Greenway Park Public School Upgrade - Flora and Fauna Assessment

Department of Education NSW

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Template 2.8.1

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Abbreviations

Abbreviation	Description
BAM	Biodiversity Assessment Method 2020
BC Act	NSW *Biodiversity Conservation Act 2016*
BDAR	Biodiversity Development Assessment Report
Biodiversity and Conservation SEPP	*State Environmental Planning Policy (Biodiversity and Conservation) 2021*
BOS	Biodiversity Offsets Scheme
DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment, and Water
DoE	NSW Department of Education
DP	Deposited Plan
ELA	Eco Logical Australia Pty Ltd
EP&A Act	NSW *Environmental Planning and Assessment Act 1979*
EP&A Regulation	NSW *Environmental Planning and Assessment Regulations 2021*
EPBC Act	Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*
FFA	Flora and Fauna Assessment
FM Act	NSW *Fisheries Management Act 1994*
GIS	Geographic Information Systems
LGA	Local Government Area
LEP	Local Environmental Plan
MNES	Matters of National Environmental Significance
NSW	New South Wales
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment, and Water
PCT	Plant Type Community
PMST	Protected Matters Search Tool
REF	Review of Environmental Factors
SAII	Serious and Irreversible Impacts
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SINSW	School Infrastructure NSW
SSD	State Significant Development
SIS	Species Impact Statement
SPRAT	Species Profile and Threats
SVTM	State Vegetation Type Mapping
TEC	Threatened ecological community

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Abbreviation	Description
WM Act	NSW *Water Management Act 2000*

Executive Summary

Eco Logical Australia Pty Ltd (ELA) was engaged by RP Infrastructure on behalf of NSW Department of Education (DoE) to prepare a Flora and Fauna Assessment (FFA) report for the Greenway Park Public School at Wyattville Drive, West Hoxton, NSW (the 'study area'). DoE intend to upgrade Greenway Park Public School including the construction of one (1) new classroom building, one (1) new preschool building, a covered walkway and additional axillary structures as well as earthworks associated with new buildings, trenching and installation of underground services, and landscaping. The activity also includes tree removal. This ecological assessment will be used to support a Review of Environmental Factors (REF) under Part 5 of the *Environmental Planning and Assessment Act 1979 (EP&A Act)* and the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (SEPP TI).

To enable the proposed activity to proceed, seven (7) portable classrooms, associated walkways, a shade structure and associated concrete slab have been removed from site and five (5) new portable classrooms and associated walkways have been installed adjacent to Block F under a separate planning pathway. Three trees were removed to accommodate the new portable classrooms. These works were undertaken under separate planning pathway, they do not form part of this REF application and have not been assessed in this report.

This report has assessed the potential impacts of the proposed works on flora and fauna species listed under the NSW *Biodiversity Conservation Act 2016* (BC Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). ELA completed a field survey during the preparation of the Biodiversity Preliminary Review Due Diligence report (ELA 2023) for DoE. Information gathered during the preparation of the previous report was used and updated desktop assessments were completed to assess the impacts of the proposed activity. Additionally, an Arboricultural Impact Assessment and Tree Protection Specification report (Laurence & Co 2025) was prepared for the study area which was reviewed to assess vegetation proposed for removal during the proposed upgrade.

Vegetation validation, undertaken by ELA (2023) for the preliminary biodiversity report, did not identify the presence of remnant native vegetation within the study area. Vegetation within the study area occurred as either planted native or planted exotic vegetation. No threatened fauna or flora species have previously been recorded from BioNet records or during field surveys in the study area. At the time of field survey in 2023, it was identified that planted native vegetation within the study area offers occasional foraging habitat for mobile threatened species, such as *Pteropus poliocephalus* (Grey-headed Flying-fox) and *Lathamus discolor* (Swift Parrot).

The study area contains approximately 0.37 ha of planted native vegetation and 0.13 ha of planted exotic vegetation. The impact assessment the proposed activity will result in the removal of approximately 0.08 ha of planted native vegetation and 0.01 ha of exotic vegetation.

The potential impact of the proposed activity to threatened species and communities listed under the BC Act and EPBC Act was assessed by undertaking a Likelihood of Occurrence Assessment for threatened ecological communities and threatened and migratory species identified from the database search. Tests of Significance under the BC Act and Assessments of Significance under the EPBC Act were required for Grey-headed Flying-fox and Swift Parrot due to the findings of the due to the findings of the likelihood of occurrence assessment and field survey undertaken in 2023, which identified potential

marginal foraging habitat for these species. The results of these tests identified that the proposed activity is unlikely to have a significant impact on either Grey-headed Flying-fox or Swift Parrot.

Mitigation measures and recommendations have been provided to prevent direct or indirect impacts to planted native vegetation adjacent to the proposed works, within the study area (Section 6). Following these mitigation measures, it is unlikely the proposed activity will have a significant effect on biodiversity values.

1. Introduction

1.1. Purpose of this report

This Flora and Fauna Assessment (FFA) report has been prepared to accompany a Review of Environmental Factors (REF) prepared for the Department of Education (DoE) relating to the Greenway Park Public School Upgrade (the activity) under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and *State Environmental Planning Policy (Transport and Infrastructure) 2021* (SEPP TI).

This document has been prepared in accordance with the *Guidelines for Division 5.1 assessments – Consideration of environmental health facilities and schools, Addendum October 2025* (the Guidelines) by the Department of Planning, Housing and Infrastructure (DHI).

This report examines and considers the relevant environmental factors in the Guidelines and *Environmental Planning and Assessment Regulations 2021* (EP&A Regulation) under Section 170, Section 171 and Section 171A of the EP&A Regulation. Those relevant to this FFA are presented in Table 1.

The purpose of this FFA is to assess the potential impacts of the proposed work, on threatened species and ecological communities listed under the NSW *Biodiversity Conservation Act 2016* (BC Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

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Table 1: Summary of relevant section of the Part 5 Guidelines and EP&A Regulation.

Regulation / Guidelines Section	Requirement	Response	Report Section
171 (2) (c) the environmental impact on the ecosystems of the locality	(c1) impact on the existing and future ecosystem (flora, fauna, habitats, biodiversity, ecological integrity, biological diversity, connectivity/fragmentation, air, water including hydrology, soil) (c2) long- and short-term impact of: i. loss or harm to trees or other vegetation ii. removed canopy cover iii. landscape setting in respect of the site and streetscape iv. impacts of the above on urban heat island effect and urban and internal comfort levels on-and off-site (c3) impact from introducing new trees and vegetation species (c4) cumulative impacts on the ecosystem	Vegetation to be affected by the activity consists of planted native vegetation. No remnant native vegetation is proposed to be impacted. Loss of trees should be offset by proposed landscaping plans.	Whole report.
171 (2) (f) the impact on the habitat of protected animals, within the meaning of the *Biodiversity Conservation Act 2016*	(f1) impacts on listed protected fauna at and in the vicinity of the site, and their habitat.	No threatened fauna was identified during field surveys. It is considered unlikely threatened fauna would regularly utilize vegetation within the site for foraging or breeding. It is recommended prior to the removal of vegetation that a pre-clearance survey be conducted by an ecologist or suitably qualified personnel to identify whether threatened fauna are utilizing vegetation to be removed.	Section 4.1.4 Section 4.2.3 Appendix A
171 (2) (g) the endangering of a species of animal, plant or other form of life, whether living on land, in water or in the air	(g1) potential endangering of any species or vegetation (g2) protected and threatened flora, terrestrial, fauna species, populations, ecological communities and their habitats	Vegetation to be affected by the activity consists of planted native vegetation. No remnant native vegetation is proposed to be impacted. No threatened flora, fauna or ecological communities were identified during field surveys. It is recommended prior to the removal of vegetation that a pre-clearance survey	Section 4.1.4 Section 4.2.3 Appendix A

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Regulation / Guidelines Section	Requirement	Response	Report Section
		be conducted by an ecologist or suitably qualified personnel to identify whether threatened fauna are utilizing vegetation to be removed.	
171 (2) (h) long-term effects on the environment	(h1) Long-term effects on: v. flood and bushfire behaviour, flooding and the flood plain, bushfire prone land vi. natural environment, flora and fauna species and their habitats vii. agricultural productivity viii. industrial land supply ix. housing supply x. climate change xi. cumulative impacts (h2) meet industry recognised building sustainability and environmental performance standards, integrate environmental design, minimise greenhouse gas emissions, minimise energy and water consumption (recycled water) and material resources, renewable energy generation and storage, fossil fuel-free, sustainable travel choices, manage, reuse, recycle and safely dispose of waste (h3) long term ecological, social and economic effects	Vegetation to be affected by the activity consists of planted native or planted exotic vegetation. Loss of trees should be offset by proposed landscaping plans. No threatened flora or fauna identified during field survey. It is recommended prior to the removal of vegetation that a pre-clearance survey be conducted by an ecologist or suitably qualified personnel to identify whether threatened fauna are utilizing vegetation to be removed.	Section 4.2.1 Section 4.2 Section 6

1.2. Documentation review

The following plans/ reports identified in Table 2 have been reviewed to inform the assessment contained within this report:

Table 2: Plans and reports reviewed

Discipline	Document name	Revision	Date
Ecology	*Biodiversity Due Diligence – Preliminary Review – Greenway Park Public School*	2	27 September 2023
Arboriculture	*Arboricultural Impact Assessment and Tree Protection Specification*	1.3	3 April 2025
Planning	*Existing Site Plan*	9	14 February 2025
Planning	*Demolition Site Plan*	5	6 March 2025
Planning	*Proposed Site Plan*	14	14 March 2025
Planning	*Landscape Plan*	G	3 April 2025

1.3. Proposed activity description

1.3.1. Overview of the proposed activity

The proposed activity for the Greenway Park Public School Upgrade includes demolition of ancillary structures, removal of trees as well as the construction and occupation of a single-storey classroom building, associated covered walkways, and landscaping. The activity includes the following:

Demolition/ earthworks:

- Demolish part of boundary fence on Chapman Street for new vehicular crossover.
- Demolish parts of boundary fence on Chapman Street for new gates.
- Demolish shade structure and associated concrete slab and footpath.
- Demolish footpaths.
- Tree removal.
- Trenching for underground services; and
- Earthworks associated with new buildings and landscaping.

Construction and operation:

- Construction and operation of single storey classroom building with associated covered walkways.
- Construction and operation of a new preschool building, including covered walkways.
- new carpark (12 spaces and one (1) accessible space) and vehicular crossover to Chapman Street.
- Installation of artwork on Block H and Block J façades, as well as a preschool retaining wall.

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- Laying of services within trenches.
- New pedestrian entry points.
- Fencing and gates.
- Underground OSD tanks.
- Rainwater tanks.
- Shed for preschool.
- Outdoor play equipment for the preschool.
- New fire hydrant booster & associated building services connections.
- Retaining walls associated with the preschool.
- Signage.
- Landscaping.
- Associated earthworks.

Figure 2 below shows the proposed site plans (by Fulton trotter Architects 2025a) and Figure 3 illustrates the demolition plans (by Fulton trotter Architects 2025b) of the proposed activity, including tree removal.

1.3.2. Works to be undertaken under separate Planning Pathway (not part of this REF)

To enable the proposed activity to proceed, seven (7) portable classrooms, associated walkways, a shade structure and associated concrete slab have been removed from site and five (5) new portable classrooms and associated walkways have been installed adjacent to Block F under a separate planning pathway. Three trees were removed to accommodate the new portable classrooms. These works were undertaken under separate planning pathway, they do not form part of this REF application and have not been assessed in this report.

1.4. Activity Site

Greenway Park Public School (from here on referred to as the 'study area') is located at Wyattville Drive, West Hoxton and is legally described as Lot 11 DP 858025 and Lot 20 DP 867282 (Figure 1).

The study area is approximately 3 ha in size and is zoned as R2 – Low Density Residential under the *Liverpool Local Environmental Plan 2008* (Liverpool LEP). Surrounding land zoning is all R2 – Low Density Residential as well. The study area is positioned in a suburban landscape within southwestern Sydney, NSW. To the north-east it is bound by residential buildings, the north-west and south-west frontages of the site are to Chapman Street and the south-eastern frontage is to Wyattville Drive.

1.5. Background

A Biodiversity Due Diligence Preliminary Review (ELA 2023) was prepared for DoE to identify key ecological constraints and provide guidance for the final design footprint. Following the report, DoE confirmed that the upgrades will proceed as a Part 5 activity under the EP&A Act. Under a Part 5 pathway, a REF is to be prepared. Part of the REF includes undertaking a FFA for the proposed activity. This FFA has been prepared by ELA utilising the field and literature results previously detailed in the preliminary biodiversity report (ELA 2023), as well as vegetation to be removed as outlined in the Arboricultural Impact Assessment (AIA) and Tree Protection Specification (Laurence & Co 2025). This assessment has conducted an updated database and literature review (see Section 3.1).

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1.6. Key definitions

The following key terms and definitions are used in this FFA:

- Proposed activity – works as described above in Section 1.2
- Study area – the entirety of Greenway Park Public School (Lot 11 DP 858025 and Lot 20 DP 867282)
- Preliminary biodiversity report– refers to the Biodiversity Due Diligence Preliminary Review prepared by ELA (ELA 2023) for DoE.

Figure 1: Greenway Park Public School (the 'study area')

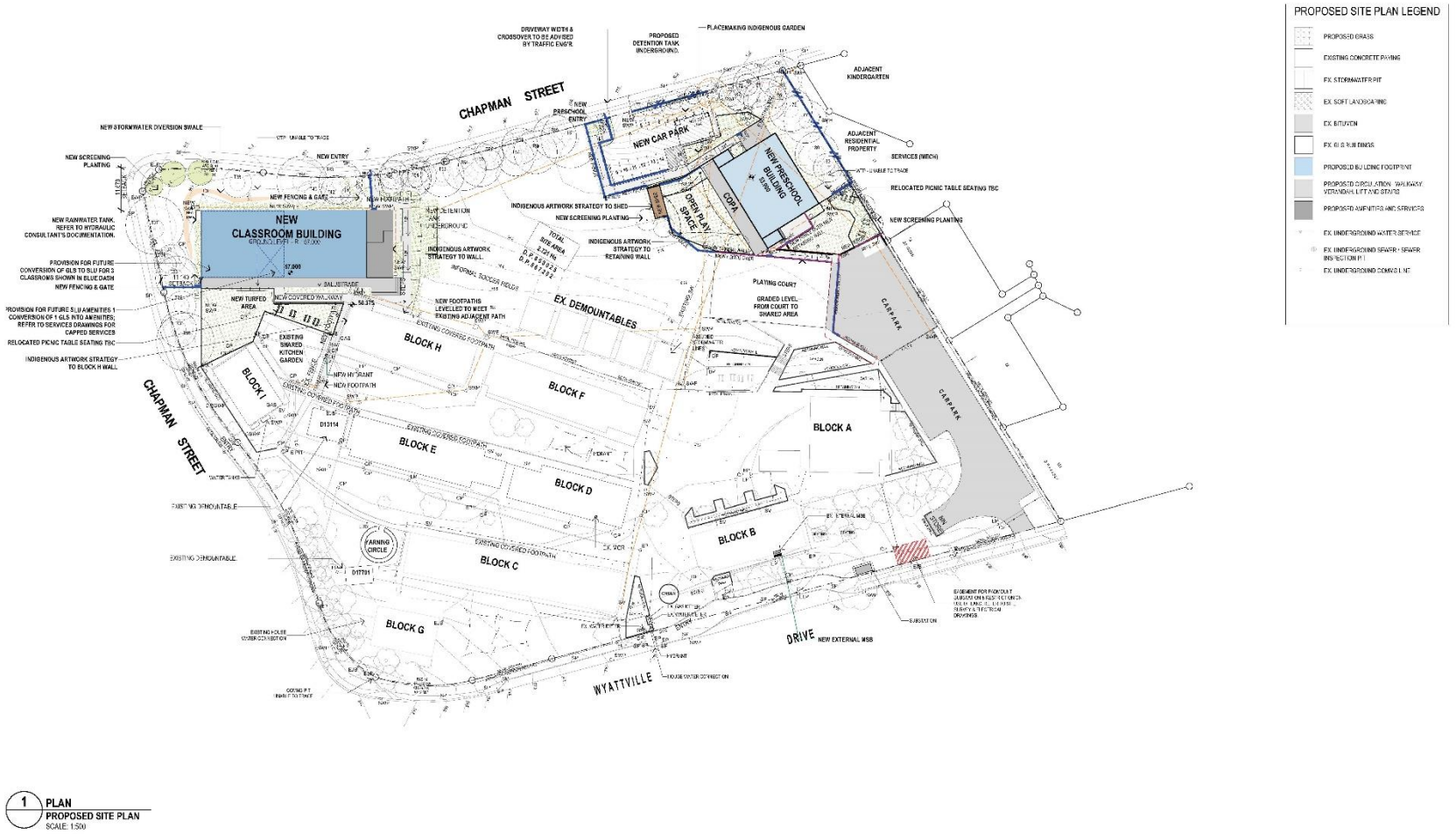

Figure 2: Proposed site plan and landscaping works (Prepared by Fulton Trotter Architects 2025a)

