



**NARLA**  
*environmental*

# Streamlined Biodiversity Development Assessment Report

300 Burns Bay Road Lane Cove

Report prepared by Narla Environmental Pty Ltd

For Lane Cove Developments no.1 Pty Ltd

March 2026



# NARLA

*environmental*

<b>Report:</b>	Streamlined Biodiversity Development Assessment Report: 300 Burns Bay Road Lane Cove
<b>Prepared for:</b>	Lane Cove Developments no.1 Pty Ltd
<b>Prepared by:</b>	Narla Environmental Pty Ltd
<b>Project no:</b>	LCDN1
<b>Version:</b>	Final v3.0

#### Disclaimer

The document may only be used for the purposes for which it was commissioned and in accordance with the Terms of the Engagement for the commission. This report and all information contained within is rendered void if any information herein is altered or reproduced without the permission of Narla Environmental. Unauthorised use of this document in any form whatsoever is prohibited. This report is invalid for submission to any third party or regulatory authorities while it is in draft stage. Narla Environmental Pty Ltd will not endorse this report if it has been submitted to the consent authority while it is still in draft stage. This document is and shall remain the property of Narla Environmental Pty Ltd. The sole purpose of this report and the associated services performed by Narla Environmental was to undertake a Biodiversity Development Assessment in association with a development application (DA) in accordance with the scope of services set out in the contract between Narla Environmental and the client who commissioned this report. That scope of services, as described in this report, was developed with the client who commissioned this report. Any survey of flora and fauna will be unavoidably constrained in a number of respects. In an effort to mitigate those constraints, we applied the precautionary principle described in the methodology section of this report to develop our conclusions. Our conclusions are not therefore based solely upon conditions encountered at the site at the time of the survey. The passage of time, manifestation of latent conditions or impacts of future events may require further examination of the project and subsequent data analysis, and re-evaluation of the data, findings, observations and conclusions expressed in this report. Narla Environmental has prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law. This report should be read in full and no excerpts are to be taken as representative of the findings. No responsibility is accepted by Narla Environmental for use of any part of this report in any other context. The review of legislation undertaken by Narla Environmental for this project does not constitute an interpretation of the law or provision of legal advice. This report has not been developed by a legal professional and the relevant legislation should be consulted and/or legal advice sought, where appropriate, before applying the information in particular circumstances. This report has been prepared on behalf of, and for the exclusive use of, the client who commissioned this report, and is subject to and issued in accordance with the provisions of the contract between Narla Environmental and the client who commissioned this report. Narla Environmental accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this report by any third party. Narla Environmental Pty Ltd has completed this assessment in accordance with the relevant federal, state and local government legislation as well as current industry best practices including guidelines. Narla Environmental Pty Ltd accepts no liability for any loss or damages sustained as a result of reliance placed upon this report and any of its content or for any purpose other than that for which this report was intended.

Narla Environmental Pty Ltd  
[www.narla.com.au](http://www.narla.com.au)

# Document Control

Revision	Document Name	Issue Date	Internal Document Review
Draft v1.0	Streamlined Biodiversity Development Assessment Report: 300 Burns Bay Road Lane Cove	12 <sup>th</sup> December 2025	Chris Moore
Final v1.0	Streamlined Biodiversity Development Assessment Report: 300 Burns Bay Road Lane Cove	6 <sup>th</sup> February 2026	Chris Moore
Final v2.0	Streamlined Biodiversity Development Assessment Report: 300 Burns Bay Road Lane Cove	17 <sup>th</sup> February 2026	Chris Moore
Final v3.0	Streamlined Biodiversity Development Assessment Report: 300 Burns Bay Road Lane Cove	09 <sup>th</sup> March 2026	Chris Moore

The report has been prepared in accordance with the Biodiversity Development Assessment Report Template (DPE 2022a)

# Summary

Narla Environmental Pty Ltd (Narla) was engaged by Lane Cove Developments no.1 Pty Ltd (the Proponent) to prepare a Streamlined Biodiversity Development Assessment Report (SBDAR) in support of a concurrent Rezoning Proposal and State Significant Development Application (Rezoning and SSDA) for a mixed-use development at 300 Burns Bay Road, Lane Cove (Lot1/DP1217654), hereafter referred to as the Subject Property.

This SSDA seeks approval for:

- Demolition of existing structures on the site, tree removal and site excavation for basement levels.
- Construction of a new residential flat building ranging from 7-15 storeys and comprising 225 apartments including:
  - 198 market apartments;
  - 34 affordable apartments; and
  - Communal areas at lower ground, ground level with new recreation park at the eastern edge of the site, rooftop levels including a pool.
- Car and bicycle parking for residents and visitors at lower ground and two (2) basement levels, including:
  - 237 car parking spaces;
  - Garbage storage; and
  - Plant rooms and other associated services.
- Public domain and landscaping improvements, including:
  - New open space at the eastern edge of the site; and
  - Hard and soft landscaping works.

The concurrent Rezoning seeks the following amendments to the *Lane Cove Local Environmental Plan 2010* (LCLEP 2010) to facilitate the proposed development:

- Amend the Height of Buildings Map under Clause 4.3 to increase the building height from 21m to 54m; and
- Amend the Maximum Floor Space Ratio Map under Clause 4.4 to change the maximum Floorspace Ratio (FSR) from 2:1 to 3.22:1.

For a further detailed project description, please refer to the Environmental Impact Statement and Rezoning Report prepared by Colliers Urban Planning. This report should be read in conjunction with the Rezoning Request and Environmental Impact Statement prepared by Colliers Urban Planning, the Architectural Plans prepared by PBD Architects, and the other accompanying technical documents that form part of the State Significant Development Application.

All components of the proposed development are collectively referred to as the 'Subject Land' and covers a total area of approximately 0.74ha.

The SBDAR will assess the biodiversity impacts of the proposed development in accordance with the requirements of the Biodiversity Conservation Act 2016 and Biodiversity Conservation Regulation 2017. The assessment has been completed as a streamlined assessment in accordance with Appendix L of the BAM (DPIE 2020a).

Owing to the nature of the development and bushfire prone nature of the property, complete avoidance of impacts to the vegetation present could not be avoided. Efforts to minimise impacts as much as possible were carried out however, with the project deliberately avoiding areas of intact bushland located in the easternmost extent of the Subject Property. This included a reduction in the originally recommended APZ area which was for the whole property to be maintained as an IPA. The vegetation to be impacted however, is highly altered and

disturbed, consisting of areas of native canopy trees within a landscaped setting as well as areas of commonly planted native landscape species, and exotic vegetation. The implementation of the associated landscape plan will see a high number of native species planted across the property ensuring that areas of connectivity and ecological features remain across the site post works.

The proposed development is expected to impact one (1) Plant Community Types (PCT):

- PCT 3176: Sydney Enriched Sandstone Moist Forest

Two (2) ecosystem credit are required to be offset for the impacts to this PCT. This vegetation is not associated with any threatened ecological communities listed under either the Biodiversity Conservation Act (BC Act) or the Environment Protection and Biodiversity Act (EPBC Act).

Due to suitable habitat being present within the Subject Property and no targeted surveys having been conducted at the time of writing this report the following threatened species and species credits are required to be 'assumed present' and offset accordingly:

- Four (4) species credits for *Chalinolobus dwyeri* (Large-eared Pied Bat);
- Four (4) species credits for *Miniopterus australis* (Little Bent-winged Bat); and
- Four (4) species credits for *Miniopterus orianae oceanensis* (Large Bent-winged Bat);

All three (3) of these species are listed as 'SAll entities' within the BioNet Threatened Biodiversity Data Collection (NDCCEEW 2025d). Due to the potential sensitivity of these species to any impact, a determination of whether or not the impacts are serious and irreversible has been undertaken in accordance with Section 9.1 of the BAM (DPIE 2020a).

To minimise potential impacts of the proposal on local biodiversity values, a series of mitigation and management measures have been identified, which are to be implemented as part of any Construction Environmental Management Plan (CEMP) produced for the site. This includes incorporating locally native species within the associated landscape plan to maintain diversity as well as assigning a Project Ecologist to undertake an extensive pre-clearing survey and to supervise the clearing of all vegetation in relation to the proposed development.

