

Ecological Assessment Report (EAR):

Project Name: 9 Armstrong Street, Rylstone

Prepared for: Steve Shaw

July 2024





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Contents

1. Introduction	1
2. Site Details	1
2.1. Project Location and Context	1
2.2. Project Description and Background	2
2.2.1. Detailed Scope of Works	2
3. Statutory and Planning Framework	3
3.1. Environmental Planning and Assessment Act 1979	3
3.2. Other Environmental Legislation	3
4. Ecological Assessment	7
3.1 Vegetation	7
3.2 Biodiversity Values Map1	С
3.3 Koala Habitat	С
3.4 Test of Significance	1
5. Summary	7
6. Certification, Review and Decision1	7
7. References19	9
Appendix A – Site Details	C
Appendix B – Bionet Atlas Search Results2	1
Appendix C – Threatened Species Search	3
Appendix D – Protected Matters Search	7
Appendix E – Assessment of Significance - EPBC 3°	1
Appendix F – Council LEP Maps	3



Photos

Photo 1: Typical vegetation at the site	9
Photo 2: Small diameter tree regrowth, often multi-stemmed, indicates previous cutting	9

Figures

Figure 1: Site aerial (Source SiX Maps/Google)	2
Figure 2: Location of proposed development site	5
Figure 3: Site plan showing woody vegetation (waypoint (WP) details in Appendix A)	6
Figure 4: BVM does not identify any areas on the subject land	. 10
Figure 5: Terrestrial biodiversity sensitivity, not identified at the site	. 36

Tables

Table 1: Proponent details	1
Table 2: Summary of other environmental legislation	3
Table 3: Summary of environmental safeguards to be implemented	17



1. Introduction

This Ecological Assessment Report (EAR) has been prepared by Access Environmental Planning for Steve Shaw with respect to the proposed construction of a residential dwelling house at 9 Armstrong Street, Rylstone (Lot 3 / DP 1010093), within Rylstone township (**Figure 1**).

Future site works will involve house construction and connection to services, such as sewer and stormwater systems.

This report addresses the impact of the proposed development on the vegetation and ecological values. Even though there is remnant native vegetation this Lot is not identified in the Mid-Western Regional Council (MWRC) Terrestrial Biodiversity mapping (**Appendix F**). A test of significance as prescribed by the Biodiversity Conservation Act 2016 is included in this report.

In accordance with the Environment Protection and Biodiversity Conservation Act of 1999 (EPBC Act) an EPBC Act Protected Matters Search was performed on 09/05/2024 from which an EPBC Act Protected Matters Report was rendered. Details regarding the search are included later in this report.

A Bionet Atlas search was performed to establish which potential threatened species have previously been recorded in or near the proposed site. The Bionet search performed on 09/05/2024 returned a total of 206 records of 13 species, within a 10 km² area around the site. The site vegetation has been altered by weed incursion and historical disturbance to trees and the consequent lack of nests and hollows limit resources available for potential threatened species.

Any erosion and sediment control measures implemented will be in accordance with the "Blue Book" (Managing Urban Stormwater: Soils and construction – Volume 1 (4th edition)).

Project Name	9 Armstrong Street, Rylstone – Residential house
Proponent Name	Mr. Steve Shaw
Project Manager	Mr. Steve Shaw
Contact Details	P: 0423 669 821

Table 1: Proponent details

2. Site Details

2.1. Project Location and Context

- Street address is 9 Armstrong Street, Rylstone, which is formally identified as Lot 3 of DP 1010093 (Figure 1).
- Mid-Western Regional Council (MWRC) Local Government Area (LGA).
- Located within Rylstone village.





Figure 1: Site aerial (Source SiX Maps/Google)

The Lot is 0.14 ha (approximately 1400 m²) in size and is mostly regular in shape with an elongated section for access. The Lot slopes to the west, down from the street access. There are no water courses on the Lot. The property has remnant smooth barked gums, with some shrubs and many exotic plants in the understorey. The proposed house will result in development activities predominantly in the existing cleared zone in the western portion of the lot.

Approximate mid-point of site: latitude: -32.8050, longitude: 149.9724.

The site is in the NSW South Western Slopes bioregion and the Capertee Valley sub-region of the Interim Biogeographic Regionalisation for Australia (IBRA) classification.

The site is zoned RU5 Village and is surrounded by RU5 zoned land and established houses.

2.2. Project Description and Background

2.2.1. Detailed Scope of Works

The proponent plans the development which is construction of a dwelling house.

These works will be undertaken by the proponent or workers contracted by the proponent. To satisfactorily complete the work the building contractor will:

- Implement erosion and sediment control measures to prevent runoff
- Remove all rubbish and debris from the site
- Apply appropriately qualified tradespeople to the tasks.

3. Statutory and Planning Framework

3.1. Environmental Planning and Assessment Act 1979

Assessment of the proposal against the provisions of Clause 4.15 of the Environmental Planning and Assessment Act and related planning instruments (Local Environment Plan (LEP), any Development Control Plan (DCP) and appropriate state environmental planning policies (SEPPs)) has been addressed in a separate Statement of Environmental Effects.

3.2. Other Environmental Legislation

Table 2: Summary of other environmental legislation

Legislation	Relevance to the Proposed Activity	
COMMONWEALTH I	EGISLATION	
Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)	The EPBC Act protects matters of <u>National Environmental Significance</u> (MNES), such as threatened species and ecological communities, migratory species (protected under international agreements), and National Heritage places (among others). There will be no significant impacts to any MNES.	
STATE LEGISLATIO	N	
<i>Biodiversity Conservation Act 2016 (BC Act)</i>	Part 7 of the BC Act provides the environmental assessment requirements for activities being assessed under Part 4 of the EP&A Act 1979, where the Biodiversity Offset Scheme (BOS) is not applicable. If a significant impact is likely, a Species Impact Statement is required. A test of significance has been completed for those threatened species that may potentially use the site (Appendix B).	
Local Land Services Act 2013 (LLS Act)	The objects of the LLS Act include 'to ensure the proper management of natural resources in the social, economic and environmental interests of the State, consistently with the principles of ecologically sustainable development. Rural village areas are excluded from LLS Act provisions and development is considered under the local Council policies and control plans.	
Fisheries Management Act 1995 (FM Act)	FM Act provides for the protection, conservation, and recovery of threatened species, populations and ecological communities of fish and marine vegetation and fish habitats, as well as promoting the development and sharing of fishery resources in NSW. Key fish habitat areas that are protected under the Fisheries Management Act do not occur near the site.	
Heritage Act 1977	The proposed activity does not involve an item or place listed on the NSW <u>State Heritage Register</u> or the subject of an interim heritage order or listing and is therefore not a controlled activity. Approval of works on the site is therefore not required under Part 4 of the Heritage Act.	



Protection of the Environment Operations Act 1997 (POEO Act)	The POEO Act is the key environmental protection and pollution statute, administered by the EPA with a licensing regime for waste, air, water and pollution. Any work potentially resulting in pollution must comply with the POEO Act. Relevant licences must be obtained if required. [No licences have been identified as being required including an Environmental Protection Licence (EPL).]
Water Management Act 2000 (WM Act)	The WM Act's main objective is to manage NSW water in a sustainable and integrated manner that will benefit today's generations without compromising future generations' ability to meet their needs. Section 91E of the Act establishes an approval regime for controlled activities within waterfront land. As the site is not on waterfront land approval under the WM Act is not required.
Biosecurity Act 2015	The <i>Biosecurity Act 2015</i> and regulations provide requirements for state level priority weeds. The Act regulates all plants, with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. No priority weeds were observed at the site.
State Environmental Planning Policy (Biodiversity and Conservation) 2021	Aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas. Chapter 4 relating to koala habitat protection (2021) is the applicable chapter due to RU5 land zoning on land that has an area of less than 1 ha, in MWRC LGA. The site vegetation is not core koala habitat because koalas do not occur there and have not been recorded at the site in the preceding 18 years.





