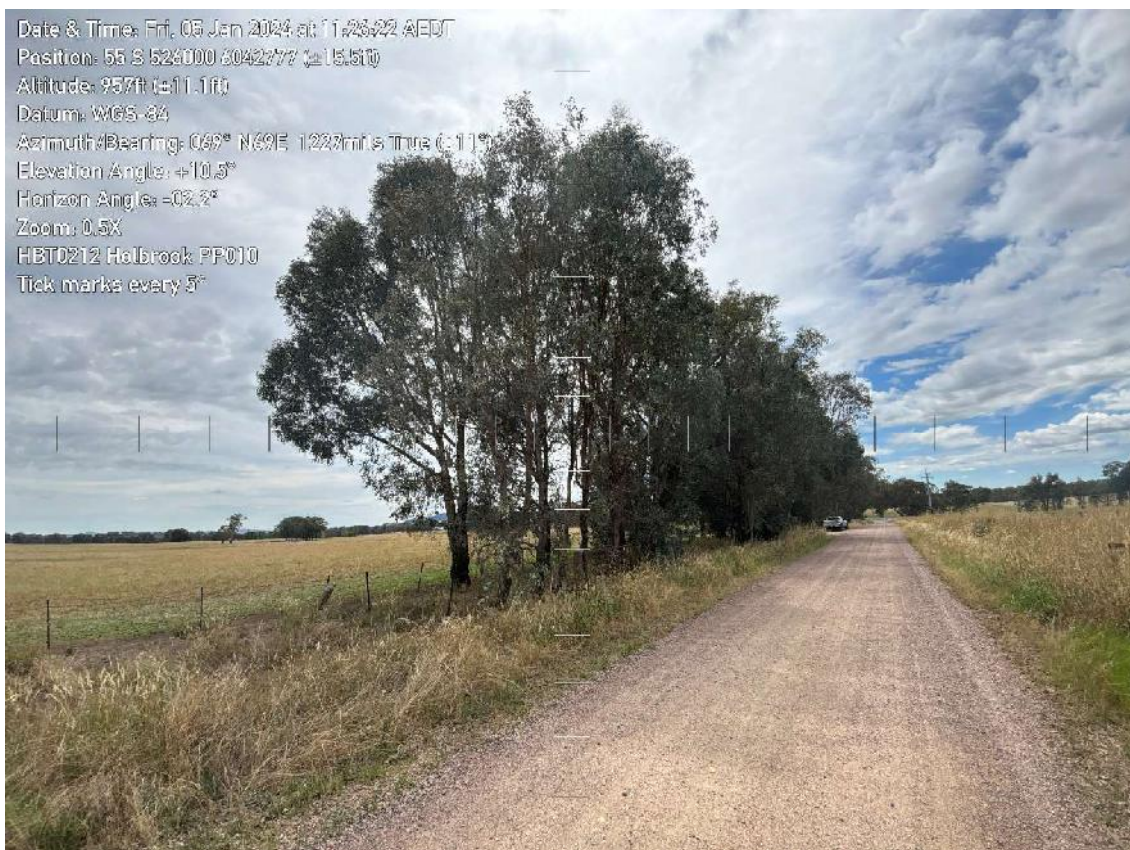
Holbrook Photo Points (01-10)