# Table of Contents

<b>1. Introduction</b>	<b>13</b>
1.1 Project Introduction	13
1.2 Site Location and Description	14
1.3 Secretary’s Environmental Assessment Requirements	14
1.4 Assessment Method Applied	14
1.5 Sources of Information Used	18
1.6 Aim and Approach	19
<b>2. Planted Native Vegetation</b>	<b>20</b>
2.1 Decision-making Key	20
2.2 Assessment of planted native vegetation for threatened species habitat	21
<b>3. Landscape</b>	<b>24</b>
3.1 IBRA bioregion and subregion	24
3.2 NSW (Mitchell) Landscapes	24
3.3 Topography, Geology and Soils	24
3.3.1 Areas of Geological Significance and Soil Hazards	24
3.4 Hydrology	24
3.5 State Environmental Planning Policy (Resilience and Hazards) 2021: Chapter 2: Coastal Management 25	
3.6 Native Vegetation Cover and Connectivity	25
3.7 Areas of Outstanding Biodiversity Value	25
<b>4. Native Vegetation</b>	<b>33</b>
4.1 Plant Community Types (PCT) Identified within the Subject Land	33
4.1.1 Historically Mapped Vegetation	33
4.1.2 Plant Community Type Selection Process	33
4.1.3 Final PCT and Vegetation Zone Selection	38
4.2 Threatened Ecological Communities	44
4.2.1 Listing under the Biodiversity Conservation Act 2016: Hygrocybeae Community of Lane Cove Bushland Park in the Sydney Basin Bioregion- Critically Endangered Ecological Community	44
4.2.2 Listing under the Environment Protection and Biodiversity Conservation Act 1999	44
4.3 Assessing Patch Size	44
4.4 Vegetation Integrity Survey (VIS) Plots	46
4.4.1 Determining future vegetation integrity scores	46
<b>5. Threatened Species</b>	<b>49</b>
5.1 Candidate Ecosystem Credit Species	49
5.2 Candidate Species Credit Species Summary	50

5.3	Surveys for SAI Species Credit and their Habitats.....	56
5.3.1	Fauna Species Credit Survey.....	56
5.3.2	Flora Species Credit Survey.....	57
5.4	Species Polygons.....	58
5.4.1	Confirmed Present.....	58
5.4.2	Assumed Present.....	58
<b>6.</b>	<b>Prescribed Impacts.....</b>	<b>62</b>
<b>7.</b>	<b>Avoid, Minimisation and Mitigation of Impacts.....</b>	<b>64</b>
7.1	Impact Mitigation and Minimisation Measures.....	64
<b>8.</b>	<b>Assessment of Impacts.....</b>	<b>67</b>
8.1	Direct Impacts.....	67
8.1.1	Full Clearing.....	67
8.1.2	Partial Clearing – IPA Management.....	67
8.2	Prescribed Impacts.....	67
8.3	Indirect Impacts.....	70
<b>9.</b>	<b>Thresholds for Assessing and Offsetting.....</b>	<b>77</b>
9.1	Impacts on Native Vegetation.....	77
9.2	Impacts on Threatened Species.....	77
9.3	Critical Habitat or Significant Impacts on Threatened Entities.....	77
9.4	Serious and Irreversible Impacts (SAI's).....	77
9.4.1	Cave Dwelling Microbats.....	78
<b>10.</b>	<b>Biodiversity Offset Credit Requirements.....</b>	<b>82</b>
10.1	Offset Requirement for Ecosystem Credits.....	82
10.2	Offset Requirement for Species Credits.....	82
<b>11.</b>	<b>Other Relevant Legislation and Planning Policies.....</b>	<b>83</b>
11.1	State Environmental Planning Policy (Biodiversity and Conservation) 2021.....	83
11.1.1	Chapter 4: Koala Habitat Protection 2021.....	83
11.1.2	Part 6.3: Foreshores and Waterways Area:.....	83
11.2.1	Development on land in proximity to coastal wetlands or littoral rainforest.....	84
11.2.2	Development on land within the coastal environment area.....	85
11.2.3	Development on land within the coastal use area.....	85
<b>12.</b>	<b>Conclusion.....</b>	<b>87</b>
<b>13.</b>	<b>References.....</b>	<b>88</b>
<b>14.</b>	<b>Appendices.....</b>	<b>90</b>

# Figures

Figure 1. The components of the Subject Land.....	16
Figure 2. The location of the Subject Land within the locality.....	17
Figure 3. IBRA Bioregion and Subregion of the Subject Property and Subject Land, and within a 1500m buffer. ....	26
Figure 4. Mitchell Landscapes of the Subject Property and Subject Land, and within a 1500m buffer. ....	27
Figure 5. Acid sulfate soil classes occurring within the 1500m buffer of the Subject Land.....	28
Figure 6. Rivers and streams (with associated riparian buffers) occurring within the 1500m buffer.....	29
Figure 7. Areas mapped under Chapter 2 of the Resilience and Hazards SEPP within 1500m of the Subject Land. .....	30
Figure 8. Areas mapped under Chapter 2 of the Resilience and Hazards SEPP within and immediately surrounding the Subject Land.....	31
Figure 9. The extent of native vegetation and habitat connectivity occurring within the 1500m buffer. Native Vegetation .....	32
Figure 10. Historically mapped vegetation communities surrounding the Subject Land. ....	34
Figure 11. Narla field validated vegetation mapping and location of the VIS plot in relation to the Subject Land. .....	43
Figure 12. Patch size for the vegetation zone identified within the Subject Land. ....	45
Figure 13. Management Zone within the Subject Land. Areas of Planted Native Vegetation and Exotic Dominated Vegetation have not been assigned to a management zone. ....	47
Figure 14. Targeted survey effort for species credit species and their habitats within the Subject Land. ....	60
Figure 15. Cave Bats Species Polygon. ....	61
Figure 16. Prescribed Impacts .....	69
Figure 17. Impacts on native vegetation and offset requirements.....	81

# Tables

Table 1. SEARS requirements as they relate to biodiversity.....	14
Table 2. Area limits for application of small area development threshold. Dark border indicates clearing threshold relevant to this report.....	15
Table 3. Output from the PCT Filter Tool (NDCCEEW 2025d) and subsequent shortlisting of dominant PCTs. Green shading indicates the selected best fit dominant PCT. ....	35
Table 4. PCT Selection Criteria. Green indicates the selected PCT. ....	36
Table 5. PCT 3176 identified within the Subject Land. ....	39
Table 6. Exotic Dominated Vegetation within the Subject Land. ....	41
Table 7. Planted Native Vegetation within the Subject Land. ....	42
Table 8. Patch size classes that each PCT and associated vegetation zone fall into. ....	44
Table 9. Vegetation integrity scores for each identified zone. ....	48
Table 10. Management Zones within the Subject Land, and relevant vegetation attributes (composition, structure and function) affecting future VI scores. ....	48

Table 11. Candidate ecosystem credits predicted to occur within the Subject Land. ....	49
Table 12. Candidate Fauna Credit Species predicted to occur within the Subject Land.....	50
Table 13. Candidate Flora and Fungi Species Credit Species predicted to occur within the Subject Land.....	51
Table 14. Weather conditions taken from the nearest weather stations (Station number 066214) in the lead up and during the field survey (BOM 2025). Survey date is in bold. ....	56
Table 15. Species credit flora species requiring targeted surveys. Targeted surveys were conducted within endorsed survey periods. ....	57
Table 16. Prescribed and uncertain impacts associated with the proposed development. ....	62
Table 17. Table of measures to be implemented before, during and after construction to avoid and minimise the impacts of the project.....	64
Table 18. Prescribed and uncertain impacts associated with the proposed development. ....	68
Table 19. Indirect impacts associated with the proposed development. ....	70
Table 20. Additional impact assessment provisions for Cave Dwelling Microbats that are associated with a serious and irreversible impact.....	78
Table 21. Ecosystem credits required to offset the proposed development. ....	82
Table 22. Species credits required to be offset for the proposed development. ....	82