5

Figure 2: Location of proposed development site.





6

Figure 3: Site plan showing woody vegetation (waypoint (WP) details in **Appendix A**).



4. Ecological Assessment

The site was inspected by pedestrian survey (using random meander technique) and trees in the impact zone with diameter at breast height (dbh) over 15 cm were examined (Figure 3).

3.1 Vegetation

Plant species identified in vegetation survey are shown below:

Trees		Grass like plants	
Scientific name	Common name	Scientific name	Common name
Eucalyptus dawsonii	Slaty gum	Themeda triandra	Kangaroo grass
Eucalyptus mannifera	Brittle gum	Austrodanthonia caespitosa	Wallaby grass
Eucalyptus rubida	Candlebark	Cynodon dactylon	Couch
Eucalyptus melliodora	Yellow box	Lomandra filiformis	Wattle mat rush
		Lomandra multiflora	Many-flowered mat
Chrucha			rusn Knah aadra
Silfuds Scientific nome		Carex inversa	Knob sedge
	Common name	Facha	
Acacia balleyana	Cootamundra wattle	Fords Optimutifier a surge	0
Acacia caesiella	Tableland wattle		Common name
Cassinia sifton	Sifton bush	Dichondra repens	Kidney weed
Pultenaea laxiflora	Bush pea	Euphorbia drummondii	Caustic weed
Grevillea juniperina 'Molonglo'	-	Portulaca oleracea	Pigweed
Melichrus urceolatus	Melichrus	Calotis cuneifolia	Purple burr daisy
Ferns			
Scientific name	Common name		
Cheilanthes tenuifolia	Rock fern		
Non-natives			
Scientific name	Common name		
Gleditsia triacanthos	Honey locust		
Ligustrum lucidum	Broad leaved privet		
Chamaecytisus palmensis	Tagasaste		
Rubus fruticosus	Blackberry		
Senecio jacobaea	Common ragwort		
Verbena bonariensis	Purple top		
Plantago lanceolata	Plantain		
Rubus fruticosus	Blackberry		
Stellaria media	Chick weed		
Medicago spp.	Burr medic		
Paspalum dilatatum	Paspalum		
Pennisetum clandestinum	Kikuyu		
Lolium spp.	Annual rye grass		



Fauna species incidentally observed:

Birds Scientific

Scientific name	Common name
Corvus coronoides	Australian raven
Gymnorhina tibicen	Australian magpie
Eolophus roseicapilla	Galah
Strepera graculina	Pied currawong
	Sulphur crested
Cacatua galerita	cockatoo
Alisterus scapularis	King parrot
Platycercus eximius	Eastern rosella
Anthochaera carunculata	Red wattle bird
Trichoglossus	
moluccanus	Rainbow lorrikeet
Cacatua sanguinea	Little corella

The majority of assessed trees within the Lot had dbh less than 30 cm. Construction of a residential house will not disturb the majority of trees across the site.

No plant community types (PCTs) are identified by State Vegetation Type Mapping (SVTM) available using the Sharing and Enabling Environmental Data (SEED) online portal.

Plant species and location details at the site were used to assess a likely fit for a known plant community type which was determined as PCT 3731 Capertee conglomerate grey gum – stringybark forest.

This PCT is described as a tall, occasionally very tall, sclerophyll open forest with a mid-stratum of dry shrubs and a ground layer of grasses and graminoids. This PCT occurs on dry quartz-rich Permian sediments exposed on foothill ranges of the Capertee and Wolgan valleys, western Blue Mountains. The tree canopy very frequently includes a high cover of *Eucalyptus punctata* and one or more species from the stringybark eucalypt group. Other eucalypts can include localised patches of *Eucalyptus polyanthemos* or *Eucalyptus mannifera*. There is typically a sparse to mid-dense shrub layer with small forbs and graminoids such as *Dianella revoluta* and *Lomandra filiformis*. This PCT occurs across a topographically diverse landscape. This varies from steep, dry and rocky escarpment talus slopes, or on gently sloping crests on plateaus or lower-elevation valley floors. It occurs at mid to high elevations which experience cool tableland temperatures.

It is 27 % cleared in NSW.

It has no associated threatened ecological communities (TEC).





Photo 1: Typical vegetation at the site.



Photo 2: Small diameter tree regrowth, often multi-stemmed, indicates previous cutting.



3.2 Biodiversity Values Map

Clearing of any vegetation identified on the biodiversity values map (BVM) (**Figure 4**) immediately triggers entry into the Biodiversity Offset Scheme (BOS), requiring assessment and reporting using the Biodiversity Assessment Method (BAM) 2020 framework. In this case, the site is not on the BVM and no clearing or modification to any vegetation identified on the BVM will occur.



Figure 4: BVM does not identify any areas on the subject land.

The other trigger for the BOS is an area threshold based on the minimum Lot size for the landholding. For this subject Lot, up to 0.25 ha (2500 m²) is allowed clearing before the BOS would be triggered and a Biodiversity Development Assessment Report (BDAR) required. As the entire Lot is 0.14 ha even if all vegetation is cleared it is less vegetation modification than the area clearing threshold trigger.

Minimum lot size associated with the property	Threshold for clearing, above which the Biodiversity Assessment Method and Biodiversity Offsets Scheme apply
Less than 1 ha	0.25 ha or more
1 ha to less than 40 ha	0.5 ha or more
40 ha to less than 1000 ha	1 ha or more
1,000 ha or more	2 ha or more

3.3 Koala Habitat

The Koala State Environmental Planning Policy (SEPP) 2021 (Chapter 4 of the Biodiversity and Conservation SEPP 2021) applies to the land due to its RU5 zoning and location in the Mid-Western Regional Council area. The land has an area much less than 1 ha and therefore development can



be considered where there is no approved koala plan of management and the land is not identified as core koala habitat.

Core koala habitat is defined in the SEPP as:

(a) an area of land which has been assessed by a suitably qualified and experienced person as being highly suitable koala habitat and where koalas are recorded as being present at the time of assessment of the land as highly suitable koala habitat, or

(b) an area of land which has been assessed by a suitably qualified and experienced person as being highly suitable koala habitat and where koalas have been recorded as being present in the previous 18 years.

The land is not highly suitable koala habitat even though a number of trees are regionally relevant species because no koalas were recorded at the time of the site visit and there are also no previous records of koalas within 10 km² of the site (Bionet Atlas search results). Development on the land can therefore be considered as there is no approved koala plan of management and it is does not satisfy the constraints relating to the definition of core koala habitat.

3.4 Test of Significance

The assessment of significance must be completed when a threatened species may be impacted in accordance with the requirements of section 1.7 of the *Environmental Planning and Assessment Act 1979* and the Assessment of Significance under Section 7.3 the *Biodiversity Conservation Act* 2016.

A list of potential threatened species was generated by a threatened species search based on IBRA bioregion and subregion. The area was assessed according to the impact of the proposed works on habitat and potential habitat for threatened species that may use or are likely to utilise the subject site.