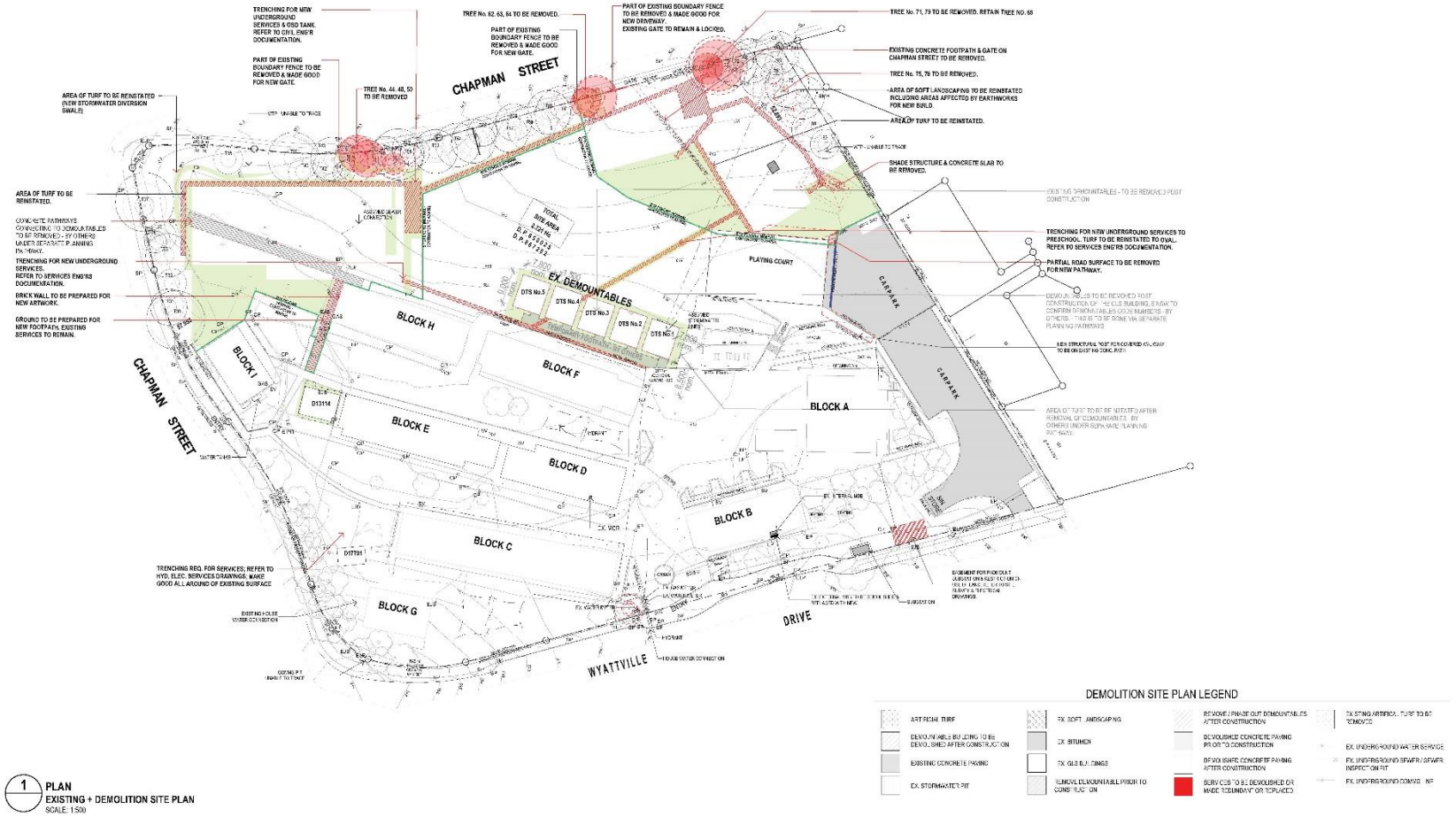

Figure 3: Demolition plan prepared for Department of Education (Prepared by Fulton Trotter Architects 2025)

Figure 4: Landscape plan prepared for Department of Education (Prepared by Ground Ink Landscape Architects 2025)

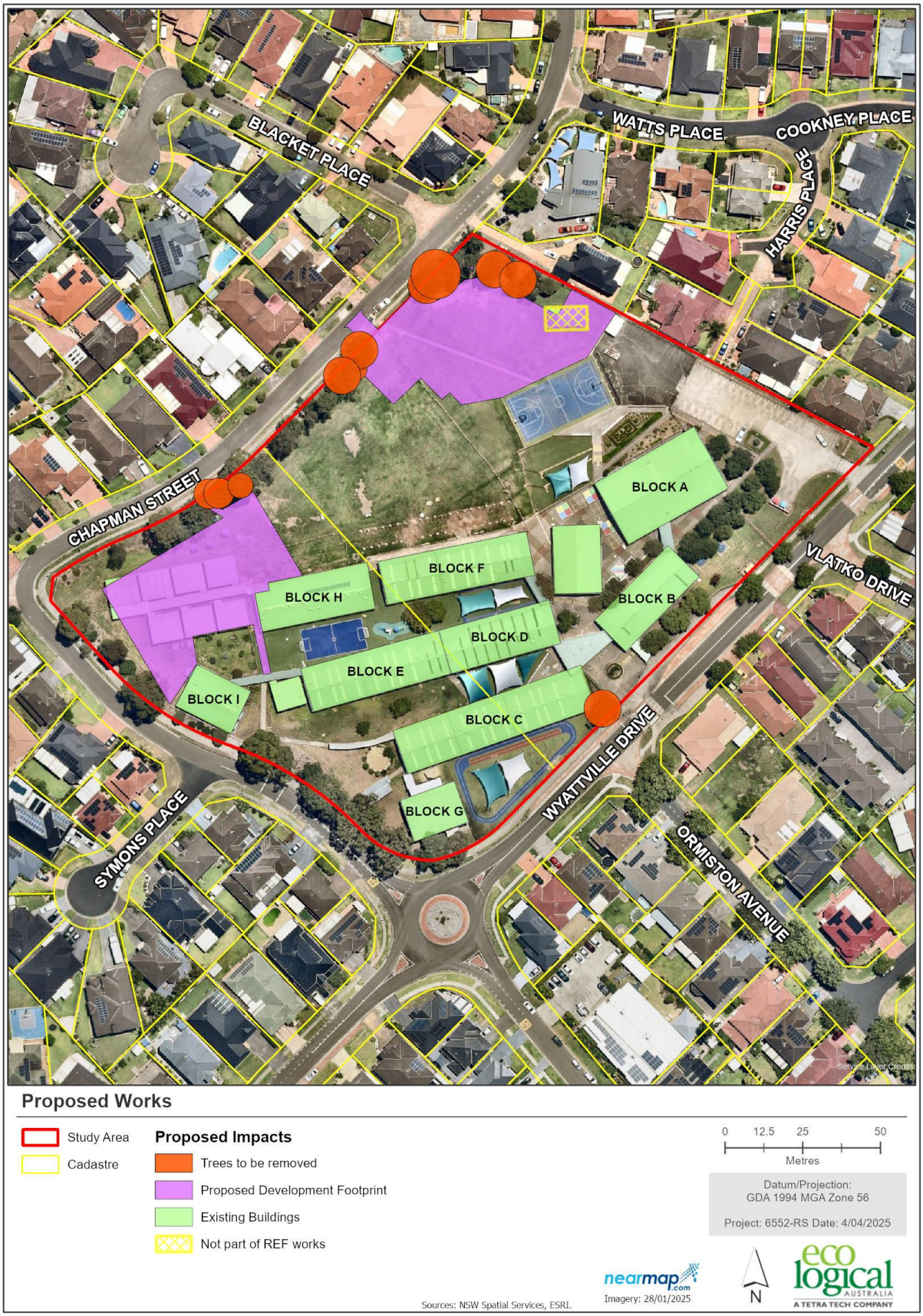

Figure 5: Proposed works

2. Legislation

Table 3: Legislation relevant to the proposed works

Legislation	Relevance to the project	Report section
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	The Commonwealth EPBC Act aims to protect Matters of National Environmental Significance (MNES), including vegetation communities and species listed under the EPBC Act. If an activity is likely to have a significant impact on MNES, it is likely to be considered a 'Controlled Action' by the Commonwealth and requires assessment and approval by the Commonwealth to proceed. MNES with the potential to occur within the study area include *Lathamus discolor* (Swift Parrot) and *Pteropus poliocephalus* (Grey-headed Flying-fox). Assessments of Significance for these species (Appendix D), concluded that the actions as part of the proposed DA are unlikely to constitute a significant impact upon these species.	Section 5.5
Environmental Planning and Assessment Act 1979 (EP&A Act)	The EP&A Act is the principal planning legislation for NSW, providing a framework for the overall environmental planning and assessment of development proposals. The EP&A Act places a duty on the determining authority to adequately address a range of environmental matters including maintenance of biodiversity and the likely impact to threatened species, populations, or ecological communities (under the BC Act – refer below). The project is being assessed under Part 5 of the EP& A Act.	Entire report
Biodiversity Conservation Act 2016 (BC Act)	Impacts to threatened species and threatened ecological communities listed under the BC Act are required to be assessed in accordance with Section 7.3 of the BC Act, known as 'Tests of Significance'. For assessments under Part 5 of the EP&A Act, the Biodiversity Offsets Scheme threshold does not apply, as specified in section 7.2 (2). Declared areas of 'outstanding biodiversity value' under section 7.2(1c) must still be considered. For a Part 5 assessment, if the conclusion of the Test of Significance is that there is potential for a significant impact on a threatened species or ecological community, then the proponent has the option of preparing a Species Impact Statement (SIS), or a Biodiversity Development Assessment Report (BDAR). This FFA has assessed the activity and determined that the proposed works are unlikely to result in a significant impact upon threatened species listed under the BC Act and therefore a SIS or BDAR is not required. The study area is not located within declared areas of outstanding biodiversity value.	Entire report
Fisheries Management Act 1994 (FM Act)	The FM Act governs the management of fish and their habitat in NSW. The FM Act regulates the provision of permits required in relation to the harm of protected marine vegetation (seagrass, macroalgae, mangroves and saltmarsh), dredging, reclamation or obstruction of fish passage on or adjacent to Key Fish Habitat. This includes direct or indirect impacts, whether temporary or permanent. The study area does not contain Key Fish Habitat (KFH), and will not involve harm to marine vegetation, dredging, reclamation or obstruction of fish passage. A permit or consultation under the FM Act will not be required for the proposed works.	N/A
NSW Biosecurity Act 2015	Under the *Biosecurity Act 2015*, priority weeds have been identified for the Greater Sydney Region and assigned strategies to contain, remove or manage. Occupiers of land (this includes owners of land) have responsibility for taking appropriate	N/A

Legislation	Relevance to the project	Report section
	action for priority weeds on the land they occupy. The study area does not contain weeds listed under the *Biosecurity Act 2015*.	
Water Management Act 2000 (WM Act)	The *Water Management Act 2000* (WM Act's) main objective is to manage NSW water in a sustainable and integrated manner that will benefit current generations, without compromising future generations' ability to meet their needs. The WM Act establishes an approval regime for activities within waterfront land, defined as the land 40 m from the highest bank of a river, lake, or estuary. The study area is not located on waterfront land. Furthermore, a Controlled Activity Approval under the WM Act is not required for the activities under Part 5 of the EP&A Act.	N/A
State and local planning instruments		
State Environmental Planning Policy (Resilience and Hazards) 2021	This SEPP applies to land in the coastal zone. The study area is not located within an area to which this SEPP applies. A Coastal Wetland at Schoeffel Park approximately 450 m to the south-east of the study area is mapped on the SEPP. There is no connectivity between this wetland and the study area.	N/A
State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and Conservation SEPP)	This new SEPP came into effect on 1 March 2022 and consolidates the following SEPPS of relevance to the study area: • Chapter 2 Vegetation in Non-Rural Areas. • Chapter 4 Koala Habitat Protection. • Chapter 6 Water Catchments. • Chapter 13 Strategic Conservation Planning. Chapter 2 of the Biodiversity and Conservation SEPP aims to protect the biodiversity values of trees and other vegetation in non-rural areas of the State, and to preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation. The City of Liverpool Local Government Area (LGA) is listed as one of the LGAs to which this SEPP applies. However, as the works are being following a Part 5 development pathway under the EP&A Act, Chapter 2 does not apply. The proposed development is located within a Local Government Area (LGA) to which the Biodiversity and Conservation SEPP applies in relation to Chapter 4 Koala Habitat Protection. However, the proposed works are considered to be permitted without consent under SEPP TI section 3.37 (1)(a)(iii), therefore Chapter 4 does not apply. The study area is located within the Georges River Catchment in accordance with this SEPP. Chapter 6 defines developmental controls for projects that may have an effect on water quality or aquatic ecology. There are no waterbodies located within the study area, with the nearest waterbody an unnamed 2nd order Strahler stream, which is 206 m from the study area. Therefore, Chapter 6 of this SEPP does not apply to this activity. Chapter 13 is related to the biodiversity certification of land, under the Cumberland Plain Conservation Plan (CPCP). The study area is within the CPCP area, however no certification or other land categories (such as avoided land or strategic conservation) apply to the study area. Further consideration of Chapter 13 is not required.	N/A
Liverpool Local Environmental	The study area is located on land zoned as R2 – Low Density Residential. The objective of this land zoning is:	Entire Report

Legislation	Relevance to the project	Report section
Plan 2008 (Liverpool LEP)	• To provide for the housing needs of the community within a low density residential environment. • To enable other land uses that provide facilities or services to meet the day to day needs of residents. • To provide a suitable low scale residential character commensurate with a low dwelling density. • To ensure that a high level of residential amenity is achieved and maintained. The study area is not located on land mapped as "Environmentally Significant Land" under the Liverpool LEP.	

3. Methodology

3.1. Literature review and database search

A review of readily available databases pertaining to the ecology and environmental features of the entire extent of the study area and surrounding area (within a 5 km radius), was conducted to identify records of threatened species, populations and communities and their potential habitat.

An updated review of databases and vegetation mapping was conducted for this FFA and included:

- BioNet (NSW Atlas of Wildlife) database search (5 km) for threatened species, populations and ecological communities listed under the BC Act (NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) 2025a) (February 2025).
- EPBC Act Protected Matters Search Tool (PMST) for threatened and migratory species, populations and ecological communities listed under the Commonwealth EPBC Act (Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) 2025a) (February 2025).
- NSW Threatened Species Profile Database (NSW DCCEEW 2025b).
- Previous vegetation mapping under the State Vegetation Type Map (SVTM) (NSW DCCEEW 2025c).
- Plant Community Type (PCT) information under BioNet Vegetation Classification (NSW DCCEEW 2025d).
- Australian Government Species Profile and Threats (SPRAT) Database (DCCEEW 2025b).
- Relevant Geographic Information System (GIS) datasets including soils, geology and drainage (NSW DCCEEW 2025e).
- Review of relevant planning instruments, documentation, and information relating to biodiversity values (NSW DCCEEW 2025f) and potential threatened species habitat.
- Aerial photography (including Google Earth and Historical Imagery) of the study area and surrounds were also used to investigate the extent of vegetation cover and landscape features.
- Biodiversity Due Diligence Preliminary Review, prepared by ELA (2023).
- National Flying-fox Monitoring data (DCCEEW 2025c) (accessed March 2025)
- National Recovery Plan for the Swift Parrot (DCCEEW 2025d).

Species searches from both the NSW BioNet Wildlife Atlas and EPBC PMST were combined to produce a list of threatened species, populations and communities that may occur within the study area. This list was also supplemented or amended based on local ecological knowledge of the area, including known species occurrences. A likelihood of occurrence table for threatened flora, fauna and ecological communities is given in Appendix A.

3.2. Field survey

A field survey was conducted on 13 September 2023 by ELA ecologists Alice Ridyard and Claudia Santori. The site inspection was conducted to:

- Validate existing vegetation mapping (DPE 2022) and determine the condition of vegetation communities present and presence of any threatened ecological communities.
- Identify habitat features for potential threatened flora and fauna species within the study area, including hollow-bearing trees, woody debris and creek lines.
- Undertake one Biodiversity Assessment Method (BAM) plot within suitable vegetation for future applications if the Biodiversity Offset Scheme (BOS) is triggered.

The field survey validated the boundaries of the vegetation using digitalised maps. When habitat features were present, these were marked using a handheld GPS unit.

3.3. Limitations

The field survey conducted for the preliminary biodiversity constraints report was not intended to provide an inventory of all species across the study area. Instead, it provides an overall assessment of the ecological values of the study area with emphasis on threatened species, endangered communities, and key fauna habitat features. It did not include any targeted flora and/or fauna surveys.

Handheld GPS units were used to collect survey tracks during the field survey. It is noted that these units can have errors in accuracy of up to 20 m (subject to availability of satellites on the day).

All area calculations have been based off the provided plans from the NSW Department of Education (DoE) to inform the study area boundaries.

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4. Results

4.1. Data audit and literature review

4.1.1. Soils, topography and hydrology

The study area is wholly located on Blacktown soil landscape (Figure 3).

Blacktown soil landscape occurs extensively on the Cumberland Lowlands. The soils comprise shallow to moderately deep hard setting mottled texture contrast soils, Red and Brown Podzolic Soils on crests grading to Yellow Podzolic Soils on lower slopes and in drainage lines on Wianamatta Group shales (NSW DCCEEW 2025e). Blacktown soil landscapes are characterised by gently undulating rises on Wianamatta Group shales and include dry sclerophyll open forest or open woodland (NSW DCCEEW 2025e).

No waterways are located within the study area. The nearest mapped watercourses are an unnamed third order Strahler stream 310 m north of the study area and a first order Strahler stream approximately 370 m south-east of the study area (Figure 1). The natural drainage around the study area has largely been modified by the construction of hard surfaces for residential development and roadways, and the associated vegetation clearing.

A coastal wetland mapped on the SEPP Hazard and Resilience layer is located proximity 450 m south-east of the study area. This unnamed wetland is associated with Bayhorse Creek and does not intersect the study area. Major arterial roads such as Cowpasture Road and urban development intersect between the mapped wetland and the study area. There is no connectivity between the study area and the mapped wetland. No additional assessment of direct or indirect impacts to the wetland are required for the proposed activity.

4.1.2. Historic aerial imagery

Historic aerial imagery accessed via the NSW Historical Imagery viewer (Spatial Services 2025) shows that the study area has been subject to use for agricultural purposes (farming) from at least 1947, when the earliest aerial imagery was available (Figure 4). By 1965, all canopy vegetation had been removed, and some buildings were constructed in the north eastern extent of the study area (Figure 5). Groundworks in preparation for construction of school buildings can be seen in 1998, with no canopy vegetation visible within the study area (Figure 6).