# Glossary

Acronym/ Term	Definition
Accredited Biodiversity Assessor	Individuals accredited by the NSW Department of Climate Change, Energy, the Environment and Water (NDCCEEW) to apply the Biodiversity Assessment Method.
APZ	Asset Protection Zone
BAM	The NSW Biodiversity Assessment Method
BAMC	The NSW Biodiversity Assessment Method Calculator
BC Act	New South Wales Biodiversity Conservation Act 2016
BDAR	Biodiversity Development Assessment Report
Biodiversity credit report	The report produced by the Credit Calculator that sets out the number and class of biodiversity credits required to offset the remaining adverse impacts on biodiversity values at a development site, or on land to be biodiversity certified.
Biodiversity Offsets	Management actions that are undertaken to achieve a gain in biodiversity values on areas of land in order to compensate for losses to biodiversity from the impacts of development.
Biodiversity values	The composition, structure and function of ecosystems, including threatened species, populations and ecological communities, and their habitats.
BOS	NSW Biodiversity Offset Scheme
DPE	NSW Department of Planning and Environment (now NDCCEEW)
DPIE	NSW Department of Planning, Industry and Environment (now NDCCEEW)
Ecosystem credit	The class of biodiversity credit that relates to a vegetation type and the threatened species that are reliably predicted by that vegetation type (as a habitat surrogate).
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
ha	Hectares
HTE	High Threat Exotic
km	Kilometres
LGA	Local Government Area
Locality	A 1500m buffer area surrounding the Subject Land
m	metres
Native Vegetation	Means any of the following types of plants native to New South Wales: (a) trees (including any sapling or shrub), (b) understorey plants, (c) groundcover (being any type of herbaceous vegetation), (d) plants occurring in a wetland.
NDCCEEW	NSW Department of Climate Change, Energy, the Environment and Water
NSW	The State of New South Wales
OEH	Office of Environment and Heritage (now NDCCEEW)
PCT	NSW Plant Community Type
Proposal	The development, activity or action proposed.
SAII	Serious and Irreversible Impacts
SAII entity	Species and ecological communities that are likely to be the subject of serious and irreversible impacts (SAIIs)
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy

Acronym/ Term	Definition
Species credit	The class of biodiversity credit that relate to threatened species that cannot be reliably predicted to use an area of land based on habitat surrogates. Species that require species credits are listed in the Threatened Biodiversity Data Collection.
SSDA	State Significant Development Application
Subject Land	The footprint of the proposed development
Subject Property	300 Burns Bay Road, Lane Cove NSW 2066 (Lot 15/DP1230609.)
Threatened species, populations and ecological communities	Species, populations and ecological communities specified in Schedules 1 and 2 of the BC Act 2016.
TPZ	Tree Protection Zone: A specified area above and below ground and at a given distance from the trunk set aside for the protection of a tree's roots and crown to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development
VIS Plot	Vegetation Integrity Survey Plot

# Declarations

## I. Certification under clause 6.15 *Biodiversity Conservation Act 2016*

I certify that this report has been prepared based on the requirements of, and information provided under, the Biodiversity Assessment Method and clause 6.15 of the Biodiversity Conservation Act 2016 (BC Act).



**Christopher Moore** BBioCon  
 General Manager / Principal Ecologist  
 Accredited Biodiversity Assessor (BAAS21009)  
 Narla Environmental Pty Ltd  
 Date: 17/02/2026

## II. Details and experience of author/s and contributors

Name	BAM Assessor Accreditation no. (if relevant)	Position/Role	Tasks performed	Relevant qualifications
Chris Moore	BAAS21009	General Manager and Principal Ecologist	Report Preparation, Document Review, BAM-C Data entry and analysis, BAM plot surveys, Targeted flora and fauna (microbats) surveys	<i>BBioCon</i>
Kayla Spithoven	NA	Ecologist	BAM Plot Surveys, Targeted flora and fauna (microbats) surveys	<i>BSc/BLang</i>

## III. Conflict of Interest

I declare that I have considered the circumstances and there is no actual, perceived or potential conflict of interest.



**Christopher Moore** BBioCon  
 General Manager / Principal Ecologist  
 Accredited Biodiversity Assessor (BAAS21009)  
 Narla Environmental Pty Ltd  
 Date: 17/02/2026

# 1. Introduction

---

## 1.1 Project Introduction

Narla Environmental Pty Ltd (Narla) was engaged by Lane Cove Developments no.1 Pty Ltd (the Proponent) to prepare a Streamlined Biodiversity Development Assessment Report (SBDAR) in support of a concurrent Rezoning Proposal and State Significant Development Application (Rezoning and SSDA) for a mixed-use development at 300 Burns Bay Road, Lane Cove (Lot1/DP1217654), hereafter referred to as the Subject Property.

This SSDA seeks approval for:

- Demolition of existing structures on the site, tree removal and site excavation for basement levels.
- Construction of a new residential flat building ranging from 7-15 storeys and comprising 225 apartments including:
  - 198 market apartments;
  - 34 affordable apartments; and
  - Communal areas at lower ground, ground level with new recreation park at the eastern edge of the site, rooftop levels including a pool.
- Car and bicycle parking for residents and visitors at lower ground and two (2) basement levels, including:
  - 237 car parking spaces;
  - Garbage storage; and
  - Plant rooms and other associated services.
- Public domain and landscaping improvements, including:
  - New open space at the eastern edge of the site; and
  - Hard and soft landscaping works.

The concurrent Rezoning seeks the following amendments to the *Lane Cove Local Environmental Plan 2010* (LCLEP 2010) to facilitate the proposed development:

- Amend the Height of Buildings Map under Clause 4.3 to increase the building height from 21m to 54m; and
- Amend the Maximum Floor Space Ratio Map under Clause 4.4 to change the maximum Floorspace Ratio (FSR) from 2:1 to 3.22:1.

For a further detailed project description, please refer to the Environmental Impact Statement and Rezoning Report prepared by Colliers Urban Planning. This report should be read in conjunction with the Rezoning Request and Environmental Impact Statement prepared by Colliers Urban Planning, the Architectural Plans prepared by PBD Architects, and the other accompanying technical documents that form part of the State Significant Development Application.

All areas associated with the proposed development will hereafter be referred to as the 'Subject Land' (**Figure 1**), which is located across the majority of the Subject Property and encompasses an area of approximately 0.74ha.

This report will assess the biodiversity impacts of the proposed development in accordance with the requirements of the Biodiversity Conservation Act 2016, Biodiversity Conservation Regulation 2017 and Biodiversity Assessment Method (BAM; DPIE 2020a). Narla have produced this report in order to assess any potential impacts associated with the SSDA and recommend appropriate measures to minimise and mitigate any potential ecological impacts in line with the requirements of the Consent Authority. The assessment has been completed in accordance with Appendix L of the BAM (DPIE 2020a).

## 1.2 Site Location and Description

The Subject Property is located at 300 Burns Bay Road, Lane Cove NSW 2066 and is legally described as Lot 15 DP1230609. Situated within the Lane Cove Council (LCC) Local Government Area (LGA **Figure 2**), the site is zoned R4 High Density Residential within the Lane Cove Local Environmental Plan 2009 (LCLEP). It has an area of 7,595 m<sup>2</sup> and comprises an existing office building and warehouse extension on the eastern portion of the site. A single storey structure providing car parking occupies the western part of the site. Car parking is also provided at grade along the southern site boundary and a tennis court is located on the western part of the site.

The site has a sloping topography, with a high point at 22.15m (AHD) along the boundary with the properties to the north, sloping south to a low point of 18.83m (AHD) along the southern boundary, representing an approx. 3.5m level change across the site from north to south.

Vehicle and pedestrian access to the site is via Burns Bay Road. A right of carriageway extends along the western site boundary for driveway access to the neighbouring buildings at 292-298 Burns Bay Road. An aerial photo of the site is shown at **Figure 1**.

## 1.3 Secretary's Environmental Assessment Requirements

This report has been prepared to respond to the Secretary's Environmental Assessment Requirements (SEARS) dated 18 July 2025 for SSD-27925706. Specifically, this report has been prepared to respond to those SEARS summarised in **Table 1**.

**Table 1. SEARS requirements as they relate to biodiversity.**

Requirement	Response
<b>16. Biodiversity</b> <ul style="list-style-type: none"><li>Unless a waiver has been granted, provide a Biodiversity Development Assessment Report (BDAR) that assesses any biodiversity impacts associated with the development in accordance with the Biodiversity Conservation Act 2016 and the Biodiversity Assessment Method 2020.</li></ul> OR <ul style="list-style-type: none"><li>If the development is on biodiversity certified land, provide information to identify the site (using associated mapping) and demonstrate the proposed development is consistent with the relevant biodiversity measure conferred by the biodiversity certification.</li></ul>	Streamlined BDAR Prepared (this report).