Assessment of Significance (NSW BC Act 2016)

As per section 7.3 the *Biodiversity Conservation Act 2016*, the following factors must be taken into account when making a determination of an activity or development:

(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

Threatened species that may occur at the site are considered below:

Plants

Scientific Name	Common Name
Acacia bynoeana	Bynoe's Wattle
Darwinia peduncularis	Darwinia peduncularis
Eucalyptus alligatrix subsp. alligatrix	Eucalyptus alligatrix subsp. Alligatrix
Eucalyptus cannonii	Capertee Stringybark
Euphrasia arguta	Euphrasia arguta
Grevillea evansiana	Evans Grevillea
Grevillea obtusiflora	Grevillea obtusiflora
Persoonia hirsuta	Hairy Geebung
Persoonia marginata	Clandulla Geebung
Phebalium bifidum	Phebalium bifidum
Pomaderris brunnea	Brown Pomaderris



Prostanthera cryptandroides subsp. cryptandroides	Wollemi Mint-bush
Prostanthera stricta	Mount Vincent Mint-bush
Pultenaea sp. Olinda	Pultenaea sp. Olinda
Swainsona recta	Small Purple-pea
Swainsona sericea	Silky Swainson-pea

Random meander searching of the proposed development site was undertaken and areas of proposed disturbance were traversed looking for potential threatened species. No threatened plants were observed during the site visit. There are limitations to the site inspection – as some species may not have been encountered due to possible plant senescence, seasonal timing and existing vegetation obscuring visibility. The location of the site in a village setting with indicators of previous tree cutting and disturbance support a decreased likelihood that a threatened plant would exist at the site.

Birds of Prey

Scientific Name	Common Name
Circus assimilis	Spotted Harrier
Falco subniger	Black Falcon
Haliaeetus leucogaster	White-bellied Sea-Eagle
Hamirostra melanosternon	Black-breasted Buzzard
Hieraaetus morphnoides	Little Eagle
Lophoictinia isura	Square-tailed Kite

Birds of prey typically have large hunting ranges and can search for prey in cleared areas. This site is very small and exists surrounded by houses with distances of greater than 100 m to small adjacent patches of native vegetation. Proposed dwelling house construction will modify mainly groundcover vegetation but it is unlikely to have significant effects as it consists of a high proportion of exotic species.

Owls

Scientific Name	Common Name
Ninox connivens	Barking Owl
Ninox strenua	Powerful Owl
Tyto novaehollandiae	Masked Owl

Owls require mature trees with large hollows (more than 20 cm across) – no trees containing adequately sized hollows exist at the site.

Woodland Birds

Scientific Name	Common Name
Anthochaera phrygia	Regent Honeyeater
Aphelocephala leucopsis	Southern Whiteface
Artamus cyanopterus cyanopterus	Dusky Woodswallow
Chthonicola sagittata	Speckled Warbler
Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)
Daphoenositta chrysoptera	Varied Sittella
Glossopsitta pusilla	Little Lorikeet
Grantiella picta	Painted Honeyeater
Hirundapus caudacutus	White-throated Needletail
Lathamus discolor	Swift Parrot



Melanodryas cucullata cucullata	South-eastern Hooded Robin
Melithreptus gularis gularis	Black-chinned Honeyeater (eastern subspecies)
Neophema pulchella	Turquoise Parrot
Pachycephala inornata	Gilbert's Whistler
Petroica boodang	Scarlet Robin
Petroica phoenicea	Flame Robin
Pomatostomus temporalis temporalis	Grey-crowned Babbler (eastern subspecies)
Stagonopleura guttata	Diamond Firetail

Woodland birds require structural diversity in plant communities, flowering understorey plants and access to native grasses. Most of the site has introduced grassy groundcover. Eucalypts that produce high volumes of nectar such as mugga ironbark, white box and swamp mahogany do not occur at the site. Nor do stringybarks, other ironbarks or mistletoes. It is not expected that the three immature yellow box trees that exist at the site will need to be disturbed for house construction. As these types of resources either do not occur or will not be disturbed, the regent honeyeater, swift parrot, painted honeyeater, black-chinned honeyeater, turquoise parrot and little lorikeet are unlikely to be affected by activities at the site.

Smaller birds like the scarlet and flame robin appreciate an open grassy understorey with few scattered shrubs and abundant logs and fallen timber which are not characteristic of site features. Grass diversity and abundance is lacking at the site which would also limit the diamond firetail, dusky woodswallow and south-eastern hooded robin habitat availability.

The southern whiteface utilises mallee, mulga and saltbush forests and woodlands typical of more arid locations and this vegetation is not found at the site.

The speckled warbler requires a sparse shrub layer and large remnant parcels of native vegetation to be able to persist in an area so is unlikely to permanently inhabit the site. Woodlands dominated by stringybarks and other rough barked eucalypts without a dense shrub layer are required features for the brown treecreeper and varied sitella, which contrasts with available attributes, reducing the likelihood of their reliance on the site.

The small size of the site and isolation from other patches of woody vegetation mean grey-crowned babblers are unlikely to be able to utilise the subject land for breeding or foraging. Gilbert's whistler usually occurs in mallee shrublands, box-ironbark woodlands, cypress pine and belah woodlands and river red gum forests, none of which is the type of vegetation prevalent at the site.

The white throated needletails are migratory, not breeding in Australia and while they are largely aerial they sometimes utilise trees for roosting. Few trees at the site will be disturbed making any potential effect exceedingly small.

Due to the existing vegetation composition and condition, site location and the existing small extent of woody native plants, modification of site flora will be relatively minor in the landscape context and significant impacts on life cycle processes for these species are unlikely.

Cockatoos

Scientific Name	Common Name
Callocephalon fimbriatum	Gang-gang Cockatoo
Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo

Allocasuarinas, the preferred feed species for the glossy black cockatoo, are not on site and the lack of water access would limit site use by the gang-gang cockatoo. Changes to site ecological resources are therefore unlikely to reduce habitat required for these species.



Water Birds

Scientific NameCommon NameEpthianura albifronsWhite-fronted ChatIxobrychus flavicollisBlack BitternRostratula australisAustralian Painted Snipe

These birds require swamps, wetlands or ephemeral wet areas which do not exist at the site and will not be affected by site activities.

Amphibians

Scientific Name Mixophyes balbus Common Name Stuttering Frog

Found in rainforest or wet open forest, there are no areas that may support refuge for this frog and therefore no possible effect on its' life cycle.

Reptiles

Scientific Name Hoplocephalus bungaroides Common Name Broad-headed Snake

Shelters in rock crevices and under flat sandstone rocks on exposed cliff edges. As there is negligible habitat on site, adverse effects on the life cycle of such species, jeopardising a viable local population, is unlikely.

Mammals

Scientific Name	Common Name
Petauroides volans	Southern Greater Glider
Petaurus norfolcensis	Squirrel Glider
Dasyurus maculatus	Spotted-tailed Quoll
Phascolarctos cinereus	Koala

The site does not contain core koala habitat and there will be minimal disturbance to the existing trees. The gliders require tree spacing that allows movement between stems, nominally less than 50 m. As the site is isolated and surrounded by residential development, gliders would be unable to cross over to the subject land from the closest patch of remnant woody vegetation. The spotted tailed quoll requires rock platforms for den sites – no rock platforms occur at the site.

Bats

Scientific Name Chalinolobus dwyeri Falsistrellus tasmaniensis Micronomus norfolkensis Miniopterus australis Miniopterus orianae oceanensis Nyctophilus corbeni Pteropus poliocephalus Saccolaimus flaviventris Scoteanax rueppellii Common Name Large-eared Pied Bat Eastern False Pipistrelle Eastern Coastal Free-tailed Bat Little Bent-winged Bat Large Bent-winged Bat Corben's Long-eared Bat Grey-headed Flying-fox Yellow-bellied Sheathtail-bat Greater Broad-nosed Bat

The types of ecological resources used are tree hollows, loose bark, buildings or other man-made structures, caves and derelict mines. Food sources include beetles, moths, flying insects, nectar and pollen. There are no trees with hollows at the site and it is not expected changes to the subject vegetation would create a significant impact on any viable local population.