Residential buildings are visible surrounding the eastern extent of the study area. By 2002, canopy vegetation is visible around the perimeter of the school and scattered between buildings (Figure 7). Additional residential buildings were built surrounding the western boundaries of the study area.

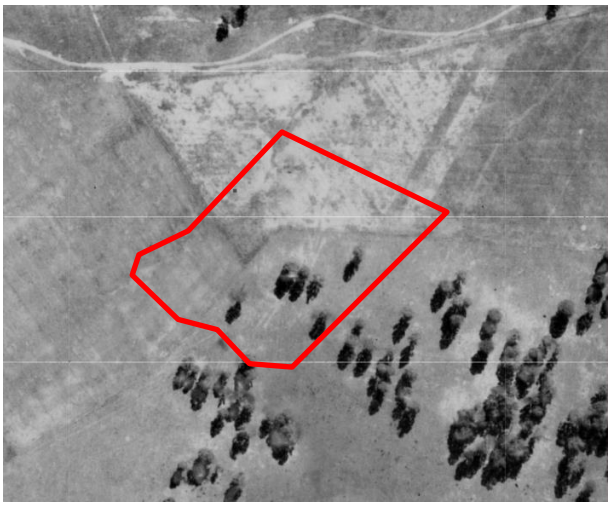

Figure 6: 1947 aerial imagery (Spatial Services 2025)

Figure 7: 1965 aerial imagery (Spatial Services 2025)

Figure 8: 1998 aerial imagery (Spatial Services 2025)

Figure 9: 2002 aerial imagery (Spatial Services 2025)

4.1.3. Vegetation mapping

Previous vegetation mapping under the State Vegetation Type Map (SVTM) (NSW DCCEEW 2025c) was reviewed for vegetation occurring within the study area and surrounding land (Figure 10). The SVTM had no Plant Community Types (PCTs) mapped as occurring within the study area.

The preliminary biodiversity report (ELA 2023) identified all vegetation occurring within the study area as either planted native or exotic vegetation. No remnant or PCTs were identified during the 2023 surveys or were considered likely to occur. A description of the planted native and exotic vegetation mapped within the study area is provided below (Section 4.2.1).

4.1.4. Threatened species

The search for threatened species using the PMST (DCCEEW 2025a) and BioNet NSW Atlas of Wildlife (NSW DCCEEW 2025a) with a 5 km buffer around the study area and the review of literature resulted in a list of 28 threatened flora species and 63 threatened or migratory fauna species (refer to Appendix A).

A review of the Important Areas map (accessed 25 February 2025 via the Biodiversity Offsets and Agreements Management System) did not identify Swift Parrot Important Area within the study area (Figure 11).

It should be noted that the result of the PMST, which has been included in Appendix A, is only a list of species based on habitat modelling. Therefore, not all species listed in Appendix A are shown on the maps in this report. BioNet database records for the study area of threatened flora and fauna are shown in Figure 12.

There are no threatened flora or fauna species BioNet records located within the study area.

Figure 10: State Vegetation Type Mapping (NSW DCCEEW 2025c)

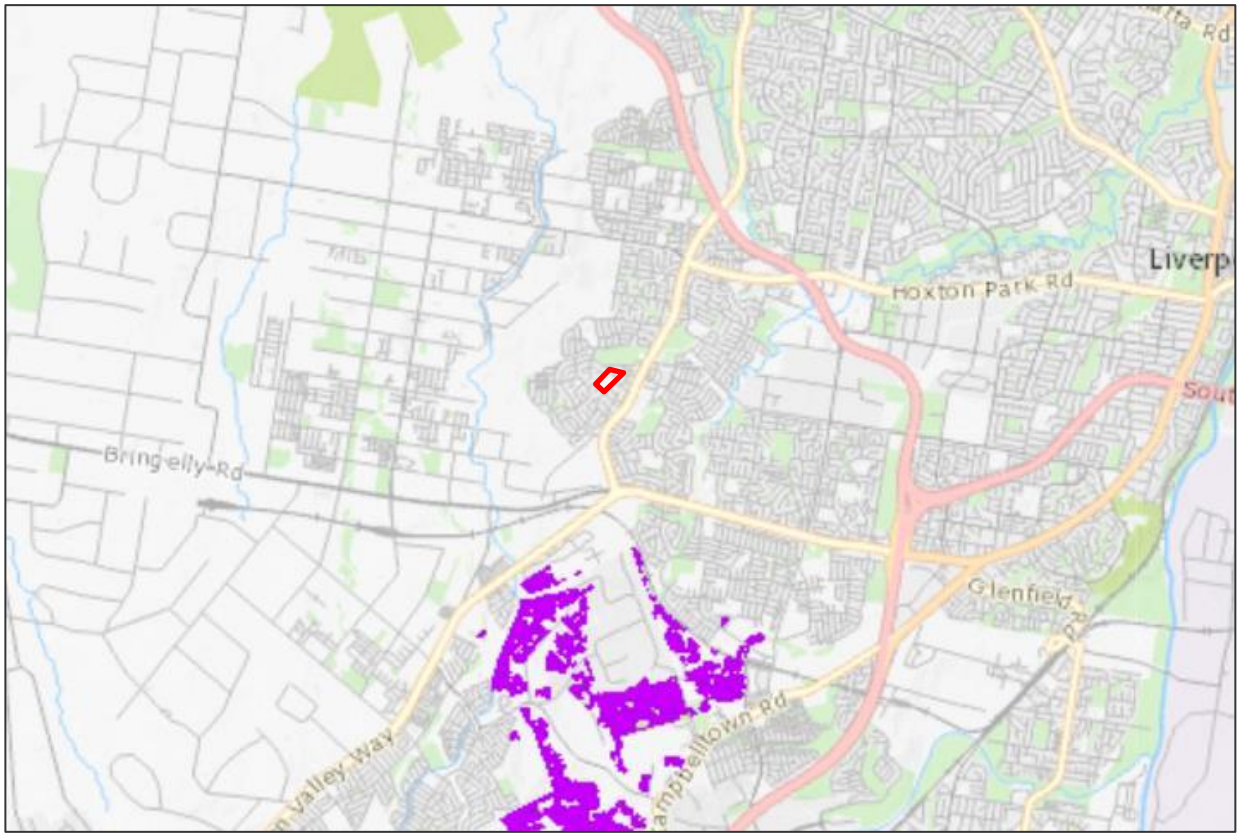

Figure 11: Swift Parrot Important Areas (Biodiversity Offsets and Agreements Management System accessed 25 February 2025)

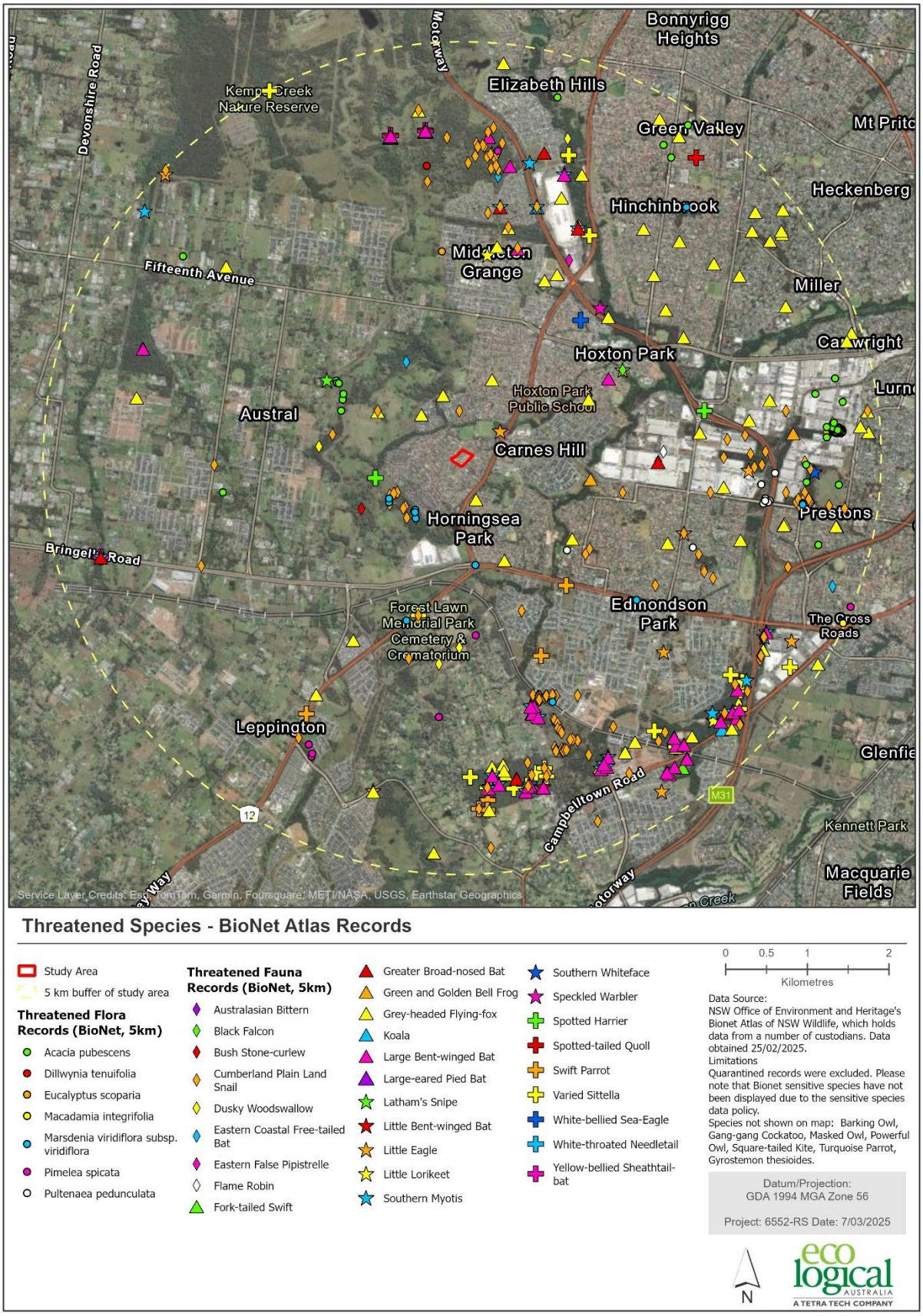

Figure 12: BioNet threatened flora and fauna species records within a 5 km radius of the study area (NSW DCCEEW 2025a)

4.2. Survey results

4.2.1. Vegetation communities

The preliminary biodiversity report (ELA 2023) recorded the vegetation within the study area as planted native and planted exotic vegetation (Figure 13).

4.2.1.1. Planted native

Approximately 0.37 ha of planted native vegetation was identified along the south western and north western boundaries of the study area and in a patch at the north-eastern extent of the study area (Figure 13). This vegetation does not conform to a native PCT.

The patch of native vegetation in the north-eastern extent of the study area consisted of a canopy of *Waterhousia floribunda* (Weeping Lilly Pilly) with no midstorey (Figure 14). The ground layer was dominated by exotic grasses, such as *Cenchrus clandestinus* (Kikuyu) and *Ehrharta erecta* (Panic Veldtgrass), with occasional native species *Dichondra repens* (Kidney Weed).

The planted native vegetation along the north-western boundary of the study area was characterised by canopy species *Eucalyptus tereticornis* (Forest Red Gum) and *Casuarina glauca* (Swamp She-oak) with a few *Lomandra longifolia* (Spiny-headed Mat-rush) in the groundcover (Figure 15). The ground layer was sparse, with low cover of the exotic grasses *C. clandestinus* and *Cynodon dactylon* (Couch) and exotic weeds such as *Malva* sp. (Mallow) and *Modiola caroliniana* (Red-flowered Mallow).

The planted native vegetation along the south-western boundary of the study area was characterised by *E. tereticornis*, *C. glauca* and *Eucalyptus moluccana* (Grey Box) (Figure 16). The midstorey contained species such as *Acacia implexa* (Hickory Wattle) and *Acacia floribunda* (White Sally Wattle). The ground layer comprised leaf litter with a few *Lomandra longifolia* and *Dianella caerulea* (Blue Flax-lily) interspersed.

Some of the canopy species in the vegetation along the north-western and south-western boundaries of the study area can be characteristic of *PCT 4023 – Coastal Valleys Swamp Oak Riparian Forest* or *PCT 3320 - Cumberland Shale Plains Woodland*. Such species include *E. tereticornis*, *C. glauca* and *Eucalyptus moluccana* and *Acacia* spp. However, it is believed that the vegetation in these areas is planted, as:

- The entire study area has been previously cleared of vegetation, as shown in Figure 6 - Figure 9.
- The trees are similar in diameter and height.
- The trees occur in a line along the boundary of the study area.
- The native planted canopy species are of similar age class to exotic canopy species indicating landscaping plantings rather than regeneration.
- There is no evidence of new regenerating vegetation of canopy, shrub or ground cover species.
- There is no adjoining remnant vegetation.

4.2.1.2. Planted exotic

Approximately 0.13 ha of exotic vegetation was identified interspersed with the buildings and along the south eastern boundary of the study area including *Pyrus calleryana* (Callery Pear), *Lagerstroemia* sp. (Crepe Myrtle) and *Ulmus parvifolia* (Chinese Elm) (Figure 17 to Figure 18). Midstorey species were recorded, such as *Nandina domestica* (Sacred Bamboo), *Rhaphiolepis indica* (Indian Hawthorn) and

Murraya paniculata (Mock Orange). The ground layer was typically comprised of exotic grasses such as *Cenchrus clandestinus* (Kikuyu), *Sporobolus africanus* (Parramatta Grass) and *Ehrharta erecta* (Panic Veldtgrass).

4.2.1.3. Exotic grasses

The remaining vegetation within the study area consisted of regularly mown groundcover of exotic grasses, such as *Cenchrus clandestinus* (Kikuyu), *Cynodon dactylon* (Couch), *Trifolium repens* (White Clover) and *Poa annua* (Winter Grass) (Figure 19). This vegetation does not conform to a native vegetation community.

Figure 13: Validated vegetation (ELA 2023 updated 2025)

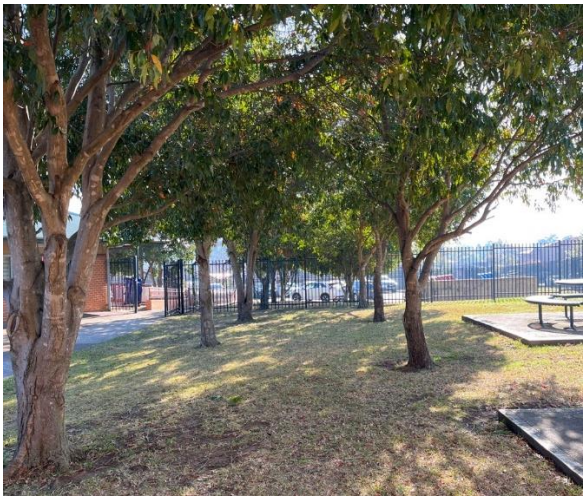

Figure 14: Planted native vegetation in north-eastern extent of the study area.

Figure 15: Planted native vegetation along the north western boundary of the study area.

Figure 16: Planted native vegetation along the south western boundary of the study area.

Figure 17: Planted exotic vegetation amongst buildings.

Figure 18: Planted exotic vegetation along south eastern boundary of the study area.

Figure 19: Exotic grasses in the playing field in north of the study area.

4.2.2. Flora species

No threatened flora species were identified as occurring within the study area in the preliminary biodiversity constraints report (ELA 2023). No priority weeds or Weeds of National Significance were identified as occurring within the study area.

4.2.3. Fauna species and their habitat

Field surveys conducted in 2023 by ELA (ELA 2023) identified a list of fauna species, presented in Appendix B. No threatened fauna species were identified during the field survey.

No hollow-bearing trees, sickness, roof cavities, waterbodies, caves or culverts within the study area that could provide habitat for threatened fauna were observed within the study area.

Canopy species within the planted native vegetation portions of the study area may provide foraging habitat for highly mobile species, such as *Pteropus poliocephalus* (Grey-headed Flying-fox) or *Lathamus discolor* (Swift Parrot). The vegetation contains nectar flowering and winter flowering myrtaceous species such as *Eucalyptus moluccana*, E. *tereticornis* and *E. robusta* which are preferred foraging resources for Grey-headed Flying Foxes and Swift Parrots.

No breeding habitat for these species were observed during field surveys. The Grey-headed Flying-fox forms bat camps along riparian corridors and can be identified during diurnal surveys. There are no recent or historic bat camps recorded within the study area based on literature review and field surveys.

The Swift Parrot is a non-breeding migrant from Tasmania. It migrates to the Australian south-east mainland between March and October. In NSW, they predominantly occur in Box-ironbark forests and woodlands along the coast and southwestern slopes where Eucalypts are flowering profusely, or where there are abundant lerp infestations. Favoured feed trees include winter flowering species such as *Eucalyptus robusta*, *Corymbia Maculata* (Spotted Gum), *C. gummifera* (Red Bloodwood), *E. sideroxylon* (Mugga Ironbark), and *E. albens* (White Box) (NSW DCCEEW 2025b).

The study area contains the limited amount of potential foraging vegetation for threatened species. The planted native vegetation (*Eucalyptus moluccana*, E. *tereticornis* and *E. robusta)* may be used on occasion by Swift Parrots, Grey-headed Flying-foxes and other highly mobile threatened species as they move across the landscape. The study area does not contain large tracts of intact vegetation which would support congregations of these species and form part of important foraging resources for these species.