## 1.4 Assessment Method Applied

This BDAR will be prepared utilising the following 'Streamlined Assessment Modules' in accordance with Appendix L of the BAM (DPIE 2020a):

- Streamlined assessment module – planted native vegetation' (**Section 2**); in conjunction with;
- 'Streamlined assessment module – small area': as the proposal does not exceed the vegetation impact area clearing threshold for small area developments as outlined in the BAM (DPIE 2020a; **Table 2**). As the Subject Property does not have an associated 'minimum lot size' the size of the property itself is required to be utilised for this determination.

Table 2. Area limits for application of small area development threshold. Dark border indicates clearing threshold relevant to this report.

Minimum lot size associated with the property	Maximum area limit for application of the small area development module
Less than 1ha	≤1ha
Less than 40ha but not less than 1ha	≤2ha
Less than 1000ha but not less than 40ha	≤3ha
1000ha or more	≤5ha

According to Appendix D of the BAM, the streamlined assessment module for planted native vegetation may be used to assess the biodiversity values of land if it meets the requirements of “D.1 – Decision-making Key” (Section 2).

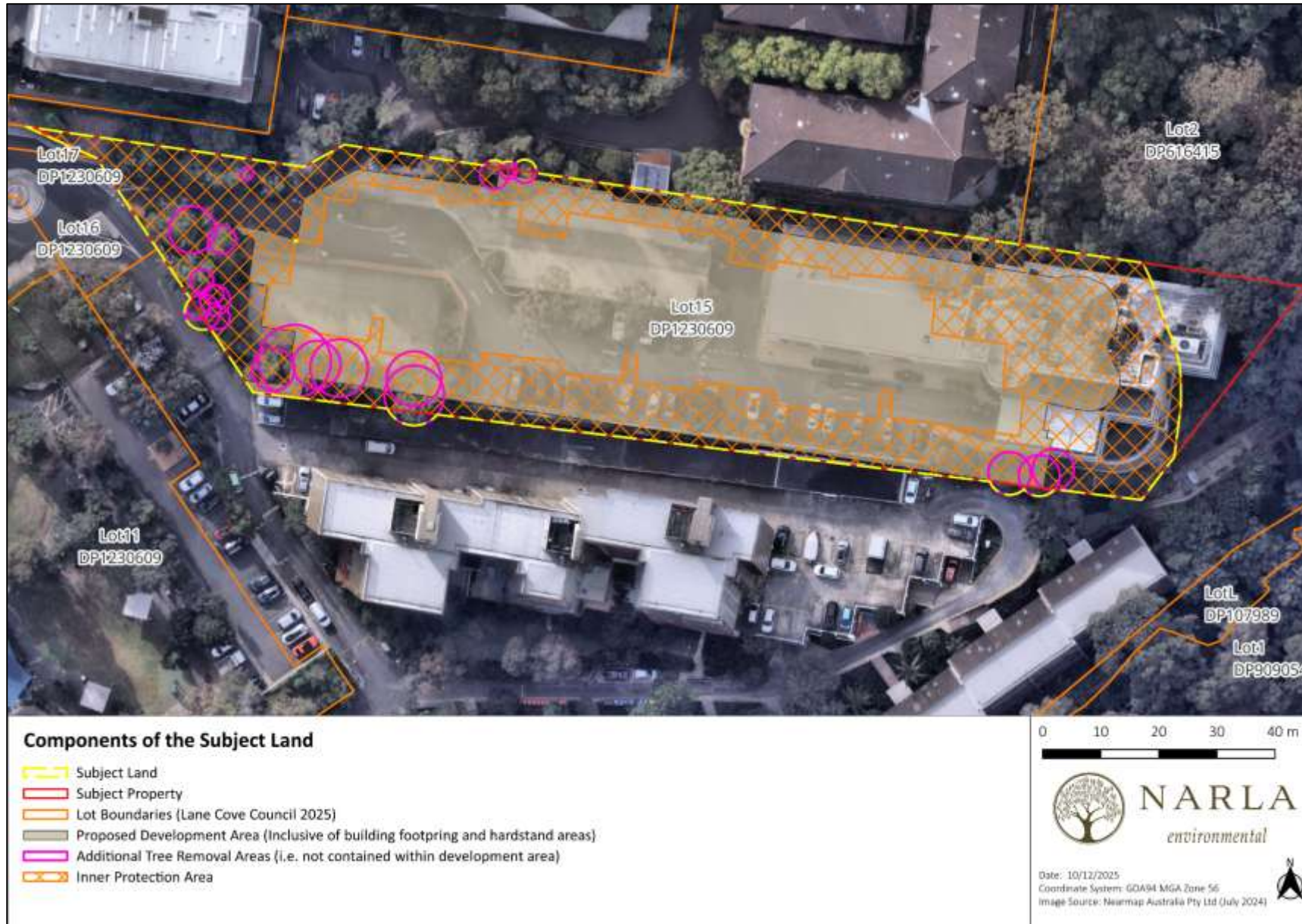


Figure 1. The components of the Subject Land.

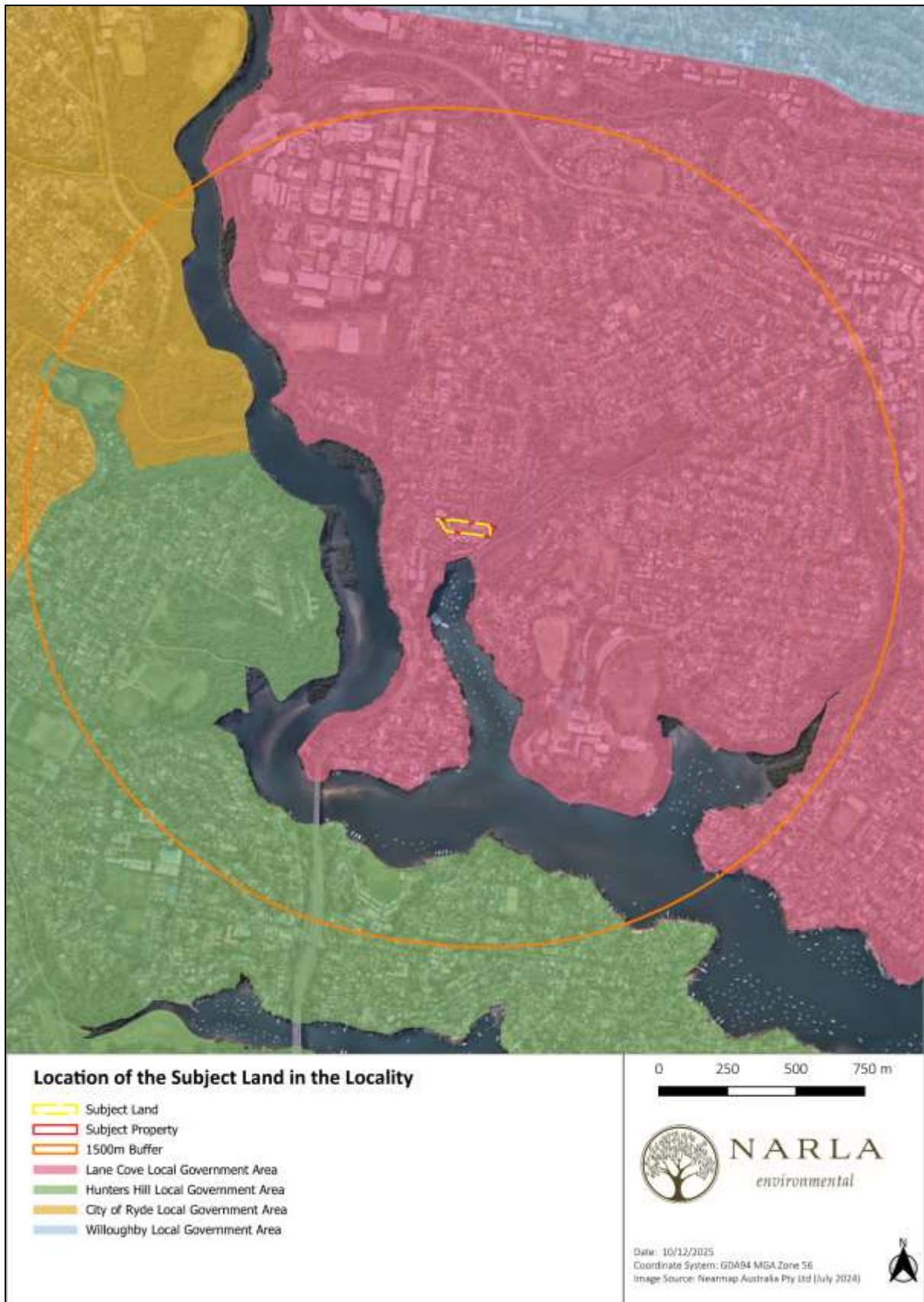


Figure 2. The location of the Subject Land within the locality.