- (b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:
 - (i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or
 - (i) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.

The endangered ecological communities (EECs) identified as potentially occurring at the site are:

- Fuzzy Box Woodland on alluvial Soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions no fuzzy box trees occur at the site.
- Genowlan Point Allocasuarina nana Heathland vegetation at the site is not a dwarf low closed heath community dominated by *Allocasuarina nana*.
- 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 - the subject land does not contain white box or Blakely's red gum trees. Yellow box trees do occur but the other tree species (*Eucalyptus dawsonii, E. mannifera and E. rubida*) are not characteristic of box-gum grassy woodland, meaning this community does not occur on the subject land.

As these possible endangered or critically endangered ecological communities do not occur on the subject land there can be no effect on the extent or composition of any such community.

- (c) in relation to the habitat of a threatened species, population or ecological community:
 - (i) the extent to which habitat is likely to be removed or modified as a result of the action propose, and
 - (ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and
 - (iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality.

Disturbance resulting from the proposed development is minor as the majority of the vegetation at the site is exotic groundcover and the existing trees will have minimal disturbance. The site vegetation has reduced ecological value because in the landscape context it is surrounded by human development.

Additional fragmentation and isolation effects are minimal because the site already exists within village housing. The site is not connected to other remnant vegetation.

The vegetation that may be removed or impacted by site activities is not critically important because the majority of it is introduced groundcover plants. Also, the trees are immature and have not developed hollows to enhance the habitat value.



(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly).

There are no nearby declared areas of outstanding biodiversity value within or surrounding the subject site.

(e) whether the proposed development or activity constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process (KTP).

The KTPs applicable to this development include:

Clearing of native vegetation – the construction of a dwelling house may require the removal of some trees on the site but most of the trees will remain undisturbed. Construction effects will be very localised. The site exists in an area set aside for human habitation, with development already surrounding it, so the overall contribution to this KTP is minor.

Competition and environmental degradation by feral animals including the rabbit, fox, goat, deer, pig, dog, cat – the proposed activity will not introduce feral animals and will not improve any reproductive or competitive life cycle advantage for existing pest animals that may occur at the site.

High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition – the use of the site for a residential dwelling house is likely to reduce the frequency and potentially the severity of fire in the area. Therefore effects on life cycle processes for plants and animals will not be exacerbated by the proposed development.

Invasion and establishment of exotic plants, perennial grasses, vines and scramblers – Introduction of weedy species, garden escapee plants, non-native perennial grasses and foreign vines and scramblers is unlikely because the site is small and isolated from other remnant bushland patches, limiting pathways for invasive exotic plants to propagate in nearby native bush.

Loss of Hollow-bearing Trees - no hollow bearing trees exist at the site.

Removal of dead wood and dead trees –dead wood and dead trees are important for habitat and nutrient cycling for plants and animals but there is minimal occurrence of dead or fallen trees at the site. The small extent of the development means the contribution to this KTP is not significant.

Anthropogenic Climate Change – materials and construction processes to build a dwelling house will add to climate change effects. This contribution is minimised by using more sustainable building materials and principles, solar power options and water tanks for the residential arrangements and the use of emerging non-fossil fuel for vehicular transport. Any contribution to climate change effects would be negligible due to the scale of the project.

The proposed development will therefore not add significantly to any of the relevant KTPs.

Conclusion regarding significance under the NSW BC Act listed species, ecological communities or populations

As the proposed activities are being undertaken on areas of land meant for human habitation and the extent of possible clearing or thinning for the provision of the residential dwelling house is minor (1400 m²) significant impact to any threatened species or their habitat, EEC or CEEC is not expected and contribution to KTPs is negligible.



5. Summary

Table 3: Summary of environmental safeguards to be implemented

Safeguards for the proposed	work
General	All project workers will be inducted on the environmental sensitivities of the work site(s) and relevant safeguards prior to commencement. Removal of trees should only occur to the minimal necessary extent. Wherever possible conserve existing large diameter trees (dbh over 30 cm). Site management will comply with the provisions of Landcom's " <u>Blue Book</u> (Managing Urban Stormwater: Soils and construction - Volume 1 (4 th edition). Sediment will be prevented from moving off the site and no sediment laden water will enter drainage lines or watercourses. Any fuels or chemicals must be stored in bunded areas with functional spill kits and containment procedures available for use. Should unexpected, threatened fauna be located at any time during the work, work will stop to prevent further harm to the individual and professional advice will be sought. Works are not to harm threatened fauna or impede fauna movement. Construction machinery should be cleaned before entering and leaving the site to ensure biosecurity risks are minimised. Waste and excess materials should be removed to a licensed waste disposal facility and the site and ground surfaces restored at the completion of building activity.

6. Certification, Review and Decision

This Ecological Assessment Report (EAR) provides a true and fair review of the ecological attributes of the proposed development site and the proposal in relation to its potential effects on the environment. It addresses to the fullest extent possible all matters affecting or likely to affect the environment as a result of the proposal. It identifies the likely impacts of the proposal on the environment and details the environmental safeguards and mitigation measures to be implemented to minimise the potential impact to the environment. In light of the above assessment of the proposed activity, it is considered that the overall impact on the environment is likely to be minimal and therefore acceptable.

EAR Author

Name: Renae Hill

Title: Project Manager – Access Environmental Planning

Date: 15th August 2024



Reviewed by: Name: Liz Mansfield and Aaron Anane Title: Administration and Project Officer – Access Environmental Planning Date: 15th August 2024



7. References

- NSW Department of Environment and Climate Change (2008). Managing Urban Stormwater: Soils and construction - Volume 2C (Unsealed roads) (https://www.environment.nsw.gov.au/research-and-publications/publicationssearch/managing-urban-stormwater-soils-and-construction-volume-2c-unsealed-roads)
- NSW Department of Climate Change, Energy, the Environment and Water. (2024). Sharing and Enabling Environmental Data (SEED)
- NSW Department of Planning, Industry and Environment. (2021). Koala SEPP 2021 Factsheet. NSW Department of Planning, Industry and Environment.



Appendix A – Site Details

Waypoint (WP) details:

WP	Comments	Stem Size (cm)	Latitude	Longitude
10	Slaty gum dbh 20cm	20	-32.8050	149.97284
11	Slaty gum dbh 24cm	24	-32.8050	149.97286
12	<i>E. mannifera gum</i> dbh 30cm	30	-32.8050	149.97285
13	E. melliodora dbh 33cm	33	-32.8050	149.97276
14	E. melliodora dbh 23cm	23	-32.8050	149.97273
15	<i>E. mannifera</i> dbh 26 cm	26	-32.8050	149.97267
16	<i>E. rubida d</i> bh 50cm	50	-32.8051	149.97249
17	<i>E. rubida d</i> bh 20cm	20	-32.8051	149.97235
26	E. melliodora dbh 27cm	27	-32.8049	149.97245
37	<i>E. mannifera</i> dbh 30cm	30	-32.8051	149.97268
42	Slaty gum dbh 23cm	23	-32.8050	149.97265
44	Slaty gum dbh 36cm	36	-32.8051	149.97260



Appendix B – Bionet Atlas Search Results

Data from the BioNet Atlas website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°C; ^^ rounded to 0.01°C. Copyright the State of NSW through the Department of Planning, Industry and Environment. Search criteria : Public Report of all Valid Records of Threatened (listed on BC Act 2016) ,Commonwealth listed ,CAMBA listed ,JAMBA listed or ROKAMBA listed Entities in selected area [North: -32.75 West: 149.92 East: 150.02 South: -32.85] returned a total of 206 records of 13 species. Report generated on 9/05/2024 12:33 PM