It was noted in the preliminary biodiversity constraints report (ELA 2023) that the leaf litter surrounding the planted native vegetation could typically provide marginal habitat for the *Meridolum corneovirens* (Cumberland Plain Land Snail). However, as no PCTs are present within the study area, the leaf litter cover is low and there is no adjoining remnant vegetation, it is considered unlikely that this species would occur in the study area. No watercourses or other waterbodies were identified within the study area (Water Technology 2025)

5. Impact assessment

5.1. Introduction

The potential impact of the proposal to threatened species and communities listed under the BC Act and EPBC Act was assessed by undertaking an assessment of likelihood of occurrence for threatened ecological communities and threatened and migratory species identified from the database search (Appendix A)

Two threatened species were identified as potential to occur within the study area after considering both the desktop review and results from previous field survey. Tests of Significance under the BC Act and were conducted for the following threatened species:

- *Pteropus poliocephalus* (Grey-headed Flying-fox)
- *Lathamus discolor* (Swift Parrot).

Other highly mobile threatened species which are wide-ranging and dispersive may still utilise the study area on occasion for foraging. The proposed activity would not affect any habitat that is important to the survival of these species and therefore no BC Act Test of Significance or EPBC Act Significant Impact Criteria was applied.

Significance Assessments under the EPBC Act were required for threatened species under the EPBC Act, (Grey-headed Flying-fox and Swift parrot) and concluded that the proposed works are unlikely to result in a significant impact.

5.2. Direct impacts

Direct impacts during the construction phase and long-term impacts post construction have been considered for this impact assessment. The proposed construction one (1) new classroom building, one (1) new preschool building and associated infrastructure will have a small impact on planted native and planted exotic vegetation.

A summary of the potential impacts has been provided in Table 4.

Table 4: Summary of potential impacts to vegetation communities in study area

Vegetation community	Total area in study area (ha)	Direct impact (ha)
Planted native vegetation	0.37	0.08
Planted exotic vegetation	0.13	0.01
TOTAL	**0.5**	**0.09**

Direct impacts are those impacts that directly affect habitat and individuals. Direct impacts considered for this assessment includes the removal of planted vegetation. The proposed activity is likely to result in the following direct impact:

- removal of planted native canopy and exotic trees.

5.2.1. Removal of native vegetation

Based on the final design, the proposed activity will result in the removal of approximately 0.08 ha of planted native vegetation and 0.01 ha of planted exotic vegetation.

5.3. Indirect impacts

Indirect impacts may result from proposed works undertaken during the construction phase of the activity. Indirect impacts are those impacts that may affect habitat or biodiversity values indirectly and can include entities within the activity footprint or those external. The proposed activity may result in the following indirect impact:

- Sediment erosion and run-off during earthworks.

5.4. Biodiversity Conservation Act 2016

Impacts to threatened species and threatened ecological communities listed under the BC Act are required to be assessed in accordance with Section 7.3 of the BC Act, known as 'Test of Significance' (also known as a 5-part test).

For assessments under Part 5 of the EP&A Act the biodiversity offsets scheme threshold is not required to be applied, as specified in section 7.2 (2). Declared areas of 'outstanding biodiversity value' under section 7.2 (1c) must still be considered.

For a Part 5 assessment, if the conclusion of the tests of significance is that there is potential for a significant impact on a threatened species or ecological community, then the proponent has the option of preparing a Species Impact Statement (SIS), or a Biodiversity Development Assessment Report (BDAR).

The Test of Significance is used to determine if the activity is likely to have a significant impact on any threatened species, populations or ecological communities. If a significant impact is indicated by the test of significance, and the proponent decides to prepare a BDAR, then the proposal would trigger the Biodiversity Offsets Scheme (BOS), and a Biodiversity Assessment Method 2020 (BAM) assessment is required.

A Test of Significance under the BC Act was required for Grey-headed Flying-fox and Swift Parrot (Appendix C) due to the findings of the likelihood of occurrence assessment (Appendix A), after considering both the desktop review and the field survey results.

5.4.1. Key Threatening Processes

No Key Threatening Processes listed under the BC Act or EPBC Act are relevant to the proposed activity.

5.5. EPBC Act – Assessment of Significance

The EPBC Act establishes a process for assessing the environmental impact of activities and developments where 'Matters of National Environmental Significance' (MNES) may be affected. Under the Act any action which "has, will have, or is likely to have a significant impact on a Matter of National

Environmental Significance" is defined as a "controlled action", and requires approval from the Commonwealth DCCEEW which is responsible for administering the EPBC Act.

Assessments of Significance under the EPBC Act were required for Grey-headed Flying-fox and Swift Parrot (Appendix D) due to the findings of the likelihood of occurrence assessment (Appendix A), after considering both the desktop review and the field survey results.

6. Mitigation measures

To prevent direct impacts from the proposal on adjacent planted native vegetation within the study area, the following general mitigation measures are recommended, and additional specific controls are provided in Table 5:

- Tree protection fencing is established around any proposed trees to be retained within the vicinity of the proposed buildings to be constructed and / or removed.
- Supplement removal of native vegetation through planting of locally native canopy species in landscaping plans.

6.1. Evaluation of Environmental Impacts

This FFA has assessed the impacts of the proposed activity to determine if the works are likely to have a significant impact upon biodiversity values. The activity was found to be unlikely to impact upon species listed under the BC Act or EPBC Act following Tests of Significance (Appendix C) and Assessment of Significance (Appendix D). This FFA report has also assessed the proposed activity in relation to impacts to other biodiversity values. The activity is unlikely to have a significant impact on biodiversity values for the following reasons:

- the activity is small in nature, i.e. approximately 0.08 ha of planted native vegetation and 0.01 ha of planted exotic vegetation.
- there is no remnant native vegetation occurring within the study area as shown on SVTM (Figure 10) or by results of the field validation (Figure 13).
- there is no threatened species or potential habitat for threatened species present in the study area.
- the mitigation measures provided in Table 5 are sufficient to mitigate direct or indirect impacts.

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Table 5: Recommendations for mitigation measures

Mitigation number / name	When is mitigation measure to be complied with	Mitigation measure	Reason for mitigation measure
1. Native vegetation	Before and during construction phase.	• Pre-works briefings are to be undertaken by staff advising contractors or workers of sensitive areas and the relevant safeguards for each. • The extent of works must be clearly pegged or marked out by a surveyor prior to vegetation removal. • Tree protection fencing is established around any proposed trees to be retained within the vicinity of the proposed buildings to be constructed and / or removed. • Pre-clearance survey is undertaken by an ecologist or similarly qualified personnel to identify any potential fauna habitat present in vegetation proposed for removal. • Supplement removal of planted native vegetation with planting of locally native canopy species in landscaping plans. Recommended tree species for replanting, based on surrounding vegetation mapped by the SVTM (Figure 10) as well as those which will supplement the removal of foraging habitat for Grey-headed Flying-fox and Swift parrot, include *Eucalyptus fibrosa*, *E. moluccana* and *E. tereticornis*.	• Prevent accidental impacts to native vegetation proposed for retention / outside of proposed works.
2. Sediments and erosion control	Before and during construction phase.	• Avoid conducting works after or before any forecasted significant rainfall. • Soil and erosion control measures such as sediment fencing may be required prior to on-ground works. These are to be inspected regularly (weekly), and more frequently during rain periods to ensure structures are in proper working order.	• Prevent potential indirect impacts to retained vegetation or potential threatened species habitat within the study area caused by run-off.
3 Incidental native fauna	Before and during vegetation clearing.	• Pre-clearance assessment by a qualified fauna ecologist is recommended immediately prior to the removal of vegetation to identify if any fauna have established habitat since field surveys in 2023 e.g. stick nests, dreys, decorticating bark. • If fauna habitat is identified, a qualified fauna ecologist should be present to supervise the clearing of this vegetation and relocate fauna if necessary.	• Prevent unnecessary harm to native fauna residing in vegetation within the study area.
3. Pathogens and weed	Before and during construction phase.	• Ensure all equipment and footwear is thoroughly cleaned prior to commencement of works and when entering new sites.	• Prevent accidental introduction of soil pathogens, fungus or

Mitigation number / name	When is mitigation measure to be complied with	Mitigation measure	Reason for mitigation measure
propagules control		• Wash down procedure should be established for machinery entering or exiting the site to limit weed spread or disease.	weed propagules into the study area during construction.

7. Conclusion

Eco Logical Australia was commissioned by DoE c/o RP Infrastructure to prepare a Flora and Fauna Assessment (FFA) report for the Greenway Park Public School Upgrades. This assessment utilised the preliminary biodiversity report (ELA 2023) and AIA (Laurence & Co 2025) prepared for DoE and updated literature reviews to assess the impacts of the proposed upgrades within the study area.

No remnant native vegetation was recorded within the study area. All vegetation present within the study area was validated as either planted native or planted exotic vegetation. The impact assessment determined that the proposed activity would involve the removal of 0.08 ha of planted native vegetation and 0.01 ha of planted exotic vegetation within the study area.

The potential impact of the proposed update to threatened species and communities listed under the BC Act and EPBC Act was assessed by undertaking a Likelihood of Occurrence Assessment for threatened ecological communities and threatened and migratory species identified from the database search. Tests of Significance under the BC Act and an Assessments of Significance under the EPBC Act were undertaken for Grey-headed Flying-fox and Swift Parrot due to the findings of the Likelihood of Occurrence Assessment (Appendix A). These tests concluded that the proposed activity is unlikely to result in a significant impact to Grey-headed Flying-fox and Swift Parrot.

Mitigation measures and recommendations have been provided to prevent indirect impacts to native planted vegetation to be retained within the study area. Following these mitigation measures, it is unlikely the proposed activity will have a significant effect on the biodiversity values. Therefore, a Biodiversity Development Assessment Report or Species Impact Statement are not required.

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Appendix A Likelihood of occurrence

The table below provides the collated results from the 5 km database searches (buffered around the study site) of the NSW Wildlife Atlas and the EPBC Protected Matters Search Tool. An assessment of likelihood of occurrence was made for threatened and migratory species identified from the database searches. Five terms for the likelihood of occurrence of species are used in this report. This assessment was based on database or other records, presence or absence of suitable habitat and features of the proposal site as presented within the results of the preliminary reports, and professional judgement. The terms for likelihood of occurrence are defined below:

- "yes" the species was or has been observed on the site
- "likely" a medium to high probability that a species uses the site
- "potential" suitable habitat for a species occurs on the site, but there is insufficient information to categorise the species as likely to occur, or unlikely to occur
- "unlikely" a very low to low probability that a species uses the site
- "no" habitat on site and in the vicinity is unsuitable for the species.

The likelihood of occurrence was only one factor among other factors, which was used to determine whether to apply the Assessment of Significance' (5-part test) and/or EPBC Significant Impact Criteria assessments to threatened species, populations, communities or migratory species.

Table 6: Likelihood of occurrence for ecological communities

BC Act name	BC Act status	EPBC Act name	EPBC Act status	Distribution and habitat	Likelihood of occurrence	Impact assessment required
Agnes Banks woodland in the Sydney Basin Bioregion	E	*Castlereagh Scribbly Gum and Agnes Banks Woodlands of the Sydney Basin Bioregion*	E	Dominated by *Eucalyptus parramattensis* subsp. *parramattensis, Angophora bakeri* and *E. sclerophylla*. A small tree stratum of *Melaleuca decora* is sometimes present, generally in areas with poorer drainage. It has a well-developed shrub stratum consisting of sclerophyllous species such as *Banksia spinulosa* var. *spinulosa, Melaleuca nodosa, Hakea sericea and H. dactyloides* (multi-stemmed form). The ground stratum consists of a diverse range of forbs *including Themeda australis, Entolasia stricta, Cyathochaeta diandra, Dianella revoluta* subsp. *revoluta, Stylidium graminifolium, Platysace ericoides, Laxmannia gracilis* and *Aristida warburgii*. Occurs within the local government areas of Bankstown, Blacktown, Campbelltown, Hawkesbury, Liverpool and Penrith. Mainly found in the Castlereagh area of the Cumberland Plain, with small patches occurring at Kemps Creek and Longneck Lagoon; also present around Holsworthy.	No	No, these communities were not recorded occurring within the study area.
Castlereagh Scribbly Gum Woodland in the Sydney Basin Bioregion	V					
Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	E	*Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community*	E	This ecological community is associated with grey-black clay-loams and sandy loams, where the groundwater is saline or sub-saline, on waterlogged or periodically inundated flats, drainage lines, lake margins and estuarine fringes associated with coastal floodplains. Floodplains are level landform patterns on which there may be active erosion and aggradation by channelled and overbank stream flow with an average recurrence interval of 100 years or less. Swamp Oak Floodplain Forest generally occurs below 20 m (rarely above 10 m) elevation in the NSW North Coast, Sydney Basin and South East Corner	No	No, these communities were not recorded occurring within the study area.

BC Act name	BC Act status	EPBC Act name	EPBC Act status	Distribution and habitat	Likelihood of occurrence	Impact assessment required
				bioregions. The structure of the community may vary from open forests to low woodlands, scrubs or reedlands with scattered trees. Typically, these forests, woodlands, scrubs and reedlands form mosaics with other floodplain forest communities and treeless wetlands, and often they fringe treeless floodplain lagoons or wetlands with semi-permanent standing water.		
Cooks River/Castlereagh Ironbark Forest in the Sydney Basin Bioregion	E	*Cooks River/Castlereagh Ironbark Forest of the Sydney Basin Bioregion*	CE	Ranges from open forest to low woodland, with a canopy dominated by *Eucalyptus fibrosa* (Broad-leaved Ironbark) and *Melaleuca decora* (Paperbark). The canopy may also include other eucalypts such as *E. longifolia* (Woollybut). The dense shrubby understorey consists of *Melaleuca nodosa* (Prickly-leaved Paperbark) and *Lissanthe strigosa* (Peach Heath), with a range of 'pea' flower shrubs, such as *Dillwynia tenuifolia, Pultenaea villosa* (Hairy Bush-pea) and *Daviesia ulicifolia* (Gorse Bitter Pea). The sparse ground layer contains a range of grasses and herbs. Occurs in western Sydney, with the most extensive stands occurring in the Castlereagh and Holsworthy areas. Smaller remnants occur in the Kemps Creek area and in the eastern section of the Cumberland Plain.	No	No, these communities were not recorded occurring within the study area.
Cumberland Plain Woodland in the Sydney Basin Bioregion	CE	*Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest*	CE	The Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest typically occurs on flat to undulating or hilly terrain, at elevations up to approximately 350 metres above sea level. Some	No	No, these communities were not recorded occurring within the study area.

BC Act name	BC Act status	EPBC Act name	EPBC Act status	Distribution and habitat	Likelihood of occurrence	Impact assessment required
Shale Gravel Transition Forest in the Sydney Basin Bioregion	E			occurrences may extend onto locally steep sites at slightly higher elevations. Predominantly associated with clay soils, that are derived from Wianamatta Shale geology.		
River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	E	*River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales and eastern Victoria*	CE	Found on the river flats of the coastal floodplains. Known from parts of the Local Government Areas of Port Stephens, Maitland, Singleton, Cessnock, Lake Macquarie, Wyong, Gosford, Hawkesbury, Baulkham Hills, Blacktown, Parramatta, Penrith, Blue Mountains, Fairfield, Holroyd, Liverpool, Bankstown, Wollondilly, Camden, Campbelltown, Sutherland, Wollongong, Shellharbour, Kiama, Shoalhaven, Palerang, Eurobodalla and Bega Valley. Associated with silts, clay-loams and sandy loams, on periodically inundated alluvial flats, drainage lines and river terraces associated with coastal floodplains.	No	No, these communities were not recorded occurring within the study area.
Shale Sandstone Transition Forest in the Sydney Basin Bioregion	CE	*Shale Sandstone Transition Forest of the Sydney Basin Bioregion*	CE	Occurs on areas transitional between the clay soils derived from Wianamatta Shale and the sandy soils derived from Hawkesbury Sandstone on the margins of the Cumberland Plain. Occurs or has occurred in the Bankstown, Baulkham Hills, Blue Mountains, Campbelltown, Hawkesbury, Liverpool, Parramatta, Penrith, and Wollondilly Local Government Areas (LGAs). The floristic composition of the community includes species otherwise characteristic of, or occurring in, either sandstone or shale habitats. The structure of the community is forest or woodland.	No	No, these communities were not recorded occurring within the study area.