## 1.5 Sources of Information Used

A thorough literature review was undertaken to gain an insight into the ecology and applicable legislation within the locality and the Lane Cove Municipal Council LGA, including:

- Relevant State and Commonwealth Databases & Datasets:
  - DPE Biodiversity Values Map v18 (DCCEEW 2025a)
  - NSW BioNet. The website of the Atlas of NSW Wildlife (DCCEEW 2025b)
  - NSW BioNet. Threatened Biodiversity Data Collection (DCCEEW 2025c)
  - NSW BioNet. Vegetation Classification System (DCCEEW 2025d)
  - NSW Government Spatial Services: Six Maps Clip & Ship (NSW Government Spatial Services 2025)
- Vegetation, Geology and Soil Mapping:
  - State Vegetation Type Map (DPE 2022b); and
  - Soil Landscapes of the Sydney 1:100,000 Sheet (Chapman et al. 2009).
- NSW State Guidelines:
  - Biodiversity Development Assessment Method (DPIE 2020a);
  - Guidance to assist a decision-maker to determine a serious and irreversible impact (DPIE 2019);
  - Biodiversity Assessment Method Calculator Version 1.5.0.00 (DCCEEW 2025f);
  - Biodiversity Offsets and Agreement Management System (BOAMS);
  - Surveying threatened plants and their habitats - NSW survey guide for the Biodiversity Assessment Method (DPIE 2020b);
  - NSW Survey Guide for Threatened Frogs: A guide for the survey of threatened frogs and their habitats for the Biodiversity Assessment Method (DPIE 2020c); and
  - Threatened Species Survey and Assessment: Guidelines for developments and activities. Working Draft (DEC 2004).
- Council Documents:
  - Lane Cove Local Environmental Plan (LCLEP) 2009; and
  - Lane Cove Development Control Plan (LCDCP) 2009.

Preparation of this SBDAR also involved the review of the following accompanying project documents:

- Tree Management Plan (Land and Form Studios 2025a; **Appendix A**);
- Ground Floor Plan (Land and Form Studios 2025b);
- Landscape Plan (Land and Form Studios 2025c);
- Arboricultural Impact Assessment (Creative Planning Solutions 2025) and
- Bush Fire Assessment Report (Australian Bushfire Consulting Services 2025).

These sources were used to gain an understanding of the natural environment and ecology of the Subject Land and its surrounds. Searches using NSW Wildlife Atlas (BioNet) were conducted to identify current threatened flora and fauna records within and surrounding the Subject Land. These data were used to assist in establishing the presence or likelihood of any biodiversity values as occurring on, or adjacent to, the Subject Land, and helped inform our Ecologist on what to look for during the site assessment.

## 1.6 Aim and Approach

This report has been prepared in accordance with the BAM (DPIE 2020a) and aims to:

- Describe the biodiversity values present within the Subject Land, including the extent of native vegetation, vegetation integrity and the presence of Threatened Ecological Communities (TECs);
- Determine the habitat suitability within the Subject Land for candidate threatened species;
- Prepare an impact assessment in regard to potential impacts of the proposed development on biodiversity values, including potential prescribed impacts and SAIIs within the Subject Land;
- Discuss and recommend efforts to avoid and minimise impacts on biodiversity values; and
- Calculate the biodiversity credits (i.e., ecosystem credits and species credits) that measure potential impacts of the development on biodiversity values. This calculation will inform the decision maker as to the number and class of offset credits required to be purchased and retired as a result of the proposed development.

## 2. Planted Native Vegetation

---

The decision-making key below provides a framework for the assessment of planted native vegetation using the BAM (DPIE 2020a). The 'Streamlined assessment module – Planted native vegetation' has been used to assess the part of the proposed development that contains planted native vegetation. The remaining vegetation within the Subject Land has been assessed using the 'Streamlined assessment module – Small area'.

### 2.1 Decision-making Key

1. Does the planted native vegetation occur within an area that contains a mosaic of planted and remnant native vegetation and which can be reasonably assigned to a PCT known to occur in the same IBRA subregion as the proposal?
  - i. Yes .... The planted native vegetation must be allocated to the best-fit PCT and the BAM must be applied.
  - ii. No .... Go to 2.

**No.** The areas of planted native vegetation to be impacted consists of historically planted *Eucalyptus saligna*, *Angophora floribunda*, *Callistemon citrinus* and *Lomandra longifolia* located within landscaped garden beds within the Subject Land. The justification of this allocation is supported by the imagery taken from the site assessment (**Plate 1** and **Plate 2**), showing the clear location of this vegetation within managed garden beds.

2. Is the planted native vegetation:
  - a) planted for the purpose of environmental rehabilitation or restoration under an existing conservation obligation listed in BAM Section 11.9(2.), and
  - b) the primary objective was to replace or regenerate a plant community type or a threatened plant species population or its habitat?
    - i. Yes .... The planted native vegetation must be assessed in accordance with Chapters 4 and 5 of the BAM.
    - ii. No .... Go to 3.

**No.** The areas of planted native vegetation to be impacted consists of historically planted *Eucalyptus saligna*, *Angophora floribunda*, *Callistemon citrinus* and *Lomandra longifolia* located within landscaped garden beds within the Subject Land.

3. Is the planted/translocated native vegetation individuals of a threatened species or other native species planted/translocated for the purpose of providing threatened species habitat under one of the following:
  - a) a species recovery project
  - b) Saving our Species project
  - c) other types of government funded restoration project
  - d) condition of consent for a development approval that required those species to be planted or translocated for the purpose of providing threatened species habitat

- e) legal obligation as part of a condition or ruling of court. This includes regulatory directed or ordered remedial plantings (e.g. Remediation Order for clearing without consent issued under the BC Act or the Native Vegetation Act)
- f) ecological rehabilitation to re-establish a PCT or TEC that was, or is carried out under a mine operations plan, or
- g) approved vegetation management plan (e.g. as required as part of a Controlled Activity Approval for works on waterfront land under the NSW Water Management Act 2000)?
- i. Yes .... The planted native vegetation must be assessed in accordance with Chapters 4 and 5 of the BAM.
- ii. No .... Go to 4.

**No.** The areas of planted native vegetation to be impacted consists of historically planted *Eucalyptus saligna*, *Angophora floribunda*, *Callistemon citrinus* and *Lomandra longifolia* located within landscaped garden beds within the Subject Land.

4. Was the planted native vegetation (including individuals of a threatened flora species) undertaken voluntarily for revegetation, environmental rehabilitation or restoration without a legal obligation to secure or provide for management of the native vegetation?
  - i. Yes .... Go to D.2 Assessment of planted native vegetation for threatened species habitat (the use of Chapters 4 and 5 of the BAM are not required to be applied).
  - ii. No .... Go to 5.

**No.** The vegetation was planted for the purposes of landscaped garden beds.

5. Is the native vegetation (including individuals of a threatened flora species) planted for functional, aesthetic, horticultural or plantation forestry purposes? This includes examples such as: windbreaks in agricultural landscapes, roadside plantings (including street trees, median strips, roadside batters), landscaping in parks, gardens and sport fields/complexes, macadamia plantations or teatree farms?
  - i. Yes .... Go to D.2 Assessment of planted native vegetation for threatened species habitat (the use of Chapters 4 and 5 of the BAM are not required to be applied).
  - ii. No .... Go to 6.

**Yes.** The vegetation was planted for the purposes of landscaped garden beds. To maintain the aesthetic of the surrounding area.

## 2.2 Assessment of planted native vegetation for threatened species habitat

The Subject Land did not contain any evidence (e.g. scats, stick nests) of threatened species credit species (flora and fauna), nor was any suitable breeding habitat (e.g. hollows) identified. Furthermore, no threatened species were incidentally observed during the site assessment. In addition, there have been no historical records of threatened species within the Subject Land (NDCCEEW 2025b). There is however potential that planted native vegetation may provide intermittent foraging habitat for threatened species such as *Glossopsitta pusilla* (Little Lorikeet) and *Pteropus poliocephalus* (Grey-headed Flying-fox). **Section 7** of this BDAR details measures to mitigate and manage impacts on any threatened species that may occur within the Subject Land.