Class	Species Code	Scientific Name	Common Name	NSW status	Comm. status	Records
Aves	0231	^^Hamirostra melanosternon	Black-breasted Buzzard	V,P,3		1
Aves	0246	^^Ninox connivens	Barking Owl	V,P,3		1
Aves	8127	Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)	V,P	V	5
Aves	0504	Chthonicola sagittata	Speckled Warbler	V,P		5
Aves	0380	Petroica boodang	Scarlet Robin	V,P		1
Aves	0652	Stagonopleura guttata	Diamond Firetail	V,P	V	3
Mammalia	1008	Dasyurus maculatus	Spotted-tailed Quoll	V,P	Е	2
Mammalia	1280	Pteropus poliocephalus	Grey-headed Flying-fox	V,P	V	1
Flora	9979	^^Pultenaea sp. Olinda		E1,3		1
Flora	3056	Swainsona recta	Small Purple-pea	E1	E	6
Flora	10949	Eucalyptus alligatrix subsp. alligatrix		V	V	171
Flora	8326	Eucalyptus cannonii	Capertee Stringybark	V		8
Flora	5954	Euphrasia arguta		E4A	CE	1

Fauna







Flora





Appendix C – Threatened Species Search

For the NSW South Western Slopes IBRA bioregion and Capertee Valley IBRA subregion:

Scientific Name	Common Name	Type Of Species	NSW Statu <u>s</u>	Occurrence
Acacia bynoeana	Bynoe's Wattle	Plant>Shrubs	Endangered	Known
Acacia meiantha	Barradam-bang Wattle	Plant>Shrubs	Endangered	Predicted
Anthochaera phrygia	Regent Honeyeater	Animal>Birds	Critically Endangered	Known
Aphelocephala leucopsis	Southern Whiteface	Animal>Birds	Vulnerable	Known
Artamus cyanopterus cyanopterus	Dusky Woodswallow	Animal>Birds	Vulnerable	Known
Astrotricha crassifolia	Thick-leaf Star-hair	Plant>Shrubs	Vulnerable	Predicted
Botaurus poiciloptilus	Australasian Bittern	Animal>Birds	Endangered	Predicted
Burhinus grallarius	Bush Stone-curlew	Animal>Birds	Endangered	Predicted
Caladenia attenuata	Duramana Fingers	Plant>Orchids	Critically Endangered	Predicted
Callocephalon fimbriatum	Gang-gang Cockatoo	Animal>Birds	Endangered	Known
Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo	Animal>Birds	Vulnerable	Known
Cercartetus nanus	Eastern Pygmy- possum	Animal>Marsupials	Vulnerable	Predicted
Chalinolobus dwyeri	Large-eared Pied Bat	Animal>Bats	Vulnerable	Known
Chthonicola sagittata	Speckled Warbler	Animal>Birds	Vulnerable	Known
Circus assimilis	Spotted Harrier	Animal>Birds	Vulnerable	Known
Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)	Animal>Birds	Vulnerable	Known
Daphoenositta chrysoptera	Varied Sittella	Animal>Birds	Vulnerable	Known
Darwinia peduncularis	Darwinia peduncularis	Plant>Shrubs	Vulnerable	Known
Dasyurus maculatus	Spotted-tailed Quoll	Animal>Marsupials	Vulnerable	Known
Ephippiorhynchus asiaticus	Black-necked Stork	Animal>Birds	Endangered	Predicted
Epthianura albifrons	White-fronted Chat	Animal>Birds	Vulnerable	Known
Eucalyptus aggregata	Black Gum	Plant>Trees	Vulnerable	Predicted
Eucalyptus alligatrix subsp. alligatrix	Eucalyptus alligatrix subsp. Alligatrix	Plant>Trees	Vulnerable	Known
Eucalyptus cannonii	Capertee Stringybark	Plant>Trees	Vulnerable	Known
Eucalyptus pulverulenta	Silver-leafed Gum	Plant>Mallees	Vulnerable	Predicted
Euphrasia arguta	Euphrasia arguta	Plant>Herbs and Forbs	Critically Endangered	Known
Falco subniger	Black Falcon	Animal>Birds	Vulnerable	Known
Falsistrellus tasmaniensis	Eastern False Pipistrelle	Animal>Bats	Vulnerable	Known
Glossopsitta pusilla	Little Lorikeet	Animal>Birds	Vulnerable	Known
Grantiella picta	Painted Honeyeater	Animal>Birds	Vulnerable	Known
Grevillea divaricata	Grevillea divaricata	Plant>Shrubs	Endangered	Predicted
Grevillea evansiana	Evans Grevillea	Plant>Shrubs	Vulnerable	Known
Grevillea obtusiflora	Grevillea obtusiflora	Plant>Shrubs	Endangered	Known



Grus rubicunda	Brolga	Animal>Birds	Vulnerable	Predicted
Haliaeetus leucogaster	White-bellied Sea- Eagle	Animal>Birds	Vulnerable	Known
Hamirostra melanosternon	Black-breasted Buzzard	Animal>Birds	Vulnerable	Known
Heleioporus australiacus	Giant Burrowing Frog	Animal>Amphibians	Vulnerable	Predicted
Hieraaetus morphnoides	Little Eagle	Animal>Birds	Vulnerable	Known
Hirundapus caudacutus	White-throated Needletail	Animal>Birds	Vulnerable	Known
Hoplocephalus bungaroides	Broad-headed Snake	Animal>Reptiles	Endangered	Known
Ixobrychus flavicollis	Black Bittern	Animal>Birds	Vulnerable	Known
Lathamus discolor	Swift Parrot	Animal>Birds	Endangered	Known
Leionema sympetalum	Rylstone Bell	Plant>Shrubs	Vulnerable	Predicted
Leucochrysum albicans subsp. tricolor	Hoary Sunray	Plant>Herbs and Forbs	Endangered	Predicted
Limosa limosa	Black-tailed Godwit	Animal>Birds	Vulnerable	Predicted
Litoria aurea	Green and Golden Bell Frog	Animal>Amphibians	Endangered	Predicted
Litoria booroolongensis	Booroolong Frog	Animal>Amphibians	Endangered	Predicted
Litoria littlejohni	Littlejohn's Tree Frog	Animal>Amphibians	Endangered	Predicted
Lophoictinia isura	Square-tailed Kite	Animal>Birds	Vulnerable	Known
Melanodryas cucullata cucullata	South-eastern Hooded Robin	Animal>Birds	Endangered	Known
Melithreptus gularis gularis	Black-chinned Honeyeater (eastern subspecies)	Animal>Birds	Vulnerable	Known
Micronomus norfolkensis	Eastern Coastal Free- tailed Bat	Animal>Bats	Vulnerable	Known
Miniopterus australis	Little Bent-winged Bat	Animal>Bats	Vulnerable	Known
Miniopterus orianae oceanensis	Large Bent-winged Bat	Animal>Bats	Vulnerable	Known
Mixophyes balbus	Stuttering Frog	Animal>Amphibians	Endangered	Known
Myotis macropus	Southern Myotis	Animal>Bats	Vulnerable	Predicted
Neophema pulchella	Turquoise Parrot	Animal>Birds	Vulnerable	Known
Ninox connivens	Barking Owl	Animal>Birds	Vulnerable	Known
Ninox strenua	Powerful Owl	Animal>Birds	Vulnerable	Known
Nyctophilus corbeni	Corben's Long-eared Bat	Animal>Bats	Vulnerable	Known
Pachycephala inornata	Gilbert's Whistler	Animal>Birds	Vulnerable	Known
Paralucia spinifera	Purple Copper Butterfly, Bathurst Copper Butterfly	Animal>Invertebrates	Endangered	Predicted
Persoonia hirsuta	Hairy Geebung	Plant>Shrubs	Endangered	Known
Persoonia marginata	Clandulla Geebung	Plant>Shrubs	Vulnerable	Known
Petauroides volans	Southern Greater Glider	Animal>Marsupials	Endangered	Known
Petaurus australis	Yellow-bellied Glider	Animal>Marsupials	Vulnerable	Predicted
Petaurus norfolcensis	Squirrel Glider	Animal>Marsupials	Vulnerable	Known
Petrogale penicillata	Brush-tailed Rock- wallaby	Animal>Marsupials	Endangered	Predicted