BC Act name	BC Act status	EPBC Act name	EPBC Act status	Distribution and habitat	Likelihood of occurrence	Impact assessment required
Moist Shale Woodland in the Sydney Basin Bioregion	E	*Western Sydney Dry Rainforest and Moist Woodland on Shale*	CE	Typically, a low closed forest, slightly more open in the moist woodland form, with emergent trees up to 25 m high and a lower tree layer. In sheltered gullies and on lower slopes the canopy layer is typically dominated by *Melaleuca styphelioides* (prickly-leaved paperbark). Other diagnostic tree species include *Acacia implexa* (hickory wattle), *Alectryon subcinereus* (native quince), *Brachychiton populneus* (kurrajong), *Corymbia maculata* (spotted gum), *Melicope micrococca* (white euodia) and *Streblus pendulinus* (whalebone tree). Generally, on upper slopes to undulating terrain, or at more disturbed sites, the ecological community exhibits its moist woodland form with the canopy dominated by *Eucalyptus moluccana, Eucalyptus tereticornis, Eucalyptus crebra* and/or *Corymbia maculata*. Characteristic shrub species include *Breynia oblongifolia* (false coffee bush), *Clerodendrum tomentosum* (hairy clerodendrum) and *Notelaea longifolia f. longifolia* (large mock-olive). Vines and other climber species are typically common. The ground layer is variable and generally sparse with a diverse mix of forbs, ferns and shade-tolerant grasses. Cumberland Plain Sub-region of the Sydney Basin Bioregion.	No	No, these communities were not recorded occurring within the study area.
Western Sydney Dry Rainforest in the Sydney Basin Bioregion	E					

BC ACT STATUS: CE = CRITICALLY ENDANGERED; E = ENDANGERED; EPBC ACT STATUS: CE = CRITICALLY ENDANGERED, E = ENDANGERED

Table 7: Likelihood of occurrence assessment for threatened fauna and flora species

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Amphibia							
Heleioporus australiacus	Giant Burrowing Frog	V	V	Heath, woodland and open dry sclerophyll forest on a variety of soil types except those that are clay based. Spends more than 95% of its time in non-breeding habitat in areas up to 300 m from breeding sites. Whilst in non-breeding habitat it burrows below the soil surface or in the leaf litter. Individual frogs occupy a series of burrow sites, some of which are used repeatedly. The home ranges of both sexes appear to be non-overlapping suggesting exclusivity of non-breeding habitat. Home ranges are approximately 0.08 ha in size. When breeding, frogs will call from open spaces, under vegetation or rocks or from within burrows in the creek bank. Males show strong territoriality at breeding sites. This species breeds mainly in autumn but has been recorded calling throughout the year. Breeding habitat of this species is generally soaks or pools within first or second order streams.	0	No	No, no potential breeding habitat recorded within study area. Study area does not meet conditions for non-breeding habitat. No local records.
Litoria aurea	Green and Golden Bell Frog	E1	V	Recorded from ~ 50 scattered sites within its former range in NSW, from the north coast near Brunswick Heads, south along the coast to Victoria. Records exist west to Bathurst, Tumut and the ACT region. Marshes, dams and stream-sides, particularly those containing *Typha spp.* (bullrushes) or *Eleocharis spp.* (spikerushes). Some populations occur in highly disturbed areas.	60	No	No. No marshes, dams or streams recorded in the study area containing preferred habitat or vegetation.
Aves							

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Actitis hypoleucos	Common Sandpiper	-	M	Summer migrant. In NSW, widespread along coastline and occurs in many areas inland. Coastal wetlands and some inland wetlands, especially muddy margins, or rocky shores. Also, estuaries and deltas, lakes, pools, billabongs, reservoirs, dams and claypans, mangroves.	0	No	No, no preferred wetland habitat recorded within the study area. No local records.
Anthochaera phrygia	Regent Honeyeater	CE	CE	Inland slopes of south-east Australia, and less frequently in coastal areas. In NSW, most records are from the North-West Plains, North-West and South-West Slopes, Northern Tablelands, Central Tablelands and Southern Tablelands regions; also recorded in the Central Coast and Hunter Valley regions. Eucalypt woodland and open forest, wooded farmland and urban areas with mature eucalypts, and riparian forests of *Casuarina cunninghamiana* (River Oak).	0	Unlikely	No, limited potential foraging habitat recorded within the study area. No local records.
Aphelocephala leucopsis	Southern Whiteface	V	V	Inhabits drier open forests, woodlands and shrublands with an understorey of grasses or shrubs, where it often forages on the ground in small flocks. Breeds between July to October, with inland breeding time influenced by rainfall. Builds dome nest in hollow limbs or foliage as well as man-made infrastructure such as stumps, fence posts or in sheds.	2	Unlikely	No, limited potential foraging habitat recorded within the study area. Low number of local records.
Apus pacificus	Fork-tailed Swift	-	M	Non-breeding visitor to Australia, arriving in October and departing in April. Occur over riparian woodland, swamps, low scrub, heathland, saltmarsh, grassland, Spinifex sandplains, open farmland and inland and coastal sand-dunes.	1	Unlikely	No, the species may potentially forage aerially above the study area but is unlikely to use the study area in any significant way. Low number of local records.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Artamus cyanopterus cyanopterus	Dusky Woodswallow	V	-	Primarily inhabit dry, open eucalypt forests and woodlands, including mallee associations, with an open or sparse understorey of eucalypt saplings, acacias and other shrubs, and groundcover of grasses or sedges and fallen woody debris. It has also been recorded in shrublands, heathlands and very occasionally in moist forest or rainforest. Also found in farmland, usually at the edges of forest or woodland.	18	Unlikely	No, limited potential habitat recorded within the study area. Study area not adjacent to larger patches of forest or woodland.
Botaurus poiciloptilus	Australasian Bittern	E1	E	Found over most of NSW except for the far north-west. Permanent freshwater wetlands with tall, dense vegetation, particularly *Typha spp.* (bullrushes) and *Eleocharis spp.* (spikerushes).	2	No	No, preferred wetland habitat containing preferred vegetation not recorded within the study area. Low number of local records.
Calidris acuminata	Sharp-tailed Sandpiper	-	V, M	Summer migrant. Widespread in most regions of NSW, especially in coastal areas, but sparse in the south-central Western Plain and east Lower Western Regions. Shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation.	0	No	No, no preferred wetland habitat recorded within the study area. No local records.
Calidris ferruginea	Curlew Sandpiper	CE	CE, M	Occurs along the entire coast of NSW, and sometimes in freshwater wetlands in the Murray-Darling Basin. Littoral and estuarine habitats, including intertidal mudflats, non-tidal swamps, lakes and lagoons on the coast and sometimes inland.	0	No	No, no preferred wetland habitat recorded within the study area. No local records.
Calidris melanotos	Pectoral Sandpiper	-	M	Summer migrant to Australia. Widespread but scattered in NSW. East of the Great Divide, recorded from Casino and Ballina, south to Ulladulla. West of the Great Divide, widespread in the Riverina and	0	No	No, no preferred wetland habitat recorded within the study area. No local records.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
				Lower Western regions. Shallow fresh to saline wetlands, including coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands.			
Callocephalon fimbriatum	Gang-gang Cockatoo	E1	E	In NSW, distributed from the south-east coast to the Hunter region, and inland to the Central Tablelands and south-west slopes. Isolated records known from as far north as Coffs Harbour and as far west as Mudgee. Mature, tall mountain forests and woodlands with dense, shrubby understorey in summer; in winter, may occur at lower altitudes in open eucalypt forests and woodlands, occasionally in more urban areas. Critical habitat are HBTs occurring within stands of trees, dominated by Eucalypt species.	2	Unlikely	No, limited potential foraging habitat recorded within the study area. No breeding habitat recorded within the study area. Local records are from captive individuals.
Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo	V	V	In NSW, widespread along coast and inland to the southern tablelands and central western plains, with a small population in the Riverina. Open forest and woodlands of the coast and the Great Dividing Range where stands of she-oak occur, with the species normally relying on one or two species within a region. The species relies on HBTs as breeding habitat, with hollows most often occurring more than 8 m above ground, in branches > 30 cm in diameter and no more than 45° from vertical.	0	No	No, limited potential foraging habitat recorded within the study area in the form of planted Swamp She-oak, but no breeding habitat recorded within the study area. No local records.
Charadrius leschenaultii	Greater Sand Plover	V	M	In NSW, recorded between the northern rivers and the Illawarra, with most records coming from the Clarence and Richmond estuaries. Almost entirely restricted to coastal areas in NSW, mainly on sheltered sandy, shelly or muddy beaches or estuaries with large intertidal mudflats or sandbanks.	0	No	No, no preferred wetland habitat recorded within the study area. No local records.

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Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Chthonicola sagittata	Speckled Warbler	V	-	From south-eastern Qld, the eastern half of NSW and into Victoria, as far west as the Grampians, mostly on hills and tablelands of the Great Dividing Range and rarely on coast. Occurs in Eucalyptus-dominated communities with a grassy understorey and sparse shrub layer, often on rocky ridges or in gullies. Pairs are sedentary and occupy a home / breeding territory.	1	Unlikely	No, limited potential habitat within the study area. Limited connectivity to other potential habitat in the surrounding area. Low number of local records.
Circus assimilis	Spotted Harrier	V	-	Found throughout the Australian mainland, except in densely forested or wooded habitats, and rarely in Tasmania. Occurs in grassy open woodland including *Acacia* and mallee remnants, inland riparian woodland, grassland and shrub steppe. It is found most commonly in native grassland, but also occurs in agricultural land, foraging over open habitats including edges of inland wetlands. Builds a stick nest in a tree and lays eggs in spring (or sometimes autumn), with young remaining in the nest for several months.	1	Unlikely	No, no potential breeding habitat recorded within the study area. No foraging habitat recorded within the study area. Low number of local records.
Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)	V	V	From eastern through central NSW, west to Corowa, Wagga Wagga, Temora, Forbes, Dubbo and Inverell. Eucalypt woodlands and dry open forest. Hollows in standing dead or live trees, and tree stumps are essential for nesting. Critical habitat includes areas with relatively undisturbed grassy woodland with a native understorey containing large living and dead trees for roosting and nesting and fallen timber which provides essential foraging habitat.	0	No	No, preferred undisturbed habitat not recorded within the study area. No breeding habitat identified within the study area. No local records.
Cuculus optatus	Oriental Cuckoo	-	M	Summer migrant to Australia. Mainly seen in northern Australia, occasionally they are sighted as far south as Sydney. They are more widespread in the Top End and coastal Queensland with the odd vagrant records	0	No	No, preferred habitat not recorded within the study area. Study area outside of species

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
				south to the Pilbara. Oriental Cuckoos are found in more humid habitats such as monsoon forest, wet eucalypt forest, river margins and near mangroves.			typical distribution. No local records.
Daphoenositta chrysoptera	Varied Sittella	V	-	The Varied Sittella is sedentary and inhabits most of mainland Australia except the treeless deserts and open grasslands. Distribution in NSW is nearly continuous from the coast to the far west. Inhabits eucalypt forests and woodlands, especially those containing rough-barked species and mature smooth-barked gums with dead branches, mallee and *Acacia* woodland. Builds a cup-shaped nest of plant fibres and cobwebs in an upright tree fork high in the living tree canopy and often re-uses the same fork or tree in successive years.	52	Unlikely	No, limited potential habitat within the study area. Limited connectivity to other potential habitat in the surrounding area.
Erythrotriorchis radiatus	Red Goshawk	E1	E	In NSW, range extends to approximately 30°S. Open woodland and forest, often along or near watercourses or wetlands. In NSW, preferred habitats include mixed subtropical rainforest, *Melaleuca* swamp forest and coastal riparian *Eucalyptus* forest.	0	No	No, suitable habitat not recorded within the study area. Study area outside of species typical distribution. No local records.
Falco hypoleucos	Grey Falcon	V	V	Arid and semi-arid zones. In NSW, found chiefly throughout the Murray-Darling Basin, with the occasional vagrant east of the Great Dividing Range. Shrubland, grassland and wooded watercourses, occasionally in open woodlands near the coast, and near wetlands.	0	No	No, suitable habitat not recorded within the study area. Study area outside of species typical distribution. No local records.
Falco subniger	Black Falcon			Sparsely distributed in NSW, occurring mostly in inland regions. Woodland, shrubland and grassland, especially riparian woodland and agricultural land. Often associated with streams or wetlands.	1	Unlikely	No, preferred habitat containing waterbodies or wetlands not within the study area. Low number of local records.

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Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Gallinago hardwickii	Latham's Snipe	V	V, M	Migrant to east coast of Australia, extending inland west of the Great Dividing Range in NSW. Freshwater, saline or brackish wetlands up to 2000 m above sea-level; usually freshwater swamps, flooded grasslands or heathlands.	2	Unlikely	No, no preferred wetland habitat recorded within the study area. Low number of local records.
Glossopsitta pusilla	Little Lorikeet	V	-	The Little Lorikeet is distributed widely across the coastal and Great Divide regions of eastern Australia from Cape York to South Australia. NSW provides a large portion of the species' core habitat, with lorikeets found westward as far as Dubbo and Albury. Nomadic movements are common, influenced by season and food availability, although some areas retain residents for much of the year and 'locally nomadic' movements are suspected of breeding pairs. Forages primarily in the canopy of open *Eucalyptus* forest and woodland, yet also finds food in *Angophora*, *Melaleuca* and other tree species. Riparian habitats are particularly used, due to higher soil fertility and hence greater productivity. Feeds mostly on nectar and pollen, occasionally on native fruits such as mistletoe, and only rarely in orchards. Roosts in treetops, often distant from feeding areas. Nests in proximity to feeding areas, if possible, most typically selecting hollows in the limb or trunk of smooth-barked *Eucalypts*. These nest sites are often used repeatedly for decades, suggesting that preferred sites are limited. Riparian trees often chosen, including species like *Allocasuarina*.	4	Unlikely	No, marginal foraging habitat recorded within the study area. No breeding habitat recorded within the study area.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Grantiella picta	Painted Honeyeater	V	V	Widely distributed in NSW, predominantly on the inland side of the Great Dividing Range but avoiding arid areas. Boree, Brigalow and Box-Gum Woodlands and Box-Ironbark Forests. Specialist feeder on the fruits of mistletoes growing on woodland eucalypts and acacias.	0	No	No, mistletoes not recorded within the study area. No local records.
Haliaeetus leucogaster	White-bellied Sea Eagle	V		In New South Wales it is widespread along the east coast, and along all major inland rivers and waterways. Habitats are characterised by the presence of large areas of open water including larger rivers, swamps, lakes, and the sea. Occurs at sites near the sea or sea-shore, such as around bays and inlets, beaches, reefs, lagoons, estuaries and mangroves; and at, or in the vicinity of freshwater swamps, lakes, reservoirs, billabongs and saltmarsh. Terrestrial habitats include coastal dunes, tidal flats, grassland, heathland, woodland, and forest (including rainforest). Breeding habitat consists of mature tall open forest, open forest, tall woodland, and swamp sclerophyll forest close to foraging habitat. Nest trees are typically large emergent eucalypts and often have emergent dead branches or large dead trees nearby which are used as 'guard roosts'. Nests are large structures built from sticks and lined with leaves or grass.	1	Unlikely	No, suitable breeding habitat not recorded within the study area. Limited hunting habitat within the study area.
Hieraaetus morphnoides	Little Eagle	V	-	It occurs as a single population throughout NSW. Occupies open eucalypt forest, woodland, or open woodland. She-oak or Acacia woodlands and riparian woodlands of interior NSW are also used. Nests in tall living trees within a remnant patch, where pairs build a large stick nest in winter.	13	Unlikely	No, suitable breeding habitat not recorded within the study area. Limited foraging habitat within the study area.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Hirundapus caudacutus	White-throated Needletail	V	V, M	Non-breeding visitor to Australia. All coastal regions of NSW, inland to the western slopes and inland plains of the Great Divide. Occur most often over open forest and rainforest, as well as heathland, and remnant vegetation in farmland.	1	Unlikely	No, the species may potentially forage aerially above the study area but is unlikely to use the study area in any significant way. Low number of local records.
Lathamus discolor	**Swift Parrot**	**E1**	**CE**	**Migrates from Tasmania to mainland in Autumn-Winter. In NSW, the species mostly occurs on the coast and south west slopes. Box-ironbark forests and woodlands. Favoured feed trees include winter flowering species such as *Eucalyptus robusta*, *E. tereticornis*, *Corymbia maculata*, *C. gummifera*, *E. sideroxylon* and *E. albens*.**	**211**	**Potential**	**Yes, marginal foraging habitat recorded within the study area. Potential feed trees within the study area proposed to be impacted by the development. No Swift Parrot Important Areas mapped within or near the study area.**
Lophoictinia isura	Square-tailed Kite	V	-	Ranges along coastal and subcoastal areas from south-western to northern Australia, Queensland, NSW and Victoria. In NSW, scattered records of the species throughout the state indicate that the species is a regular resident in the north, north-east and along the major west-flowing river systems. It is a summer breeding migrant to the south-east, including the NSW south coast, arriving in September and leaving by March. Found in a variety of timbered habitats including dry woodlands and open forests. Shows a particular preference for timbered watercourses. Nest sites generally located along or near watercourses, in a fork or on large horizontal limbs.	1	Unlikely	No, suitable breeding habitat not recorded within the study area. Limited hunting habitat within the study area.
Melanodryas cucullata cucullata	South-eastern Hooded Robin	E1	E	Found throughout much of inland NSW, with the exception of the extreme north-west, where it is replaced by subspecies *picata.* Dry eucalypt	0	Unlikely	No, preferred foraging habitat not recorded within the study area. No local records.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
				woodland, acacia scrub and mallee with an open understorey. Rocks and fallen timber form essential foraging habitat.			
Motacilla flava	Yellow Wagtail	-	M	Regular summer migrant to mostly coastal Australia. In NSW recorded Sydney to Newcastle, the Hawkesbury and inland in the Bogan LGA. Swamp margins, sewage ponds, saltmarshes form preferred habitat, with the species also recorded from adjacent playing fields, airfields, ploughed land, lawns.	0	Unlikely	No, preferred swamp / wet habitat not recorded within the study area. No local records.
Neophema chrysostoma	Blue-winged Parrot	V	V	Inhabits a range of habitats from coastal, sub-coastal and inland areas, right through to semi-arid zones. Favours grasslands, grassy woodlands and wetland habitats. Often found near wetlands both near the coast and in semi-arid zones. Blue-winged Parrots can also be seen in altered environments such as airfields, golf courses and paddocks.	0	Unlikely	No, marginal habitat recorded within the study area. Study area outside of the species typical distribution. No local records.
Neophema pulchella	Turquoise Parrot	V	-	Range extends from southern Queensland through to northern Victoria, from the coastal plains to the western slopes of the Great Dividing Range. Lives on the edges of eucalypt woodland adjoining clearings, timbered ridges and creeks in farmland. Nests in tree hollows, logs or posts, from August to December.	1	Unlikely	No, marginal habitat recorded within the study area. No suitable breeding identified within study area. Low number of local records.
Ninox connivens	Barking Owl	V	-	Found throughout continental Australia except for the central arid regions. Although still common in parts of northern Australia, the species has declined greatly in southern Australia and now occurs in a wide but sparse distribution in NSW. The owls sometimes extend their home range into urban areas, hunting birds in garden trees and insects attracted to streetlights. Inhabits woodland and open forest,	1	Unlikely	No, marginal habitat recorded within the study area. No suitable breeding recorded within study area.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
				including fragmented remnants and partly cleared farmland. It is flexible in its habitat use, and hunting can extend in to closed forest and more open areas. Sometimes able to successfully breed along timbered watercourses in heavily cleared habitats (e.g. western NSW) due to the higher density of prey found on these fertile riparian soils. Nests in hollows of large, old trees. Living eucalypts are preferred though dead trees are also used.			
Ninox strenua	Powerful Owl	V	-	In NSW, it is widely distributed throughout the eastern forests from the coast inland to tablelands, with scattered records on the western slopes and plains suggesting occupancy prior to land clearing. Inhabits a range of vegetation types, from woodland and open sclerophyll forest to tall open wet forest and rainforest. Requires large tracts of forest or woodland habitat but can occur in fragmented landscapes as well. The species breeds and hunts in open or closed sclerophyll forest or woodlands and occasionally hunts in open habitats. It roosts by day in dense vegetation. Nests in large tree hollows (at least 0.5 m deep), in large eucalypts (diameter at breast height of 80-240 cm) that are at least 150 years old.	1	Unlikely	No, marginal habitat recorded within the study area. No suitable breeding recorded within study area.
Numenius madagascariensis	Eastern Curlew	CE	CE	Summer migrant to Australia. Primarily coastal distribution in NSW, with some scattered inland records. Estuaries, bays, harbours, inlets and coastal lagoons, intertidal mudflats or sandflats, ocean beaches, coral reefs, rock platforms, saltmarsh, mangroves, freshwater/brackish lakes, saltworks and sewage farms.	0	No	No, no preferred wetland habitat recorded within the study area. No local records.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Pandion haliaetus cristatus	Eastern Osprey	V	M	Common around the northern NSW coast, and uncommon to rare from coast further south. Some records from inland areas. Habitat includes rocky shorelines, islands, reefs, mouths of large rivers, lagoons and lakes. Breeds from July to September with nests made high up in dead trees or in dead crowns of lives trees.	0	Unlikely	No, preferred roosting / breeding habitat not recorded within the study area. No waterbodies recorded within the study area. No local records.
Petroica phoenicea	Flame Robin	V	-	The Flame Robin is endemic to south eastern Australia. In NSW, it breeds in upland tall moist eucalypt forests and woodlands, often on ridges and slopes. Prefers habitat with clearings or areas with open understoreys. The ground layer of the breeding habitat is dominated by native grasses and the shrub layer may be either sparse or dense. In winter, birds migrate to drier more open habitats in the lowlands (i.e. valleys below the ranges, and to the western slopes and plains). Occur singly, in pairs, or in flocks of up to 40 birds or more; in the non-breeding season they will join up with other insectivorous birds in mixed feeding flocks. Nests are often near the ground and are built in sheltered sites, such as shallow cavities in trees, stumps or banks.	1	Unlikely	No, preferred breeding habitat not recorded within the study area. Marginal foraging habitat present within the study area. Low number of local records.
Pycnoptilus floccosus	Pilotbird	V	V	The pilotbird is found from the Wollemi National Park and Blue Mountains National Park in New South Wales through to the Dandenong Ranges, near Melbourne in Victoria. Its natural habitat is temperate wet sclerophyll forests and occasionally temperate rainforest, where there is dense undergrowth with abundant debris. It is sedentary and common.	0	No	No, preferred habitat containing dense undergrowth not recorded within the study area. No local records.