Plate 1. Site photos showing the planted native vegetation within Subject Land (1/2).



Plate 2. Site photos showing the planted native vegetation within Subject Land (2/2).

## 3. Landscape

---

### 3.1 IBRA bioregion and subregion

The Subject Land occurs within the ‘Pittwater’ Interim Biogeographic Regionalisation for Australia 7 (IBRA7) Subregion, which is part of the ‘Sydney Basin’ IBRA7 Bioregion (**Figure 3**).

### 3.2 NSW (Mitchell) Landscapes

Mitchell Landscapes (2002) groups ecosystems into meso-ecosystems representing larger natural entities based on topography and geology. The naming of ecosystems and meso-ecosystems was standardised so that each name provided location information and a meaningful descriptive landscape term.

The Subject Land is mapped within the ‘Port Jackson Basin’ Mitchell Landscape (**Figure 4**). This landscape is characterised by a deep elongated harbour with steep cliffed margins on horizontal Triassic quartz sandstone. Small pocket beaches and more extensive Quaternary estuary fill of muddy sand at the head of most tributary streams. General elevation 0 to 80m, local relief 10 to 50m. Sandstone slopes and cliffs have patches of uniform or gradational sandy soil on narrow benches and within joint crevices that support forest and woodland of Sydney Peppermint (*Eucalyptus piperita*), Smooth-barked Apple (*Angophora costata*), Red Bloodwood (*Corymbia gummifera*) and Blackbutt (*Eucalyptus pilularis*). Sheltered gullies contain some Turpentine (*Syncarpia glomulifera*), Coachwood (*Ceratopetalum apetalum*) and Water Gum (*Tristaniopsis laurina*). Estuarine sands were originally dominated by saltmarsh but have been taken over by Grey Mangrove (*Avicennia marina*) in the past century.

### 3.3 Topography, Geology and Soils

The Subject Land is located on a slight east facing slope, with elevation ranging from 22m above sea level (asl) in the north to approximately 18m asl in the south (Google Earth 2025). The majority of the Subject Land is mapped as occurring on the Hawkesbury Soil Landscape, with a small section in the west mapped as occurring on “Disturbed Terrain” as per the Soil Landscapes of the Sydney 1:100,000 Sheet (Chapeman et al 2009).

The Hawkesbury soil landscape is characterised by Hawkesbury Sandstone consisting of medium to coarse-grained quartz sandstone with minor shale and laminite lenses. Sandstones are either massive or cross-bedded sheet facies with vertical or subvertical joint sets. The combination of bedding planes and widely spaced joints gives sandstone outcrops a distinctive blocky appearance.

Disturbed Terrain refers to artificial fill. Dredged estuarine sand and mud, demolition rubble, industrial and household waste. Also includes rocks and local soil materials.

#### 3.3.1 Areas of Geological Significance and Soil Hazards

The Subject Land did contain a large sandstone rock face along its northern border, which will not be impacted by the proposed works. Areas along and surround the southern boundary of the Subject Land are mapped as Class 5 Acid Sulfate Soils as per the Lane Cove Local Environmental Plan 2009 (**Figure 5**).

### 3.4 Hydrology

No mapped or unmapped watercourses were located within the Subject Land or broader Subject Property. A number of mapped watercourses occur within the 1500m buffer surrounding the Subject Land, ranging from 1<sup>st</sup> to 2nd order streams running down to the Lane Cove River (**Figure 6**).

### 3.5 State Environmental Planning Policy (Resilience and Hazards) 2021: Chapter 2: Coastal Management

No areas of native vegetation mapped as 'Coastal Wetlands' or 'Littoral Rainforest' as per the State Environmental Planning Policy (Resilience and Hazards) 2021: Chapter 2: Coastal Management are located within the Subject Land; however occurrences do occur in the broader locality (**Figure 7**). The Subject Land does however contain the following areas mapped under Chapter 2 of this SEPP (**Figure 8**).

- Coastal Wetland Proximity Area;
- Coastal Use Area; and
- Coastal Environmental Area

### 3.6 Native Vegetation Cover and Connectivity

Native vegetation cover and connectivity have been assessed in accordance with Sections 3.2 and 3.1.3 of the BAM (DPIE 2020a). The native vegetation cover will be used to assess the habitat suitability of the Subject Land for threatened species. Areas of connectivity will determine the extent of habitat that may facilitate the movement of threatened species across their range. A 1500m buffer around the boundary of the Subject Land was calculated to determine the extent of native vegetation and habitat connectivity.

Native vegetation covered approximately 180ha of the terrestrial area (i.e. excluding the Lane Cove River) within the 1500m buffer circle (total terrestrial area = 679ha) equating to approximately 27% cover and was there assigned to the >10% - 30% class (**Figure 9**).

Owing to the built up and urban nature of the locality, areas of connectivity were limited between the select native vegetation present within the Subject Land and the broader locality. The majority of the habitat connectivity present was provided along Lane Cove River and its associated vegetated inlets and gullies.

### 3.7 Areas of Outstanding Biodiversity Value

No Areas of Outstanding Biodiversity Value occur on the Subject Land or surrounding area.

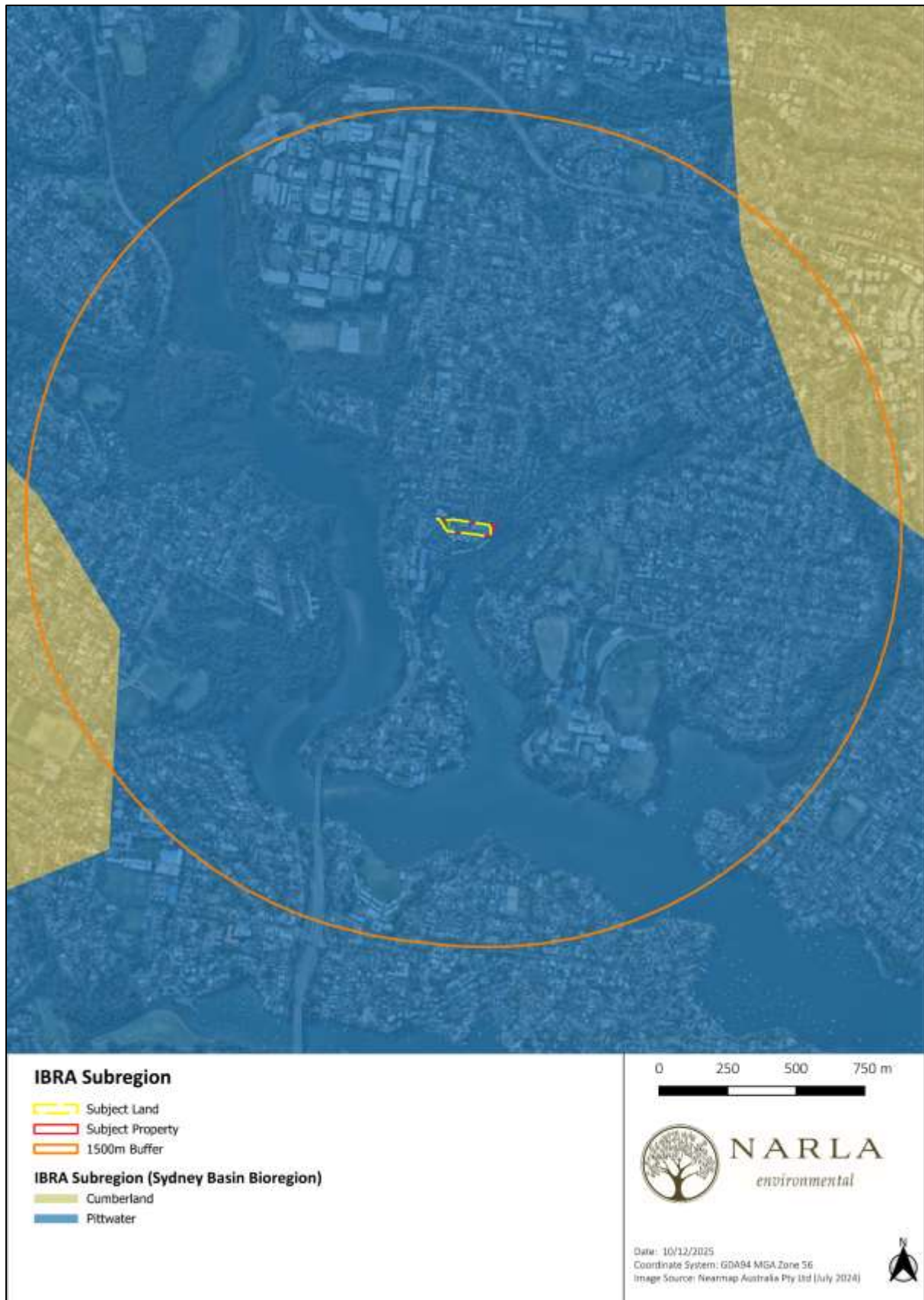


Figure 3. IBRA Bioregion and Subregion of the Subject Property and Subject Land, and within a 1500m buffer.