Petroica boodang	Scarlet Robin	Animal>Birds	Vulnerable	Known
Petroica phoenicea	Flame Robin	Animal>Birds	Vulnerable	Known
Phascogale tapoatafa	Brush-tailed Phascogale	Animal>Marsupials	Vulnerable	Predicted
Phascolarctos cinereus	Koala	Animal>Marsupials	Endangered	Known
Phebalium bifidum	Phebalium bifidum	Plant>Shrubs	Endangered	Known
Pomaderris brunnea	Brown Pomaderris	Plant>Shrubs	Endangered	Known
Pomaderris cotoneaster	Cotoneaster Pomaderris	Plant>Shrubs	Endangered	Predicted
Pomatostomus temporalis temporalis	Grey-crowned Babbler (eastern subspecies)	Animal>Birds	Vulnerable	Known
Prasophyllum petilum	Tarengo Leek Orchid	Plant>Orchids	Endangered	Predicted
Prostanthera cryptandroides subsp. cryptandroides	Wollemi Mint-bush	Plant>Shrubs	Vulnerable	Known
Prostanthera stricta	Mount Vincent Mint- bush	Plant>Shrubs	Vulnerable	Known
Pseudophryne australis	Red-crowned Toadlet	Animal>Amphibians	Vulnerable	Predicted
Pteropus poliocephalus	Grey-headed Flying- fox	Animal>Bats	Vulnerable	Known
Pultenaea sp. Genowlan Point	Pultenaea sp. Genowlan Point	Plant>Shrubs	Critically Endangered	Predicted
Pultenaea sp. Olinda	Pultenaea sp. Olinda	Plant>Shrubs	Endangered	Known
Rostratula australis	Australian Painted Snipe	Animal>Birds	Endangered	Known
Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Animal>Bats	Vulnerable	Known
Scoteanax rueppellii	Greater Broad-nosed Bat	Animal>Bats	Vulnerable	Known
Stagonopleura guttata	Diamond Firetail	Animal>Birds	Vulnerable	Known
Swainsona recta	Small Purple-pea	Plant>Herbs and Forbs	Endangered	Known
Swainsona sericea	Silky Swainson-pea	Plant>Herbs and Forbs	Vulnerable	Known
Thesium australe	Austral Toadflax	Plant>Herbs and Forbs	Vulnerable	Predicted
Tyto novaehollandiae	Masked Owl	Animal>Birds	Vulnerable	Known
Tyto tenebricosa	Sooty Owl	Animal>Birds	Vulnerable	Predicted
Varanus rosenbergi	Rosenberg's Goanna	Animal>Reptiles	Vulnerable	Predicted
Veronica blakelyi	Veronica blakelyi	Plant>Shrubs	Endangered	Predicted
Vespadelus troughtoni	Eastern Cave Bat	Animal>Bats	Vulnerable	Predicted

Fuzzy Box Woodland on alluvial Soils of the South Western Slopes, Darling
Riverine Plains and Brigalow Belt South BioregionsEECKnownGenowlan Point Allocasuarina nana HeathlandEECKnownWhite Box - Yellow Box - Blakely's Red Gum Grassy Woodland and
Derived Native Grassland in the NSW North Coast, New EnglandCritically
EECKnownTableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern
Highlands, NSW South Western Slopes, South East Corner and RiverinaEECKnown

Bioregions



Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners, Manorina melanocephala (Latham, 1802)	KTP	Predicted
Alteration of habitat following subsidence due to longwall mining	KTP	Predicted
Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands	KTP	Predicted
Anthropogenic Climate Change	KTP	Predicted
Bushrock removal	KTP	Predicted
Clearing of native vegetation	KTP	Predicted
Competition and grazing by the feral European Rabbit, Oryctolagus cuniculus (L.)	KTP	Predicted
Competition and habitat degradation by Feral Goats, Capra hircus Linnaeus 1758	KTP	Predicted
Competition from feral honey bees, Apis mellifera L.	KTP	Predicted
Forest eucalypt dieback associated with over-abundant psyllids and Bell Miners	KTP	Predicted
Habitat degradation and loss by Feral Horses (brumbies, wild horses), Equus caballus Linnaeus 1758	KTP	Predicted
Herbivory and environmental degradation caused by feral deer	KTP	Predicted
High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition	KTP	Predicted
Importation of Red Imported Fire Ants Solenopsis invicta Buren 1972	KTP	Predicted
Infection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populations	KTP	Predicted
Infection of frogs by amphibian chytrid causing the disease chytridiomycosis	KTP	Predicted
Infection of native plants by Phytophthora cinnamomi	KTP	Predicted
Introduction of the Large Earth Bumblebee Bombus terrestris (L.)	KTP	Predicted
Invasion and establishment of exotic vines and scramblers	KTP	Predicted
Invasion and establishment of Scotch Broom (Cytisus scoparius)	KTP	Predicted
Invasion and establishment of the Cane Toad (Bufo marinus)	KTP	Predicted
Invasion of native plant communities by African Olive Olea europaea subsp. cuspidata (Wall. ex G. Don) Cif.	KTP	Predicted
Invasion of native plant communities by Chrysanthemoides monilifera	KTP	Predicted
Invasion of native plant communities by exotic perennial grasses	KTP	Predicted
Invasion of the Yellow Crazy Ant, Anoplolepis gracilipes (Fr. Smith) into NSW	KTP	Predicted
Invasion, establishment and spread of Lantana (Lantana camara L. sens. Lat)	КТР	Predicted
Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants	KTP	Predicted
Loss of Hollow-bearing Trees	KIP	Predicted
Loss or degradation (or both) of sites used for hill-topping by butterflies	KTP	Predicted
Predation and hybridisation by Feral Dogs, Canis lupus familiaris	КТР	Predicted
Predation by Gambusia holbrooki Girard, 1859 (Plague Minnow or Mosquito Fish)	KTP	Predicted
Predation by the European Red Fox Vulpes Vulpes (Linnaeus, 1758)	KTP	Predicted
Predation by the Feral Cat Felis catus (Linnaeus, 1758)	KTP	Predicted
Predation, habitat degradation, competition and disease transmission by Feral Pigs, Sus scrofa Linnaeus 1758	KTP	Predicted
Removal of dead wood and dead trees	KTP	Predicted



Appendix D – Protected Matters Search

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: 09-May-2024

Summary Details Matters of NES Other Matters Protected by the EPBC Act Extra Information Caveat Acknowledgements

<u>World Heritage Properties:</u>	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	4
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	42
Listed Migratory Species:	11

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	19
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None