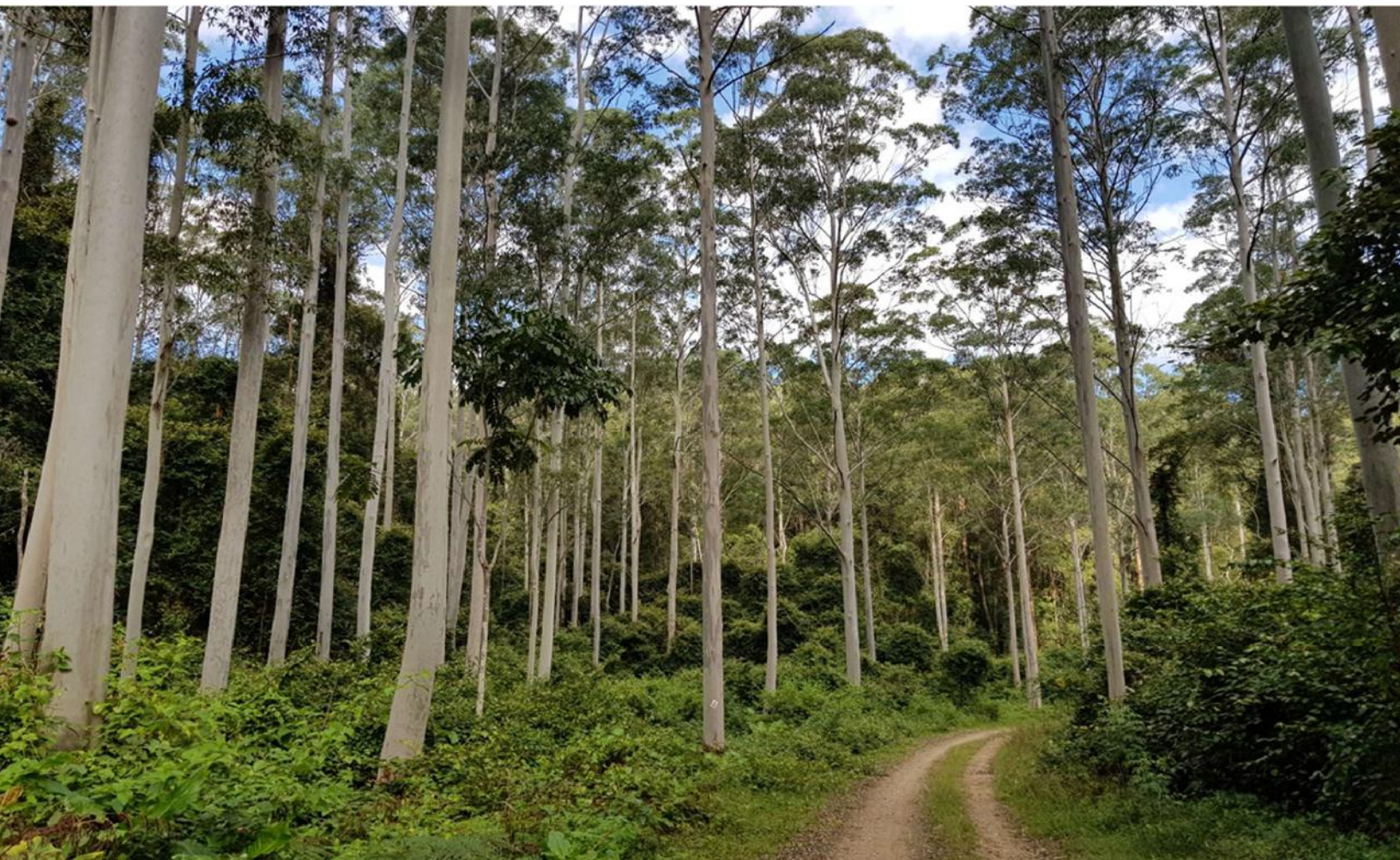
Appendix C – Flora List



Table C1 **Flora List**

Native/ Exotic	Growth Form	Scientific Name	Common Name	Study Area (Q01)	Roadside Vegetation (Presence)
Exotic	Forb	<i>Amaranthus viridis</i>	Green Amaranth	0.1	x
Exotic	Forb	<i>Cirsium vulgare</i>	Spear Thistle	0.5	x
Exotic	Forb	<i>Conyza bonariensis</i>	Flax-leaf Fleabane	1	x
Exotic	Forb	<i>Echium plantagineum</i>	Paterson's Curse	0.1	x
Exotic	Forb	<i>Hypochaeris radicata</i>	Cat's Ear	5	x
Exotic	Forb	<i>Lactuca serriola</i>	Prickly Lettuce	0.5	x
Exotic	Forb	<i>Malva parviflora</i>	Small-flowered Mallow	0.5	x
Exotic	Forb	<i>Rumex acetosella</i>	Sheep Sorrel	0.1	x
Exotic	Forb	<i>Rumex conglomeratus</i>	Clustered Dock	0.1	x
Exotic	Grass	<i>Avena barbata</i>	Bearded Oats		x
Exotic	Grass	<i>Briza subaristata</i>	Quaking Grass	0.1	x
Exotic	Grass	<i>Bromus catharticus</i>	Prairie Grass	0.5	x
Exotic	Grass	<i>Bromus sterilis</i>	Sterile Brome	0.1	x
Exotic	Grass	<i>Bromus tectorum</i>	Drooping Brome	0.1	x
Exotic	Grass	<i>Dactylus glomeratum</i>	Cocksfoot Grass	0.1	x
Exotic	Grass	<i>Holcus lanatus</i>	Yorkshire Fog		x
Exotic	Grass	<i>Lolium perenne</i>	Perennial Ryegrass	20	x
Exotic	Grass	<i>Panicum coloratum</i>	Coolah Grass	40	x
Exotic	Grass	<i>Paspalum dilatatum</i>	Paspalum		x
Exotic	Grass	<i>Phalaris aquaticus</i>	Phalaris	20	x
Exotic	Grass	<i>Vulpia myosuros</i>	Rats-tail fescue	0.5	x
Native	Forb	<i>Einadia nutans</i>	Ruby Saltbush		x
Native	Forb	<i>Lythrum hyssopifolia</i>	Hyssop Loosestrife	0.1	x
Native	Forb	<i>Portulaca oleraceus</i>	Pigweed	0.1	x
Native	Grass	<i>Microlaena stipoides</i>	Weeping Grass		x
Native	Grass	<i>Rytidosperma caespitosum</i>	Ringed Wallaby Grass		x
Native	Tree	<i>Eucalyptus blakelyi</i>	Blakely's Red Gum		x
Native	Tree	<i>Eucalyptus polyanthemos</i>	Red Box		x

Appendix D – Assessment of Significance



Assessment of Significance

CEEC White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions occurs

Factor	Assessment
(a) Effect on life cycle of threatened species.	Not Applicable
(b) (i) Effect on extent of EEC or CEEC.	The proposed development will not directly impact areas of the CEEC, which is located approximately 70 m from the Subject Site boundary along eastern border of the Study Area.