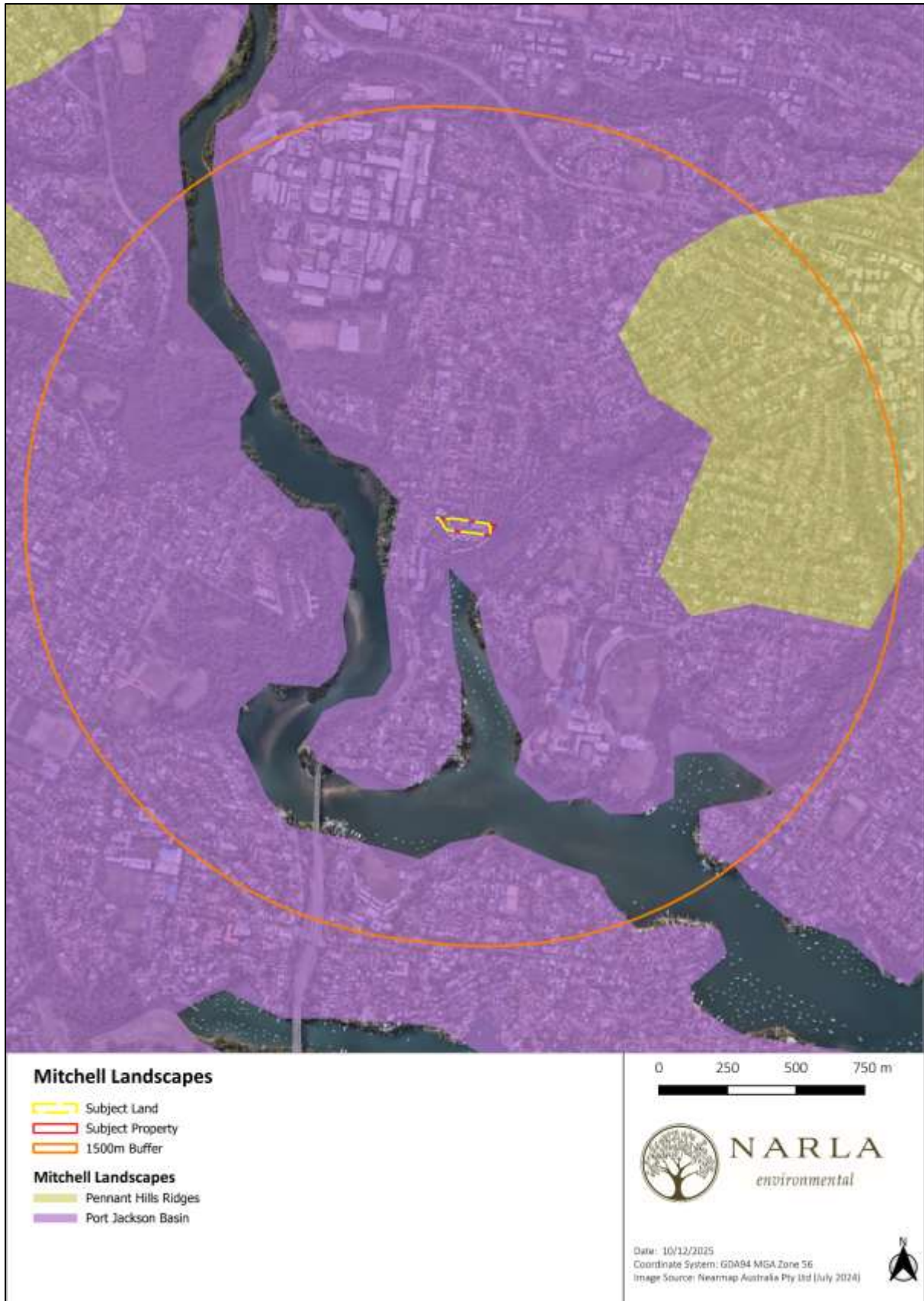


Figure 4. Mitchell Landscapes of the Subject Property and Subject Land, and within a 1500m buffer.

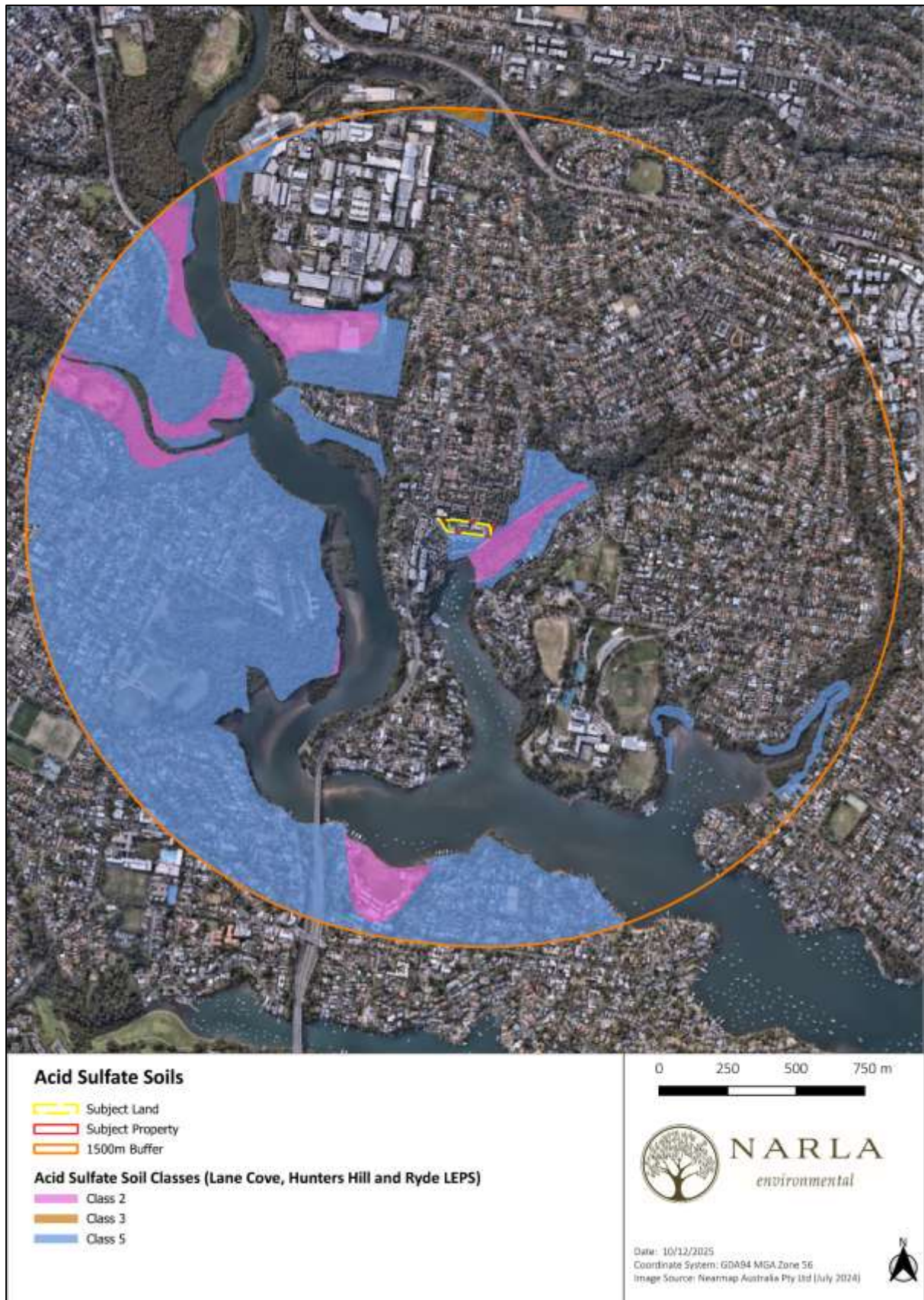


Figure 5. Acid sulfate soil classes occurring within the 1500m buffer of the Subject Land.