Wetlands of International Importance (Ramsar Wetlands)		[Resource Information]
Ramsar Site Name	Proximity	Buffer Status
Banrock station wetland complex	900 - 1000km upstream from Ramsar site	In feature area
Riverland	800 - 900km upstream from Ramsar site	In feature area
The coorong, and lakes alexandrina and albert wetland	1000 - 1100km upstream from Ramsar site	In feature area
<u>The macquarie marshes</u>	200 - 300km upstream from Ramsar site	In feature area
Threatened Ecological Communities		[Resource Info

Listed Threatened Ecological Communities

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
<u>Natural Temperate Grassland of the</u> <u>South Eastern Highlands</u>	Critically Endangered	Community may occur within area
<u>White Box-Yellow Box-Blakely's Red</u> <u>Gum Grassy Woodland and Derived</u> <u>Native Grassland</u>	Critically Endangered	Community may occur within area

Listed Threatened Species

Species ID	Scientific Name	Common Name	Class	Simple Presence	Threatened Category
84745	Galaxias rostratus	Flathead Galaxias, Beaked Minnow, Flat-headed Galaxias, Flat-headed Jollytail, Flat-headed Minnow	Fish	May	CE
4325	Euphrasia arguta	null	Plant	May	CE
744	Lathamus discolor	Swift Parrot	Bird	May	CE
82338	Anthochaera phrygia	Regent Honeyeater	Bird	Known	CE
81964	Prasophyllum sp. Wybong (C.Phelps ORG 5269)	a leek-orchid	Plant	May	CE
856	Calidris ferruginea	Curlew Sandpiper	Bird	May	CE
55144	Prasophyllum petilum	Tarengo Leek Orchid	Plant	May	E
75184	Dasyurus maculatus maculatus (SE mainland population)	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population)	Mammal	Likely	E
7580	Swainsona recta	Small Purple-pea, Mountain Swainson-pea, Small Purple Pea	Plant	May	E



768	Callocephalon fimbriatum	Gang-gang Cockatoo	Bird	Likely	E
77037	Rostratula australis	Australian Painted Snipe	Bird	Likely	E
67093	Melanodryas cucullata cucullata	South-eastern Hooded Robin, Hooded Robin (south-eastern)	Bird	Likely	E
89104	Leucochrysum albicans subsp. tricolor	Hoary Sunray, Grassland Paper- daisy	Plant	May	E
183	Chalinolobus dwyeri	Large-eared Pied Bat, Large Pied Bat	Mammal	Likely	E
26171	Maccullochella macquariensis	Trout Cod	Fish	May	E
66632	Macquaria australasica	Macquarie Perch	Fish	May	E
1844	Litoria booroolongensis	Booroolong Frog	Frog	Likely	E
1001	Botaurus poiciloptilus	Australasian Bittern	Bird	May	E
85104	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	Mammal	Likely	E
96	Pseudomys novaehollandiae	New Holland Mouse, Pookila	Mammal	May	V
87600	Petaurus australis australis	Yellow-bellied Glider (south- eastern)	Mammal	May	V
12974	Homoranthus darwinioides	null	Plant	Likely	V
67036	Calyptorhynchus Iathami lathami	South-eastern Glossy Black- Cockatoo	Bird	Likely	V
525	Pycnoptilus floccosus	Pilotbird	Bird	May	V
1649	Delma impar	Striped Legless Lizard, Striped Snake-lizard	Reptile	Likely	V
15202	Thesium australe	Austral Toadflax, Toadflax	Plant	May	V
863	Gallinago hardwickii	Latham's Snipe, Japanese Snipe	Bird	May	V
529	Aphelocephala leucopsis	Southern Whiteface	Bird	Likely	V
934	Leipoa ocellata	Malleefowl	Bird	May	V
14159	Dichanthium setosum	bluegrass	Plant	Likely	V
83395	Nyctophilus corbeni	Corben's Long-eared Bat, South- eastern Long-eared Bat	Mammal	May	V
186	Pteropus poliocephalus	Grey-headed Flying-fox	Mammal	May	V
874	Calidris acuminata	Sharp-tailed Sandpiper	Bird	May	V
67062	Climacteris picumnus victoriae	Brown Treecreeper (south-eastern)	Bird	Likely	V
16845	Pomaderris brunnea	Rufous Pomaderris, Brown Pomaderris	Plant	May	V
738	Polytelis swainsonii	Superb Parrot	Bird	Likely	V
59398	Stagonopleura guttata	Diamond Firetail	Bird	Known	V
470	Grantiella picta	Painted Honeyeater	Bird	Likely	V
929	Falco hypoleucos	Grey Falcon	Bird	Likely	V
726	Neophema chrysostoma	Blue-winged Parrot	Bird	May	V



1665	Aprasia parapulchella	Pink-tailed Worm-lizard, Pink- tailed Legless Lizard	Reptile	Likely	V
682	Hirundapus caudacutus	White-throated Needletail	Bird	Likely	V

Listed Migratory Species

Species ID	Scientific Name	Common Name	Presence Text	Threatened Category
863	Gallinago hardwickii	Latham's Snipe, Japanese Snipe	Species or species habitat may occur within area	Vulnerable
678	Apus pacificus	Fork-tailed Swift	Species or species habitat likely to occur within area	
612	Myiagra cyanoleuca	Satin Flycatcher	Species or species habitat likely to occur within area	
592	Rhipidura rufifrons	Rufous Fantail	Species or species habitat likely to occur within area	
609	Monarcha melanopsis	Black-faced Monarch	Species or species habitat may occur within area	
874	Calidris acuminata	Sharp-tailed Sandpiper	Species or species habitat may occur within area	Vulnerable
59309	Actitis hypoleucos	Common Sandpiper	Species or species habitat may occur within area	
856	Calidris ferruginea	Curlew Sandpiper	Species or species habitat may occur within area	Critically Endangered
858	Calidris melanotos	Pectoral Sandpiper	Species or species habitat may occur within area	
682	Hirundapus caudacutus	White-throated Needletail	Species or species habitat known to occur within area	Vulnerable
644	Motacilla flava	Yellow Wagtail	Species or species habitat may occur within area	



Appendix E – Assessment of Significance - EPBC

Assessment of Significance (Commonwealth EPBC Act 1999)

As per Part 3 of the Environment Protection and *Biodiversity Conservation Act 2016*, the following factors must be taken into account when making considering whether the matter is a controlled activity and whether the matter needs to be referred to the Commonwealth Minister for the Environment:

(a) Are there any matters of national environmental significance located in the area of the proposed action?

The protected matters search listed 2 possible endangered ecological communities (EEC) and 42 threatened species (9 plant species and 33 animal species) that may occur in the area.

Of the 2 potential EEC:

Natural Temperate Grassland of the South Eastern Highlands (critically endangered)

White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (critically endangered)

- the species composition and structure of the vegetation on site does not satisfy the characteristics of any of these communities and they do not occur on the subject land.

(b) Considering the proposed action at its broadest scope (that is, considering all stages and components of the action, and all related activities and infrastructure), is there potential for impacts, including indirect impacts, on matters of national environmental significance?

Potential impacts are minor due to the small scale of disturbance and the vegetation at the site being composed of predominantly exotic groundcover with a small number of immature native trees, without nests or hollows.

(c) Are there any proposed measures to avoid or reduce impacts on matters of national environmental significance (and if so, is the effectiveness of these measures certain enough to reduce the level of impact below the 'significant impact' threshold)?

Standard sediment and erosion control measures which are industry accepted best practice.

(d) Are any impacts of the proposed action on matters of national environmental significance likely to be significant impacts (important, notable, or of consequence, having regard to their context or intensity)?

There will be no significant impacts on matters of national significance.