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Rostratula australis	Australian Painted Snipe	E1	E	In NSW, many records are from the Murray-Darling Basin including the Paroo wetlands, Lake Cowal, Macquarie Marshes, Fivebough Swamp and more recently, swamps near Balldale and Wanganella. Other important locations with recent records include wetlands on the Hawkesbury River and the Clarence and lower Hunter Valleys. Prefers fringes of swamps, dams, and nearby marshy areas where there is a cover of grasses, lignum, low scrub, or open timber. Nests on the ground amongst tall vegetation, such as grasses, tussocks, or reeds.	0	No	No, no preferred wetland habitat recorded within the study area. No local records.
Stagonopleura guttata	Diamond Firetail	V	V	Grassy eucalypt woodlands, open forest, mallee, Natural Temperate Grassland, secondary derived grassland, riparian areas and lightly wooded farmland. Critical habitat is areas that have not had historical clearing, and are neither fragmented or degraded.	0	Unlikely	No, marginal preferred habitat recorded within the study area. Study area appears to regularly undergo disturbance through mowing. No local records.
Tringa nebularia	Common Greenshank	E1	E, M	Summer migrant to Australia. Recorded in most coastal regions of NSW; also, widespread west of the Great Dividing Range, especially between the Lachlan and Murray Rivers and the Darling River drainage basin, including the Macquarie Marshes, and north-west regions. Terrestrial wetlands (swamps, lakes, dams, rivers, creeks, billabongs, waterholes and inundated floodplains, claypans, saltflats, sewage farms and saltworks dams, inundated rice crops and bores) and sheltered coastal habitats (mudflats, saltmarsh, mangroves, embayment's, harbours, river estuaries, deltas, lagoons, tidal pools, rock-flats and rock platforms).	0	No	No, no preferred wetland habitat recorded within the study area. No local records.

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Tyto novaehollandiae	Masked Owl	V	-	Extends from the coast where it is most abundant to the western plains. Overall records for this species fall within approximately 90% of NSW, excluding the most arid north-western corner. There is no seasonal variation in its distribution. Lives in dry eucalypt forests and woodlands from sea level to 1100 m. Will hunt along the edges of forests, including roadsides. Roosts and breeds in moist eucalypt forested gullies, using large tree hollows or sometimes caves for nesting.	1	Unlikely	No, marginal habitat recorded within the study area. No suitable breeding recorded within study area.
Invertebrates							
Austrocordulia leonardi	Sydney Dragonfly	Hawk	E1	E	Three locations in a small area south of Sydney, from Audley to Picton. Deep and shady riverine pools with cooler water. Larvae are found under rocks. Spends most of its life underwater as an aquatic larva, before metamorphosing and emerging from the water as an adult. Adults are thought to only live for a few weeks.	0	No	No, no waterbodies recorded within the study area. Study area outside of known distribution. No local records.
Meridolum corneovirens	Cumberland Land Snail	Plain	E1	-	Lives in small areas on the Cumberland Plain west of Sydney, from Richmond and Windsor south to Picton and from Liverpool west to the Hawkesbury and Nepean Rivers at the base of the Blue Mountains. Known from over 100 different locations, but not all are currently occupied, and they are usually isolated from each other as a result of land use patterns. Primarily inhabits Cumberland Plain Woodland (a critically endangered ecological community). This community is a grassy, open woodland with occasional dense patches of shrubs. It is also known from Shale Gravel Transition Forests, Castlereagh Swamp Woodlands and the margins of River-flat Eucalypt	301	Unlikely	No, limited habitat recorded within the study area. Limited connectivity between the study area and other areas of vegetation.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
				Forest, which are also listed communities. Lives under litter of bark, leaves and logs, or shelters in loose soil around grass clumps. Occasionally shelters under rubbish. Can dig several centimetres into soil to escape drought.			
Mammals (excluding bats)							
Dasyurus maculatus maculatus (SE mainland population)	Spotted-tailed Quoll	V	E	Found on the east coast of NSW, Tasmania, eastern Victoria and north-eastern Qld. Rainforest, open forest, woodland, coastal heath and inland riparian forest, from the sub-alpine zone to the coastline. Solitary animals that occur in low densities. Rely on fallen logs, boulder piles, burrows and hollows for shelter.	0	No	No, preferred habitat containing features used for shelter not recorded within the study area. Limited connectivity between the study area and other areas of vegetation.
Notamacropus parma	Parma Wallaby	V	V	The species once occurred in north-eastern NSW from the Queensland boarder to the Bega area in the southeast. Their range is now confined to the coast and ranges of central and northern NSW from the Gosford district to south of the Bruxner Highway between Tenterfield and Casino. Wet sclerophyll forest with a thick, shrubby understorey and nearby grassy patches, or dry sclerophyll forests with a dense understorey.	0	No	No, preferred wet sclerophyll habitat not recorded within the study area. Outside of the species typical distribution. No local records.
Petauroides volans	Greater Glider	E1	E	Eastern Australia, from the Windsor Tableland in north Queensland through to central Victoria (Wombat State Forest). Eucalypt forests and woodlands. It is typically found in highest abundance in taller, montane, moist eucalypt forests with relatively old trees and abundant hollows. Arboreal, nocturnal species.	0	No	No, preferred old growth forest habitat not recorded within the study area. No local records.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Petaurus australis australis	Yellow-bellied Glider (south-eastern)	V	V	Along the eastern coast to the western slopes of the Great Dividing Range, from southern Qld to Victoria. Tall mature eucalypt forest generally in areas with high rainfall and nutrient rich soils. Live in small family groups in which a den tree is often shared. Arboreal, nocturnal species.	0	No	No, preferred mature forest habitat not recorded within the study area. No shelter habitat recorded within the study area.
Petrogale penicillata	Brush-tailed Rock-wallaby	E1	V	In NSW they occur from the Q border in the north to the Shoalhaven in the south, with the population in the Warrumbungle Ranges being the western limit. Rocky escarpments, outcrops and cliffs with a preference for complex structures with fissures, caves and ledges.	0	No	No, preferred habitat not recorded within the study area. No local records.
Phascolarctos cinereus	Koala	E1	E	In NSW it mainly occurs on the central and north coasts with some populations in the west of the Great Dividing Range. There are sparse and possibly disjunct populations in the Bega District, and at several sites on the southern tablelands. Inhabits eucalypt woodlands and forests.	4	Unlikely	No, marginal foraging habitat recorded within the study area. Limited connectivity between the study area and other areas of vegetation.
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Qld, NSW and the ACT)	-	E	The listed population of the koala has a wide but patchy distribution that spans the coastal and inland areas of Qld north to the Herberton area, extending westwards into hotter and dryer semi-arid climates of central Qld, NSW and the ACT.	4	Unlikely	No, marginal foraging habitat recorded within the study area. Limited connectivity between the study area and other areas of vegetation.
Pseudomys novaehollandiae	New Holland Mouse	-	V	Fragmented distribution across eastern NSW. Known to inhabit open heathlands, woodlands and forests with a heathland understorey and vegetated sand dunes. It is a social animal, living predominantly in burrows shared with other individuals.	0	No	No, preferred heath understorey habitat not recorded within the study area. No local records.

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Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Mammals (bats)							
Chalinolobus dwyeri	Large-eared Pied Bat	E1	E	Recorded from Rockhampton in Qld south to Ulladulla in NSW. Largest concentrations of populations occur in the sandstone escarpments of the Sydney basin and the NSW north-west slopes. Roosting habitat includes areas featuring cliffs, escarpments or rocky outcrops. Wet and dry sclerophyll forests, Cyprus Pine dominated forest, woodland, sub-alpine woodland, edges of rainforests and sandstone outcrop country.	3	Unlikely	No, roosting habitat not recorded within the study area. May occasionally fly through the study area on hunting forays however, unlikely to utilize for extended periods of time.
Falsistrellus tasmaniensis	Eastern False Pipistrelle	V	-	The Eastern False Pipistrelle is found on the south-east coast and ranges of Australia, from southern Queensland to Victoria and Tasmania. Prefers moist habitats, with trees taller than 20 m. Generally, roosts in eucalypt hollows but has also been found under loose bark on trees or in buildings. Hunts beetles, moths, weevils and other flying insects above or just below the tree canopy. Enters torpor in winter.	38	Unlikely	No, roosting habitat not recorded within the study area. May occasionally fly through the study area on hunting forays however, unlikely to utilize for extended periods of time.
Micronomus norfolkensis	Eastern Coastal Free-tail Bat	V	-	The Eastern Freetail-bat is found along the east coast from south Queensland to southern NSW. Occur in dry sclerophyll forest, woodland, swamp forests and mangrove forests east of the Great Dividing Range. Roost mainly in tree hollows but will also roost under bark or in man-made structures. Usually solitary but also recorded roosting communally, probably insectivorous.	64	Unlikely	No, roosting habitat not recorded within the study area. May occasionally fly through the study area on hunting forays however, unlikely to utilize for extended periods of time.
Miniopterus australis	Little Bent-winged Bat	V	-	East coast and ranges south to Wollongong in NSW. Moist eucalypt forest, rainforest, vine thicket, wet and dry sclerophyll forest, Melaleuca swamps, dense coastal forests and banksia scrub. Roost in caves,	4	Unlikely	No, roosting habitat not recorded within the study area. May occasionally fly through the study area on hunting forays

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
				tunnels, tree hollows, abandoned mines, stormwater drains, culverts, bridges and sometimes buildings during the day, and at night forage for small insects beneath the canopy of densely vegetated habitats.			however, unlikely to utilize for extended periods of time.
Miniopterus orianae oceanensis	Large Bent-winged Bat	V	-	Eastern Bent-winged Bats occur along the east and north-west coasts of Australia. Caves are the primary roosting habitat, but also use derelict mines, storm-water tunnels, buildings and other man-made structures. Form discrete populations centred on a maternity cave that is used annually in spring and summer for the birth and rearing of young. At other times of the year, populations disperse within about 300 km range of maternity caves. Hunt in forested areas, catching moths and other flying insects above the tree tops.	321	Unlikely	No, roosting habitat not recorded within the study area. May occasionally fly through the study area on hunting forays however, unlikely to utilize for extended periods of time.
Myotis macropus	Southern Myotis	V	-	The Southern Myotis is found in the coastal band from the north-west of Australia, across the top-end and south to western Victoria. It is rarely found more than 100 km inland, except along major rivers. Generally, roost in groups of 10 - 15 close to water in caves, mine shafts, hollow-bearing trees, storm water channels, buildings, under bridges and in dense foliage. Forage over streams and pools catching insects and small fish by raking their feet across the water surface.	29	Unlikely	No, roosting habitat not recorded within the study area. Foraging habitat not recorded within the study area.
Pteropus poliocephalus	**Grey-headed Flying-fox**	**V**	**V**	**Along the eastern coast of Australia, from Bundaberg in Qld to Melbourne in Victoria. Subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps as well as urban gardens and cultivated fruit crops.**	**138**	**Potential**	**Yes, marginal foraging habitat recorded within the study area. No camps recorded within the study area. Potential feed trees within the study area proposed**

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
							to be impacted by the development.
Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	V	-	The Yellow-bellied Sheathtail-bat is a wide-ranging species found across northern and eastern Australia. In the most southerly part of its range - most of Victoria, south-western NSW and adjacent South Australia - it is a rare visitor in late summer and autumn. There are scattered records of this species across the New England Tablelands and North West Slopes. Roosts singly or in groups of up to six, in tree hollows and buildings; in treeless areas they are known to utilise mammal burrows. When foraging for insects, flies high and fast over the forest canopy, but lower in more open country. Forages in most habitats across its very wide range, with and without trees; appears to defend an aerial territory.	1	Unlikely	No, roosting habitat not recorded within the study area. May occasionally fly over the study area on hunting forays however, unlikely to utilize for extended periods of time.
Scoteanax rueppellii	Greater Broad-nosed Bat	V	-	The Greater Broad-nosed Bat is found mainly in the gullies and river systems that drain the Great Dividing Range, from north-eastern Victoria to the Atherton Tableland. It extends to the coast over much of its range. In NSW it is widespread on the New England Tablelands, however, does not occur at altitudes above 500 m. Utilises a variety of habitats from woodland through to moist and dry eucalypt forest and rainforest, though it is most commonly found in tall wet forest. Although this species usually roosts in tree hollows, it has also been found in buildings. Forages after sunset, flying slowly and directly along creek and river corridors at an altitude of 3 - 6 m. Open woodland habitat and dry open forest suits the direct flight of this species as it searches for beetles and	24	Unlikely	No, roosting habitat not recorded within the study area. Hunting habitat not recorded within the study area.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
				other large, slow-flying insects; this species has been known to eat other bat species. Little is known of its reproductive cycle, however a single young is born in January; prior to birth, females congregate at maternity sites located in suitable trees, where they appear to exclude males during the birth and raising of the single young.			
Reptiles							
Aprasia parapulchella	Pink-tailed Worm-lizard	V	V	In NSW, only known from Central and Southern Tablelands and the South Western Slopes. Sloping, open woodland areas with predominantly native grassy ground layers, rocky outcrops or scattered, partially-buried rocks. Commonly found beneath small, partially-embedded rocks and appear to spend considerable time in burrows below these rocks; the burrows have been constructed by and are often still inhabited by small black ants and termites.	0	No	No, preferred grassland habitat containing rock habitat features not recorded within the study area. No local records.
FLORA							
Acacia bynoeana	Bynoe's Wattle	E1	V	Found in central eastern NSW, from the Hunter District (Morisset) south to the Southern Highlands and west to the Blue Mountains. Heath or dry sclerophyll forest on sandy soils. Seems to prefer open, sometimes slightly disturbed sites such as trail margins, edges of roadside spoil mounds and in recently burnt patches. Associated overstorey species include Red Bloodwood, Scribbly Gum, Parramatta Red Gum, Saw Banksia and Narrow-leaved Apple.	0	Unlikely	No, the study area is mapped as occurring on shale soils (NSW DCCEEW 2025e). The species was not recorded within the study area.
Acacia pubescens	Downy Wattle	V	V	Restricted to Sydney region, most commonly observed around Bankstown-Fairfield-Rookwood and Pitt Town	682	Unlikely	No, the study area is regularly disturbed and was not found to