(b) (ii) Effect on composition of EEC or CEEC.	The total extent of this CEEC occurs within land outside of the construction footprint. The construction and operation of the proposed development is unlikely to have caused a change in abiotic conditions, given that the habitat within the Study Area is already cleared and the CEEC has already shown resilience to long-term edge effects. Site conditions following construction are unlikely to substantially change the abiotic conditions and are unlikely to have an effect on the composition of the CEEC.
(c) (i) Extent of habitat removal or modification for threatened species, population or ecological community	The proposed development will not remove or modify the CEEC. The habitat values within the EEC are unlikely to substantially change following completion of the proposed development.
(c) (ii) Extent of fragmentation or isolation of habitat for threatened species, population or ecological community.	The proposed development will not cause further fragmentation or isolation of the CEEC.
(c) (iii) The importance of habitat to threatened species, populations or ecological community.	The CEEC is fragmented and in low condition state, existing in a linear strip adjacent to the Hume Highway. The CEEC within the Study Area is unlikely to be important for the long-term persistence of the CEEC within the locality. The proposed development will remove not important habitat for the CEEC.
(d) Area of Outstanding Biodiversity Value	The Study Area does not occur with an Area of Outstanding Biodiversity Value.
(e) Key Threatening Processes	<p>The following Key Threatening Processes (KTP) are relevant to the proposed development:</p> <ul style="list-style-type: none"> • Invasion of native plant communities by African Olive <i>Olea europaea</i> subsp. <i>cuspidata</i> (Wall. ex G. Don) Cif. • Infection of native plants by <i>Phytophthora cinnamomi</i> • Invasion of native plant communities by exotic perennial grasses. • Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants. <p>The proposed development is likely to facilitate the above-listed KTPs to a negligible extent.</p>

Factor	Assessment
Conclusion	The proposed development is unlikely to significantly impact the occurrence of this CEEC such that its occurrence is likely to become extinct within the locality.



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