Species ID	Scientific Name	Common Name	Class
81964	Prasophyllum sp. Wybong (C.Phelps ORG 5269)	a leek-orchid	Plant
84745	Galaxias rostratus	Flathead Galaxias, Beaked Minnow, Flat-headed Galaxias, Flat-headed Jollytail, Flat-headed Minnow	Fish
4325	Euphrasia arguta	null	Plant
744	Lathamus discolor	Swift Parrot	Bird
856	Calidris ferruginea	Curlew Sandpiper	Bird
82338	Anthochaera phrygia	Regent Honeyeater	Bird

Critically endangered species:



Endangered species:					
Species ID	Scientific Name	Common Name	Class		
183	Chalinolobus dwyeri	Large-eared Pied Bat, Large Pied Bat	Mammal		
89104	Leucochrysum albicans subsp. tricolor	Hoary Sunray, Grassland Paper-daisy	Plant		
77037	Rostratula australis	Australian Painted Snipe	Bird		
7580	Swainsona recta	Small Purple-pea, Mountain Swainson-pea, Small Purple Pea	Plant		
75184	Dasyurus maculatus maculatus (SE mainland population)	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population)	Mammal		
768	Callocephalon fimbriatum	Gang-gang Cockatoo	Bird		
67093	Melanodryas cucullata cucullata	South-eastern Hooded Robin, Hooded Robin (south-eastern)	Bird		
26171	Maccullochella macquariensis	Trout Cod	Fish		
66632	Macquaria australasica	Macquarie Perch	Fish		
1844	Litoria booroolongensis	Booroolong Frog	Frog		
85104	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	Mammal		
55144	Prasophyllum petilum	Tarengo Leek Orchid	Plant		
1001	Botaurus poiciloptilus	Australasian Bittern	Bird		

Significant Impact Criteria for Critically Endangered and Endangered Species

a. Will it lead to a long-term decrease in the size of a population of a species

There is no known population of any such species at the site.

b. Will it reduce the area of occupancy of the species

Not applicable (N/A).

c. Will it fragment an existing important population into two or more populations N/A.

d. Will it adversely affect habitat critical to the survival of a species

No.

e. Will it disrupt the breeding cycle of a population

Breeding resources at the site are inadequate.

f. Will it modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline

The extent of habitat modification is small and there are no known populations of threatened species.



g. Will it result in invasive species that are harmful to a critically endangered or endangered species becoming established in the critically endangered or endangered species' habitat

Proposed site use will not increase the prevalence of invasive species.

h. Will it introduce disease that may cause the species to decline, or

Proposed site use will not introduce disease.

i. Will it interfere substantially with the recovery of the species?

N/A

Vulnerable species:

Species ID	Scientific Name	Common Name	Class
12974	Homoranthus darwinioides	null	Plant
96	Pseudomys novaehollandiae	New Holland Mouse, Pookila	Mammal
67062	Climacteris picumnus victoriae	Brown Treecreeper (south-eastern)	Bird
863	Gallinago hardwickii	Latham's Snipe, Japanese Snipe	Bird
67036	Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo	Bird
186	Pteropus poliocephalus	Grey-headed Flying-fox	Mammal
738	Polytelis swainsonii	Superb Parrot	Bird
529	Aphelocephala leucopsis	Southern Whiteface	Bird
934	Leipoa ocellata	Malleefowl	Bird
525	Pycnoptilus floccosus	Pilotbird	Bird
1665	Aprasia parapulchella	Pink-tailed Worm-lizard, Pink-tailed Legless Lizard	Reptile
14159	Dichanthium setosum	bluegrass	Plant
1649	Delma impar	Striped Legless Lizard, Striped Snake-lizard	Reptile
874	Calidris acuminata	Sharp-tailed Sandpiper	Bird
87600	Petaurus australis australis	Yellow-bellied Glider (south-eastern)	Mammal
16845	Pomaderris brunnea	Rufous Pomaderris, Brown Pomaderris	Plant
59398	Stagonopleura guttata	Diamond Firetail	Bird
470	Grantiella picta	Painted Honeyeater	Bird
83395	Nyctophilus corbeni	Corben's Long-eared Bat, South-eastern Long-eared Bat	Mammal
929	Falco hypoleucos	Grey Falcon	Bird
726	Neophema chrysostoma	Blue-winged Parrot	Bird
15202	Thesium australe	Austral Toadflax, Toadflax	Plant
682	Hirundapus caudacutus	White-throated Needletail	Bird



Si	gnificant Impact Criteria for Vulnerable Species
a.	Will it lead to a long-term decrease in the size of an important population of a species
Th	e site does not contain or support an important population.
b.	Will it reduce the area of occupancy of an important population
Pro po	pposed site activities may impact a minimal number of native trees but no important pulation of threatened species has been identified.
c.	Will it fragment an existing important population into two or more populations
lt v	vill not fragment an existing important population.
d.	Will it adversely affect habitat critical to the survival of a species
Th sp ha	e site is a small patch of vegetation existing in a town residential area and due to ecies composition, immature tree growth and site location it does not represent bitat critical to the survival of a species.
e.	Will it disrupt the breeding cycle of an important population
Ec rip:	ological resources important for breeding (nests, hollows, remnant dead wood and arian zones) will not be affected by the proposed site activities.
f.	Will it modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline
Th of val	e effects of proposed site use on habitat quality and quantity will be minor because exotic species incursion and young woody vegetation having reduced ecological ue.
g.	Will it result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat
Inv act	asive species will not be encouraged by proposed site activities and may be ively controlled to reduce pest numbers.
h.	Will it introduce disease that may cause the species to decline, or
Th a v	e activity is unlikely to introduce or spread disease that would result in the decline of rulnerable species
i. N//	Will it interfere substantially with the recovery of the species?

No EPBC listed critically endangered or endangered ecological communities exist at the site.

Significant Impact Criteria for Critically Endangered and Endangered Communities

- a. Will it reduce the extent of an ecological community
- b. Will it fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines
- c. Will it adversely affect habitat critical to the survival of an ecological community
- d. Will it modify, destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival. including reduction of groundwater levels, or substantial alteration of surface water drainage patterns
- e. Will it cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting



- f. Will it cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to
 - Assisting invasive species, which are harmful to the listed ecological community, to become established, or
 - Causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community.
- g. Will it interfere with the recovery of an ecological community?

Conclusion regarding significance under the Commonwealth EPBC Act listed species, ecological communities or populations.

The Protected Matters Report listed potential for 42 threatened species, 11 migratory species and 2 threatened ecological communities to utilize the site.

Works are unlikely to have a significant impact on a threatened species due to the small size of the disturbance. No endangered ecological community was observed at the site.

Remnant woody vegetation would be reduced by a minor extent – with potential disturbance to a 1400 m² area of mostly exotic groundcover and limited impact to a small number of endemic trees.

Additional fragmentation effects are limited because the location is already compromised by surrounding housing and human development.

Potential adverse effects to important habitat are not significant in the context of the existing landscape.

The planned site activities will not influence or disrupt breeding cycles for any threatened species or entities in an endangered community.

Habitat will not be modified, destroyed, removed or isolated to the extent that a species or ecological community will decline markedly or lose structure or functionality.

Invasive species will not be assisted in access or reproduction success or be provided with any competitive advantage through proposed site development or ongoing use.

Proposed works will not introduce disease or increase the potential for fertilizer, herbicides, chemicals or pollutants to accumulate in more biologically sensitive areas.

The proposed development is to be conducted on previously modified land that is zoned for village purposes. Given that activities will modify an isolated, small patch of vegetation it is highly unlikely that any of the listed species will be impacted by the proposed site use.



Appendix F – Council LEP Maps



Figure 5: Terrestrial biodiversity sensitivity, not identified at the site.

Ecological Assessment: Report: 9 Armstrong Street