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
				areas. Occurs in open woodland and forest including Coos River/Castlereagh Ironbark Forest, Shale/Gravel Transition Forest and Cumberland Plain Woodland. Occurs on alluviums, shales and at the intergrade between shales and sandstones.			contain any remnant vegetation. The species was not recorded within the study area.
Allocasuarina glareicola	-	E1	E	Primarily restricted to the Richmond (NW Cumberland Plain) district, but with an outlier population found at Voyager Point, Liverpool. Castlereagh woodland on lateritic soil. Found in open woodland with *Eucalyptus parramattensis*, *Eucalyptus fibrosa*, *Angophora bakeri*, *Eucalyptus sclerophylla* and *Melaleuca decora*.	0	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.
Cryptostylis hunteriana	Leafless Tongue-orchid	V	V	Recorded mainly on coastal and near coastal ranges north from Victoria to near Forester. Occurs in coastal heathlands, margins of coastal swamps and sedgelands, coastal forest, dry woodland, and lowland forest. Larger populations typically occur in woodland dominated by *Eucalyptus sclerophyll*, *E. sieberi*, *Corymbia gummifera*, and *Allocasuarina littoralis*.	0	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.
Cynanchum elegans	White-flowered Wax Plant	E1	E	Restricted to eastern NSW, from Brunswick Heads on the north coast to Gerroa in the Illawarra region, and as far west as Merriwa in the upper Hunter River valley. Dry rainforest; littoral rainforest; *Leptospermum laevigatum-Banksia integrifolia* subsp. *integrifolia* (Coastal Tea-tree– Coastal Banksia) coastal scrub; *Eucalyptus tereticornis* (Forest Red Gum) or *Corymbia maculata* (Spotted Gum) open forest and woodland; and *Melaleuca armillaris* (Bracelet Honeymyrtle) scrub.	0	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Dillwynia tenuifolia	-	V	-	The core distribution is the Cumberland Plain from Windsor and Penrith east to Dean Park near Colebee. Other populations in western Sydney are recorded from Voyager Point and Kemps Creek in the Liverpool LGA, Luddenham in the Penrith LGA and South Maroota in the Baulkham Hills Shire. Disjunct localities outside the Cumberland Plain include the Bulga Mountains at Yengo in the north, and Kurrajong Heights and Woodford in the Lower Blue Mountains.	1	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.
Eucalyptus scoparia	Wallangarra White Gum	E1	V	In NSW it is known from only three locations near Tenterfield. Open eucalypt forest, woodland and heaths on well-drained granite/rhyolite hilltops, slopes and rocky outcrops, typically at high altitudes.	1	Unlikely	No, the species is a commonly planted landscaping species. Species is not indigenous to the area. The species was not recorded within the study area.
Genoplesium baueri	Bauer's Midge Orchid	E1	E	Has been recorded from locations between Nowra and Pittwater and may occur as far north as Port Stephens. Dry sclerophyll forest and moss gardens over sandstone.	0	No	No, preferred sandstone habitat not recorded within the study area. No local records.
Grevillea parviflora subsp. *parviflora*	Small-flower Grevillea	V	V	Sporadically distributed throughout the Sydney Basin and in the Hunter in the Cessnock-Kurri Kurri area. Also known from Putty to Wyong and Lake Macquarie. Found in heath and shrubby woodland to open forest on sandy or light clay soils usually over thin shales.	0	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.
Haloragis exalata subsp. *exalata*	Wingless Raspwort	V	V	Disjunct distribution in the Central Coast, South Coast and North Western Slopes botanical subdivisions of NSW. Protected and shaded damp situations in riparian habitats.	0	No	No, riparian habitat not recorded within the study area.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Leucopogon exolasius	Woronora Beard-heath	V	V	Distribution is in Upper Georges River area and in Heathcote National Park. Occurs in woodland on sandstone. Flowering occurs in August and September.	0	Unlikely	No, the study area is mapped as occurring on shale soils (NSW DCCEEW 2025e). Heathland habitat not recorded within the study area.
Macadamia integrifolia	Macadamia Nut	-	V	Not known to occur naturally in the wild in NSW; recorded from Camden Haven but it is not known if the tree was cultivated or growing naturally. Drier subtropical rainforest.	1	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.
Marsdenia viridiflora subsp. *viridiflora*		E2		Razorback Range, also recorded at Prospect, Bankstown, Smithfield, Cabramatta Creek and St Marys. Vine thickets and open shale woodland.	38	No	No, preferred habitat not recorded within the study area. The species was not recorded within the study area.
Melaleuca deanei	Deane's Melaleuca	V	V	Ku-ring-gai/Berowra area, Holsworthy/Wedderburn area, Springwood (in the Blue Mountains), Wollemi National Park, Yalwal (west of Nowra) and Central Coast (Hawkesbury River) areas. Heath on sandstone.	0	No	No, the study area is mapped as occurring on shale soils (NSW DCCEEW 2025e). Heathland habitat not recorded within the study area.
Persicaria elatior	Tall Knotweed	V	V	In south-eastern NSW recorded from Mt Dromedary, Moruya State Forest near Turlinjah, the Upper Avon River catchment north of Robertson, Bermagui, and Picton Lakes. In northern NSW known from Raymond Terrace (near Newcastle) and the Grafton area (Cherry Tree and Gibberagee State Forests). Beside streams and lakes, swamp forest or disturbed areas.	0	No	No, preferred riparian habitat not recorded within study area. No local records.

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Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Persoonia hirsuta	Hairy Geebung	E1	E	Scattered distribution around Sydney, from Singleton in the north, along the east coast to Bargo in the south and the Blue Mountains to the west. Sandy soils in dry sclerophyll open forest, woodland and heath on sandstone.	0	Unlikely	No, the study area is mapped as occurring on shale soils (NSW DCCEEW 2025e). Heathland habitat not recorded within the study area.
Persoonia nutans	Nodding Geebung	E1	E	Restricted to the Cumberland Plain in western Sydney, between Richmond in the north and Macquarie Fields in the south. Northern populations: sclerophyll forest and woodland (Agnes Banks Woodland, Castlereagh Scribbly Gum Woodland and Cooks River / Castlereagh Ironbark Forest) on aeolian and alluvial sediments. Southern populations: tertiary alluvium, shale sandstone transition communities and Cooks River / Castlereagh Ironbark Forest.	0	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.
Pimelea curviflora var. *curviflora*	-	V	V	Confined to the coastal area of the Sydney and Illawarra regions between northern Sydney and Maroota in the north-west and Croom Reserve near Albion Park in the south. Occurs in woodland, mostly on shaley/lateritic soils over sandstone and shale/sandstone transition soils on ridgetops and upper slopes.	0	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.
Pimelea spicata	Spiked-Rice-flower	E1	E	Two disjunct areas; the Cumberland Plain (Marayong and Prospect Reservoir south to Narellan and Douglas Park) and the Illawarra (Landsdowne to Shellharbour to northern Kiama). Well-structured clay soils. *Eucalyptus moluccana* (Grey Box) communities and in areas of ironbark on the Cumberland Plain. Coast Banksia open woodland or coastal grassland in the Illawarra.	439	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
Pomaderris brunnea	Brown Pomaderris	E1	V	In NSW, found around the Colo, Nepean and Hawkesbury Rivers, including the Bargo area and near Camden. It also occurs near Walcha on the New England tablelands. Moist woodland or forest on clay and alluvial soils of flood plains and creek lines.	0	No	No, preferred moist / riparian habitat not recorded within the study area. No local records.
Pterostylis gibbosa	Illawarra Greenhood	E1	E	Known from a small number of populations in the Hunter region, the Illawarra region, and the Shoalhaven region. Open forest or woodland, on flat or gently sloping land with poor drainage. Only visible above the ground between late summer and spring, and only when soil moisture levels can sustain its growth.	0	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.
Pterostylis saxicola	Sydney Plains Greenhood	E1	E	Restricted to western Sydney between Freemans Reach in the north and Picton in the south. Small pockets of shallow soil in depressions on sandstone rock shelves above cliff lines, adjacent to sclerophyll forest or woodland on shale/sandstone transition soils or shale soils.	0	No	No, preferred sandstone rock shelf habitat not recorded within the study area. No local records.
Pultenaea parviflora		E1	V	Core distribution is from Windsor to Penrith and east to Dean Park. May be locally abundant, particularly within scrubby/dry heath areas within Castlereagh Ironbark Forest and Shale Gravel Transition Forest on tertiary alluvium or laterised clays. May also be common in transitional areas where these communities adjoin Castlereagh Scribbly Gum Woodland. Commonly found in association with Eucalyptus dominant canopy species. Associated species may include *Allocasuarina littoralis, Angophora bakeri*, *Aristida* spp. *Banksia spinulosa, Cryptandra* spp., *Daviesia ulicifolia, Dodonaea falcata,*	0	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
				Entolasia stricta, Hakea sericea, Lissanthe strigosa, Melaleuca nodosa, Ozothamnus diosmifolius, Styphelia laeta and *Themeda australis.*			
Pultenaea pedunculata	Matted Bush-pea	E1	-	In NSW it is represented by just three disjunct populations, in the Cumberland Plains in Sydney, the coast between Tathra and Bermagui and the Windellama area south of Goulburn. Woodland, sclerophyll forest, road batters and coastal cliffs.	15	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area.
Rhizanthella slateri	Eastern Underground Orchid	V	E	In NSW, currently known from fewer than 10 locations, including near Bulahdelah, the Watagan Mountains, the Blue Mountains, Wiseman's Ferry area, Agnes Banks and near Nowra. Sclerophyll forest in shallow to deep loams.	0	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant vegetation. The species was not recorded within the study area. No local records.
Rhodamnia rubescens	Scrub Turpentine	CE	CE	Occurs in coastal districts north from Batemans Bay in New South Wales, approximately 280 km south of Sydney, to areas inland of Bundaberg in Queensland. Populations of *R. rubescens* typically occur in coastal regions and occasionally extend inland onto escarpments up to 600 m a.s.l. in areas with rainfall of 1,000-1,600 mm. Found in littoral, warm temperate and subtropical rainforest and wet sclerophyll forest usually on volcanic and sedimentary soils.	0	No	No, rainforest habitat not recorded within the study area. No local records.
Syzygium paniculatum	Magenta Lilly Pilly	E1	V	Only in NSW, in a narrow, linear coastal strip from Upper Lansdowne to Conjola State Forest. Subtropical and littoral rainforest on gravels, sands, silts and clays.	0	No	No, rainforest habitat not recorded within the study area. No local records.
Thesium australe	Austral Toadflax	V	V	In eastern NSW it is found in very small populations scattered along the coast, and from the Northern to Southern Tablelands. Grassland on coastal headlands	0	Unlikely	No, the study area is regularly disturbed and was not found to contain any remnant

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat	Records within 5 km of the study area (BioNet)	Likelihood of Occurrence	Impact Assessment Required
				or grassland and grassy woodland away from the coast.			vegetation. The species was not recorded within the study area. No local records.

BC ACT STATUS: CE = CRITICALLY ENDANGERED; E1 = ENDANGERED; E2 = ENDANGERED POPULATION, V=VULNERABLE; EPBC ACT STATUS: CE = CRITICALLY ENDANGERED, E = ENDANGERED, V = VULNERABLE, M = MIGRATORY

Appendix B Fauna list

Scientific name	Common name	Status
Acridotheres tristis	Common Myna	Exotic
Anthochaera carunculata	Red Wattlebird	Native
Columba livia	Rock Dove	Exotic
Grallina cyanoleuca	Magpie-lark	Native
Hirundo neoxena	Welcome Swallow	Native
Manorina melanocephala	Noisy Miner	Native
Ocyphaps lophotes	Crested Pigeon	Native
Vanellus miles	Masked Lapwing	Native

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Appendix C BC Act Tests of Significance

The 'Test of significance' (5-part test) is applied to species, populations and ecological communities listed on Schedules 1 and 2 of the BC Act and Schedules 4, 4A and 5 of the FM Act. The assessment sets out five factors, which when considered, allow proponents to undertake a qualitative analysis of the likely impacts of an action and to determine whether a significant impact is likely. All factors must be considered, and an overall conclusion made based on all factors in combination.

Tests of Significance have been undertaken for the following threatened entities:

- *Pteropus poliocephalus* (Grey-headed Flying-fox)
- *Lathamus discolor* (Swift Parrot).

C1 *Pteropus poliocephalus* (Grey-headed Flying-fox)

The Grey-headed Flying-fox is listed as vulnerable under the BC Act and has previously been recorded within 5 km of the study area (NSW DCCEEW 2025a). The description and habitat associations of this species are presented in Appendix A. The proposed action will result in the removal of vegetation which represents occasional foraging habitat for this species.

No known Grey-headed Flying-fox camps are present within the study area and no camps will be affected by the proposed school upgrades. Grey-headed Flying-fox present in camps within a 20 km radius of the study area may use the foraging resources available within the study area. The potential foraging habitat within the study area is marginal and would not be relied upon as a sole foraging resource for this species. The closest Nationally Important Camp is located approximately 7.6 km southeast of the study area in Milton Park, Macquarie Fields (DCCEEW 2025c).

Table 8: BC Act Test of Significance for Grey-headed Flying-fox

BC Act	Question	Response
7.3.1 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	Factors likely to have an adverse effect on the life cycle of the Grey-headed Flying-fox would include a substantial loss and/or fragmentation of foraging habitat and loss of suitable roosting or breeding habitat. There are no known flying fox camps within the study area (DCCEEW 2025c). The nearest camp is located at Macquarie Fields approximately 7.6 km southeast of the study area. The proposed works do not impact upon breeding habitat or suitable roosting habitat for this species. The proposed works will result in the removal of vegetation which may provide occasional foraging habitat for the Grey-headed Flying-fox. This vegetation does not represent a substantial loss of habitat and is unlikely to further fragment vegetation. It is considered unlikely that the proposed works would place a viable population of the species at risk of

BC Act	Question	Response
		extinction given that the area of potential habitat is small in extent and would only be used occasionally, as part of a mosaic of foraging resources.
7.3.1 b) i	In the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity: 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	Not applicable.
7.3.1 b) ii	In the case of an endangered ecological community or critically endangered ecological community: Whether the proposed development or activity 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.	Not applicable.
7.3.1 c) i	In relation to the habitat of a threatened species or ecological community: The extent to which habitat is likely to be removed or modified as a result of the proposed development or activity	Impacts to potential foraging habitat for this species would be minimal. The proposed works will result in the removal of 0.08 ha of planted native vegetation and 0.01 ha of exotic which may provide occasional foraging habitat for the Grey-headed Flying-fox. This includes canopy species *Eucalyptus tereticornis*, *E. robusta*, and exotic species *Morus* sp. This will result in a minor reduction in the expanse of canopy available for foraging within the study area and similar canopy trees will also be retained within the study area. For a highly mobile species, this impact is considered to be minor. This species will be able to continue to utilise the retained planted native vegetation within the study area as foraging habitat. As such, the extent to which the potential foraging habitat will be removed is unlikely to impact upon this species.
7.3.1 c) ii	In relation to the habitat of a threatened species or ecological community: Whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity	The proposed works will result in the removal of 0.08 ha of planted native vegetation, of which several Eucalypts may provide marginal foraging habitat for the Grey-headed Flying-fox. One *Morus* sp. which may also provide marginal foraging habitat, is also proposed to be removed. These consist of individual trees scattered on the boundary of the study area. This vegetation is already fragmented from larger patches of vegetation present within the surrounding area. The majority of planted native and within the study area will remain. Therefore, the proposed works are unlikely to increase fragmentation. This highly mobile species would access similar vegetation within the broader landscape.
7.3.1 c) iii	In relation to the habitat of a threatened species or ecological community: The importance of the habitat to be removed, modified, fragmented or isolated to the long-term	The proposed works will result in the removal of Eucalyptus trees which may provide occasional foraging habitat for the Grey-headed Flying-fox. However, *Eucalyptus robusta* and *E. tereticornis* are known

BC Act	Question	Response
	survival of the species, population or ecological community in the locality.	important feed trees for the species during winter months, and the proposed works will result in the removal of one and two of these trees respectively. This will result in a minor reduction in extent of available foraging habitat within an already fragmented landscape. It is likely there will be more present within the surrounding landscape as these are a commonly planted streets and garden tree used throughout the greater Sydney area. This is a highly mobile species, travelling an up to 20 km per night to forage (DCCEEW 2025b), and there is likely an abundance of potential foraging habitat available within a 20 km radius of the study area. The small area of habitat to be impacted within the study area is not considered vital to the long-term survival of this species because the species is highly mobile and would be able to continue foraging in better condition vegetation within the broader landscape.
7.3.1 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).	The proposed works would not impact any declared area of outstanding biodiversity value.
7.3.1 e)	Whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.	The proposed development is not part of a listed key threatening process.
Conclusion	Is there likely to be a significant impact?	The proposed works are unlikely to have a significant impact on Grey-headed Flying-fox for the following reasons: • the extent of potential foraging habitat to be affected is minimal, consisting of 0.08 ha of planted native vegetation and 0.01 ha of planted exotic *Morus* sp. • similar habitat for the Grey-headed Flying-fox will remain within the study area and is available within proximity of the study area. • the proposed works would not result in fragmentation of habitat for the species • no breeding habitat (camps) would be impacted by the proposed works.

C2 *Lathamus discolor* (Swift Parrot)

The Swift Parrot is listed as endangered under the BC Act and has previously been recorded within 5 km of the study area (NSW DCCEEW 2025a). The description and habitat associations of this species are presented in Appendix A. The proposed action will result in the removal of 0.08 ha of planted native vegetation which includes *Eucalyptus robusta* and *E. tereticornis* and represents marginal foraging habitat for this species. 0.01 ha of exotic vegetation may also be removed and is unlikely to represent foraging habitat for this species.

No Swift Parrot Important Areas has been mapped within or near the study area. The potential foraging habitat within the study area is marginal and would not be relied upon as a sole foraging resource for this species.

Table 9 BC Act Test of Significance for Swift Parrot

BC Act	Question	Response
7.3.1 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	Factors likely to have an adverse effect on the life cycle of the Swift parrot would include a substantial loss and/or fragmentation of foraging habitat and loss of suitable roosting and breeding habitat. The Swift Parrot is a winter non-breeding migrant species to the east coast of NSW. No breeding habitat would be impacted by the proposed works. The proposed works will result in the removal of 0.08 ha of planted native vegetation which includes several Eucalyptus trees containing marginal foraging habitat for the Swift Parrot. This would be considered a small reduction in foraging habitat. The patch of marginal foraging habitat within the study area is small, has poor structural complexity and would be utilised as part of a wider range of foraging resources in the broader landscape for these highly mobile species. This highly mobile species would also be able to access better quality habitat (Cumberland Blue Box Riverflat Forest and Cumberland Plain Woodland) adjacent to the study area, as well as within the vegetation in the riparian corridor of Kemps Creek to the northwest of the study area. Therefore, it is considered unlikely that the proposed works would place a viable population of any of these species at risk of extinction.
7.3.1 b) i	In the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity: 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	Not applicable.
7.3.1 b) ii	In the case of an endangered ecological community or critically endangered ecological community:	Not applicable.

BC Act	Question	Response
	Whether the proposed development or activity 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.	
7.3.1 c) i	In relation to the habitat of a threatened species or ecological community: The extent to which habitat is likely to be removed or modified as a result of the proposed development or activity	The proposed works will result in the removal of 0.08 ha of planted native vegetation and 0.01 ha of exotic vegetation, of which several Eucalyptus trees are considered marginal foraging habitat for the Swift Parrot. However, this is not considered significant as similar foraging habitat will be retained within the study area. This vegetation is already fragmented from larger patches of vegetation present within the surrounding area. The majority of planted native and within the study area will remain. In addition, this highly mobile species would also be able to access better quality habitat (Cumberland Blue Box Riverflat Forest and Cumberland Plain Woodland) adjacent to the study area, as well as within the vegetation in the riparian corridor of Kemps Creek to the northwest of the study area.
7.3.1 c) ii	In relation to the habitat of a threatened species or ecological community: Whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity	The planted native vegetation to be removed is part of a highly fragmented patch of vegetation within an urban landscape. The vegetation to be removed includes 0.08 ha of planted native vegetation which includes several *Eucalyptus sp.* which represents potential foraging habitat for the Swift Parrot. The proposed works would not result in further fragmenting or isolating of foraging habitat within the local occurrence as canopy connectivity would continue within the vegetation that is to be retained within the study area (0.25 ha). The proposed upgrades will retain connective canopy within the study area. In addition, this highly mobile species will still be able to access similar vegetation located within the vicinity of the study area, to the east, west and south. The species will also continue to have access to better quality, larger scale foraging habitat near Kemps Creek which is located further to the northwest of the study area.
7.3.1 c) iii	In relation to the habitat of a threatened species or ecological community: 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.	The study area is not within a key or other breeding area for Swift Parrot; therefore, no breeding habitat will be affected. The vegetation to be removed includes four *Eucalyptus species* which represents potential marginal foraging habitat for the Swift Parrot. No hollow bearing trees were recorded within the study area during previous field survey. The area of habitat to be affected is not considered vital to the long-term survival of any of these species within the locality and does presents limited foraging resources.
7.3.1 d)	Whether the proposed development or activity is likely to have an adverse effect on any declared	The proposed works would not impact any declared area of outstanding biodiversity value.

BC Act	Question	Response
	area of outstanding biodiversity value (either directly or indirectly).	
7.3.1 e)	Whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.	The proposed development is not part of a listed key threatening process.
Conclusion	Is there likely to be a significant impact?	The proposed works are unlikely to have a significant impact on Swift Parrot for the following reasons: • The area of vegetation to be affected is in marginal in quality and small in size • Better habitat (Cumberland Blue Box Riverflat Forest and Cumberland Plain Woodland) for this highly mobile species is available adjacent to the study area, as well as within the vegetation in the riparian corridor of Kemps Creek to the northwest of the study area. • This species is a winter-non-breeding migrant to mainland Australia. Therefore, no breeding habitat for the identified threatened species will be affected. • Habitat for the species is unlikely to be fragmented as they are highly mobile and can use retained vegetation within the study area and broader landscape.

Appendix D Assessment of Significance (EPBC Act)

The EPBC Act establishes a process for assessing the environmental impact of activities and developments where Matters of National Environmental Significance (MNES) may be affected. Under the Act, any action which 'has, will have, or is likely to have a significant impact on a matter of MNES' is defined as a controlled action, and requires approval from the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW), which is responsible for administering the EPBC Act. The process includes undertaking an Assessment of Significance for listed threatened species and ecological communities that represent a matter of MNES that will be affected as a result of the proposed action. Significant impact guidelines that outline a number of criteria have been developed by the Commonwealth of Australia (2013), to provide assistance in conducting the Assessment of Significance and help decide whether or not a referral to the Commonwealth is required.

The following MNES has been assessed as part of this assessment:

- *Pteropus poliocephalus* (Grey-headed Flying-fox)
- *Lathamus discolor* (Swift Parrot).

D1 *Pteropus poliocephalus* (Grey-headed Flying-fox)

The Grey-headed Flying-fox is listed as vulnerable under the EPBC Act and has been previously recorded within a 5 km radius of the action area (Appendix A). The proposed works will result in the removal of *four Eucalyptus trees* which may provide occasional foraging habitat for the Grey-headed Flying-fox.

Grey-headed Flying-fox present in camps within a 20 km radius of the action area may use the foraging resources available within the action area (i.e. the study area). The potential foraging habitat within the action area is marginal and would not be relied upon as a sole foraging resource for this species. There are no known camps within the study area. The nearest nationally important camp to the study area is approximately 7.6 km southeast at Milton Park, Macquarie Fields (DCCEEW 2025c).

Considering that Grey-headed Flying-fox is likely to forage on the planted native vegetation within the study area on an occasional basis, a significance assessment has been undertaken in accordance with Significant impact guidelines 1.1 under the EPBC Act (CoA, 2013) (Table 10).

Table 10: EPBC Act Assessment for *Pteropus poliocephalus* (Grey-headed Flying-fox)

Criterion	Assessment
An action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:	
Criterion a: lead to a long-term decrease in the size of an important population of a species	The Matters of National Environmental Significance Impact Guidelines 1.1 (CoA 2013) defines an important population as a population that is necessary for a species' long-term survival and recovery. This may include populations identified as such in recovery plans, and/or that are: 1. Key source populations either for breeding or dispersal 2. Populations that are necessary for maintaining genetic diversity, and/or 3. Populations that are near the limit of the species range The Grey-headed Flying-fox is considered one population due to the constant exchange of genetic material between individuals and its movement between camps throughout

Criterion	Assessment
	its entire geographic range (DAWE 2021). Maternity or other roosting habitat is considered important habitat for this species. According to the National Flying-fox Monitoring Program, no Grey-headed Flying-fox camps currently occur or have ever been recorded within the action area (DAWE 2021). The nearest active Grey-headed Flying-fox camp occurs at Macquarie Park approximately 7.6 km southeast of the study area. The proposed action will result in the removal of three trees (one *Eucalyptus robusta* and two *E. tereticornis*) which may provide occasional foraging habitat for the Grey-headed Flying-fox. The Grey-headed Flying-fox is recorded as travelling long distances (up to 40 km) on feeding forays (DAWE 2021). Given that potential foraging habitat present within the study area will be retained (0.25 ha) and the proximity of potential foraging habitat in the surrounding landscape, and no camps occur within the action area, the removal of potential foraging habitat within the action area is unlikely to lead to the long-term decrease in the size of an important population of Grey-headed Flying-fox.
Criterion b: reduce the area of occupancy of an important population	The proposed action will reduce the extent of available foraging habitat for the Grey-headed Flying-fox. The proposed action will result in the removal of Eucalyptus trees and one exotic *Morus* sp. which may provide occasional foraging habitat for the Grey-headed Flying-fox. A total of 0.25 ha of planted vegetation which may serve as foraging habitat is proposed to be retained. The study area does not contain breeding or sheltering habitat (i.e., bat camps). The Grey-headed Flying-fox is known to fly long distances (up to 40 km per night) and move between bat camps (DAWE 2021). As such, this species is likely to utilise a large extent of habitat around nearby camps, including the nationally important camp located at Macquarie Park. Due to the extent of potential habitat within the surrounding landscape of the action area, the removal of 0.08 ha of planted native vegetation and 0.01 ha of planted exotic vegetation is unlikely to significantly reduce the extent of occupancy for this species.
Criterion c: fragment an existing important population into two or more populations	The proposed action will remove 0.08 ha of planted native vegetation which includes several Eucalyptus trees vegetation which may provide occasional foraging habitat for the Grey-headed Flying-fox. No camps will be affected, and other areas of foraging habitat are present in the study area. The species is highly mobile, and the proposed action will not fragment an existing important population into two or more populations. Whilst the potential foraging habitat may contribute as a 'stepping stone' for this highly mobile species to other more substantial foraging habitat sites, this function is unlikely to be significantly inhibited by the proposed action. Furthermore, this species has been recorded in urban environments and is likely to continue to forage adjacent to the action area and across the broader locality. Therefore, the proposed action is unlikely to fragment an existing important population into two or more populations.
Criterion d: adversely affect habitat critical to the survival of a species	The National Recovery Plan for the Grey-headed Flying-fox (DAWE 2021) identifies a number of myrtaceous plants, including Important winter and spring vegetation communities are those that contain *Eucalyptus tereticornis*, *E. albens, E. crebra, E. fibrosa, E. melliodora, E. paniculata, E. pilularis, E. robusta, E. seeana, E. sideroxylon, E. siderophloia, Banksia integrifolia, Castanospermum australe, Corymbia citriodora*, *C. eximia, C. maculata, Grevillea robusta, Melaleuca quinquenervia* or *Syncarpia glomulifera* as important foraging resources for the Grey-headed Flying Fox. The plan also identifies habitat which contain native species used for foraging and occur within 20 km of a nationally important camp and native or exotic species used for roosting at the site of a nationally important Grey-Headed Flying-Fox camp as critical habitat important to the survival of the species (DAWE 2021). The study area contains native species used for foraging and is within 20 km of a nationally important camp, so is considered critical habitat. No nationally important camps will be directly affected by the proposed action.

Criterion	Assessment
	The proposed action will remove five Eucalyptus trees which may provide marginal foraging habitat for the Grey-headed Flying-fox. However, given that this species is highly mobile (traveling up to 40 km to forage), that 0.25 ha of potential foraging habitat is to be retained within the action area, and the abundant habitat resources within the locality, it is considered unlikely that the development would adversely affect habitat critical to the survival of this species.
Criterion e: disrupt the breeding cycle of an important population	The proposed action will remove Eucalyptus trees which may provide marginal foraging habitat for the Grey-headed Flying-fox. The proposed action will not disrupt the breeding cycle of the Grey-headed Flying-fox given that no camps will be impacted by the proposed action and suitable foraging habitat is likely to be available outside of the study area.
Criterion f: modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The proposed action will remove five Eucalyptus trees and one *Morus* sp. which may provide marginal foraging habitat for the Grey-headed Flying-fox. Given the small amount of foraging habitat to be removed, that habitat is likely to be available outside of the action area and that this species is highly mobile, it is unlikely that the habitat to be removed would cause the species to decline. Further, according to the National Flying-fox Monitoring Program, no Grey-headed Flying-fox camps currently occur within the action area (DAWE 2021). The nearest active Grey-headed Flying-fox camps occur approximately 7.6 km to the southeast. No known Grey-headed Flying-fox camps for this species will be impacted by the proposed action.
Criterion g: Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	The proposed action is unlikely to result in the establishment of an invasive species that is harmful to the Grey-headed Flying-fox. The action area is an active school which already occurs in an urban environment and impacts to planted native vegetation are minimal (three planted native trees).
Criterion h: Introduce disease that may cause the species to decline	Grey-headed Flying-fox are reservoirs for the Australian bat lyssavirus which can cause clinical disease and mortality in Grey-headed Flying-fox. The species also carries and Hendra virus, although it does not cause evident clinical disease in flying-foxes. Lyssavirus infection is higher when individuals are under stress. The proposed action is unlikely to increase the incidence of Lyssavirus, as no camps would be directly impacted.
Criterion i: Interfere substantially with the recovery of the species	The recovery plan lists objectives for the recovery of Grey-headed Flying-fox (DAWE 2021). Considering only a minimal amount of potential foraging habitat will be impacted 0.08 ha of planted native vegetation which includes Eucalyptus trees which may provide occasional foraging. There are no camps are present within the action area, the proposed action is unlikely to interfere substantially with these objectives or the recovery of the species.
Conclusion	In consideration of the above, the proposed action is considered unlikely to have a significant impact on the Grey-headed Flying-fox as: • No camp or habitat important to the lifecycle of this species will be impacted. • The proposed works will not result in fragmentation of habitats. • The works are small in scale and will remove minimal amount of vegetation which could serve as potential foraging habitat (0.08 ha including Eucalyptus trees and 0.01 ha which represents one planted exotic species). • Similar foraging habitat would still be available within the surrounding landscape.

D2 *Lathamus discolor* (Swift Parrot)

Swift Parrot is listed as Critically Endangered under the EPBC Act. The description and habitat associations of this species are presented in Appendix D. This species was not observed during the field survey and the study area does not fall within the Important Areas map for the species (NSW DCCEEW 2025d) or historical records (NSW DCCEEW 2025b). The Swift parrot is listed as critically endangered under the EPBC Act and has been previously recorded within a 5 km radius of the action area.

Potential marginal foraging habitat for Swift Parrot will be removed within the study area as a result of the proposed action and includes planted native vegetation. The planted vegetation to be removed that may provide foraging habitat for this species comprises of five Eucalyptus trees. The Swift Parrot is a non-breeding migrant to mainland Australia that breeds in Tasmania. No breeding habitat will be affected. The potential foraging habitat within the study area is marginal and would not be relied upon as a sole foraging resource for this species.

Criterion	Question	Response
An action is likely to have a significant impact on a critically endangered species if there is a real chance or possibility that it will:		
1)	lead to a long-term decrease in the size of a population	A 'population of a species' refers to a geographically distinct regional population or collection of local populations; or total population, that occurs within a particular bioregion. The Swift Parrot occurs as a single population which migrates to the Cumberland IBRA bioregion sporadically during autumn to early-spring to feed on blossom and lerp across a range of woodland and forest habitats. The planted native vegetation occurs as isolated patches within an existing highly developed and modified environment. The proposed action will result in the removal of four Eucalyptus trees containing marginal foraging habitat for the Swift Parrot. Although the species can adapt to utilise a variety of habitats for foraging (DCCEEW 2024), the relatively small extent of potential habitat and its modified and disturbed nature, including aggressive birds known to compete with Swift Parrot, indicates that the potential habitat is of marginal quality. Given the small extent of marginal habitat within the study area and the highly mobile nature of the Swift Parrot, the proposed action is not likely to lead to the long-term decrease in the size of the population of the species.
2)	reduce the area of occupancy of the species	The proposed action would result in the removal of 0.08 ha of planted native vegetation, of which several Eucalyptus trees may present as marginal foraging habitat for the Swift Parrot. The proposed action will not affect Swift Parrot breeding habitat as the species only breeds in Tasmania (DCCEEW 2024). When on the mainland, this species, will migrate through large areas to utilise peak flowering events. The study area forms a small portion of a large extent of foraging resources for this non-breeding migrant. It is noted that vegetation

Criterion	Question	Response
		within the study area will be retained and as such the area of occupancy will not be reduced.
3)	fragment an existing population into two or more populations	The Swift Parrot occurs as a single population across the entirety of its range (DCCEEW 2024). Given the Swift Parrot is highly mobile and the potential habitat to be impacted within the study area is isolated in a highly modified environment, the proposed action will not fragment an existing population into two or more populations.
4)	adversely affect habitat critical to the survival of a species	The National Recovery Plan (DCCEEW 2024) list foraging habitat on the Australian mainland as critical to the survival of the Swift Parrot, which includes preferred feed trees including *Eucalyptus robusta* and *E. tereticornis* present within the study area. The proposed action will result in the removal of 0.08 ha of planted native vegetation which includes several Eucalyptus trees containing marginal foraging habitat. This impact is considered unlikely to have significant impact on the species, given the minimal extent of the habitat and the modified and disturbed landscape in which it is located, along with the occurrence of larger and higher quality foraging habitat (Cumberland Blue Box Riverflat Forest and Cumberland Plain Woodland) available adjacent to the study area as well as to the northeast of the study area, near Kemps Creek, which will remain accessible by this highly mobile species.
5)	disrupt the breeding cycle of a population	The Swift Parrot breeds in Tasmania and as such, the proposed action will not disrupt the breeding cycle of a population.
6)	modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The proposed action will result in the removal of five Eucalyptus trees containing marginal foraging habitat for the Swift Parrot. Given that the study area is isolated in an urban, highly modified environment, it is unlikely that the proposed action would cause a decline in the Swift Parrot.
7)	result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	Given the study area is already in an existing highly modified environment adjacent to residential, urban areas, the proposed action is unlikely to result in the establishment of invasive species that are harmful to the Swift Parrot.
8)	introduce disease that may cause the species to decline, or	It is unlikely the proposed action would introduce disease that could cause decline to the Swift Parrot.
9)	interfere substantially with the recovery of the species.	The proposed action would result in the removal of four Eucalyptus trees containing marginal foraging habitat for the Swift Parrot. The Swift Parrot is a winter non-breeding migrant species to the east coast of NSW. No breeding habitat would be affected by the proposed action. Given the small extent of marginal potential foraging habitat to be removed and its isolated location within a highly modified environment, it is unlikely that

Criterion	Question	Response
		the proposed action would substantially interfere with the recovery of the Swift Parrot.
Conclusion	Is there likely to be a significant impact?	No. The proposed action is unlikely to have a significant impact on the Swift Parrot for the following reasons: • The small extent (0.08 ha of planted native vegetation which includes several Eucalyptus trees) of marginal potential foraging habitat to be impacted. • No breeding habitat would be removed by the proposed action. • The planted native vegetation within the study area is isolated in a highly modified environment, which includes the co-existence of aggressive species known to compete with the Swift Parrot (DCCEEW 2024). • The species is highly mobile and available potential foraging habitat occurs outside of the study area.