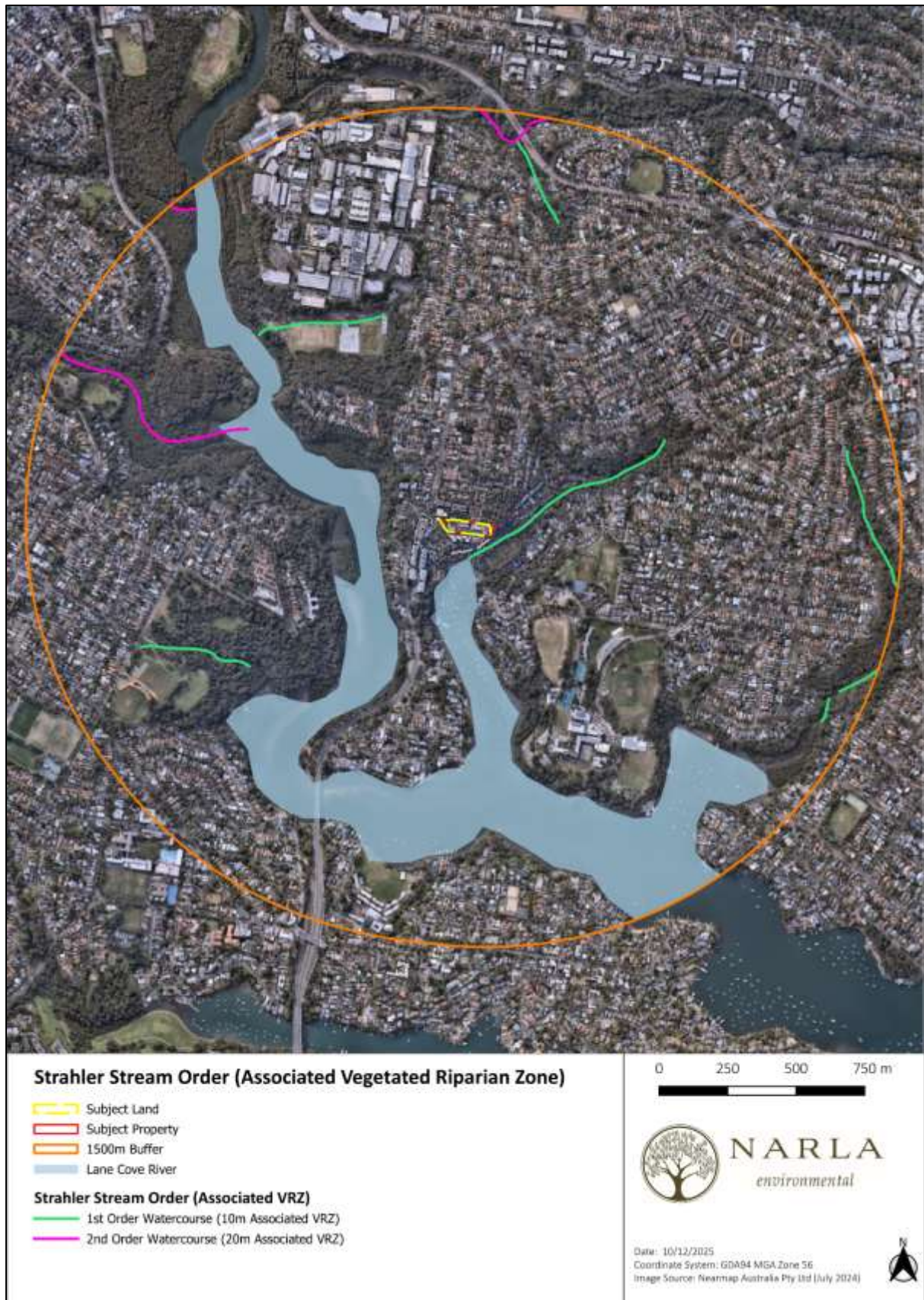


Figure 6. Rivers and streams (with associated riparian buffers) occurring within the 1500m buffer.

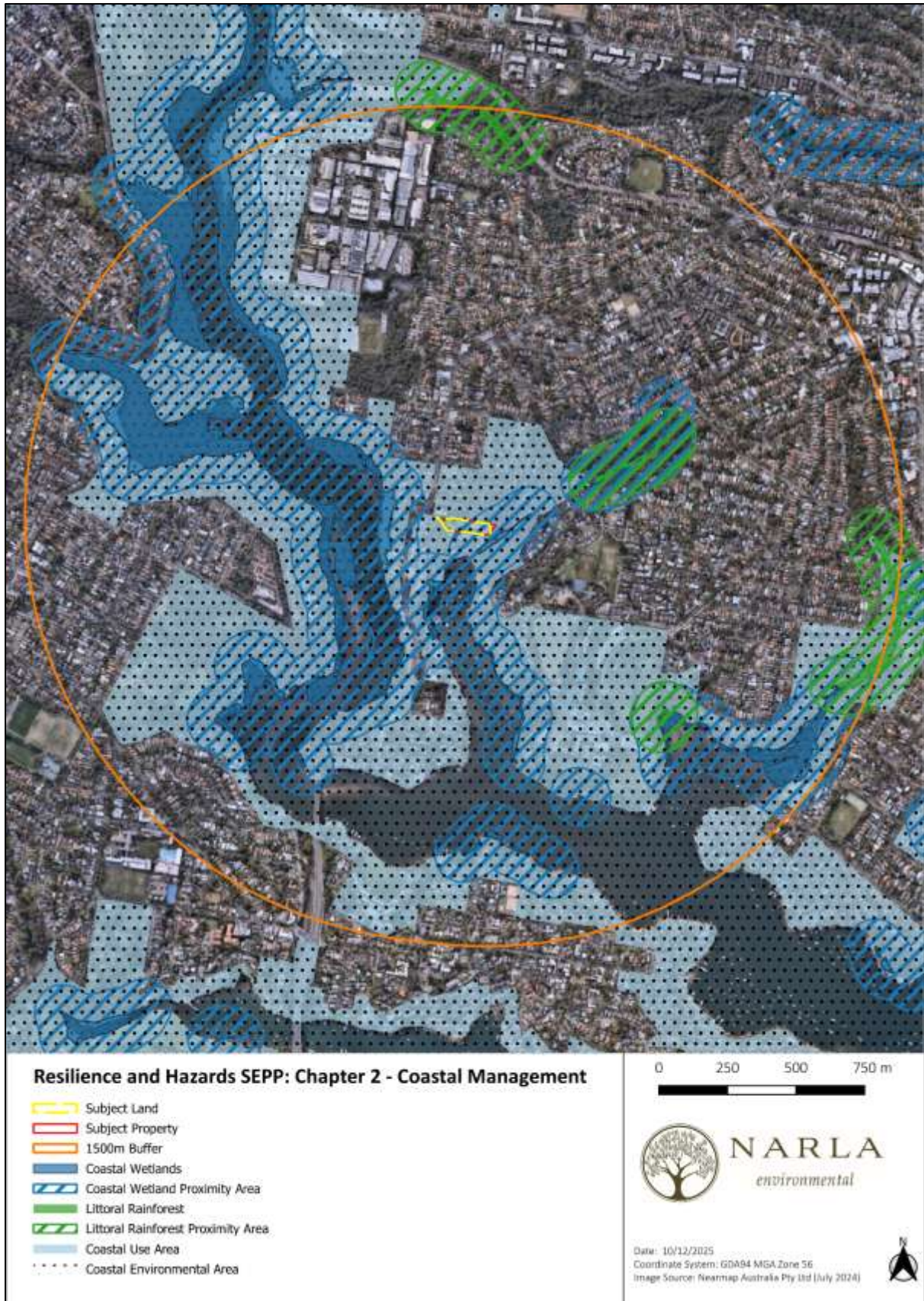


Figure 7. Areas mapped under Chapter 2 of the Resilience and Hazards SEPP within 1500m of the Subject Land.

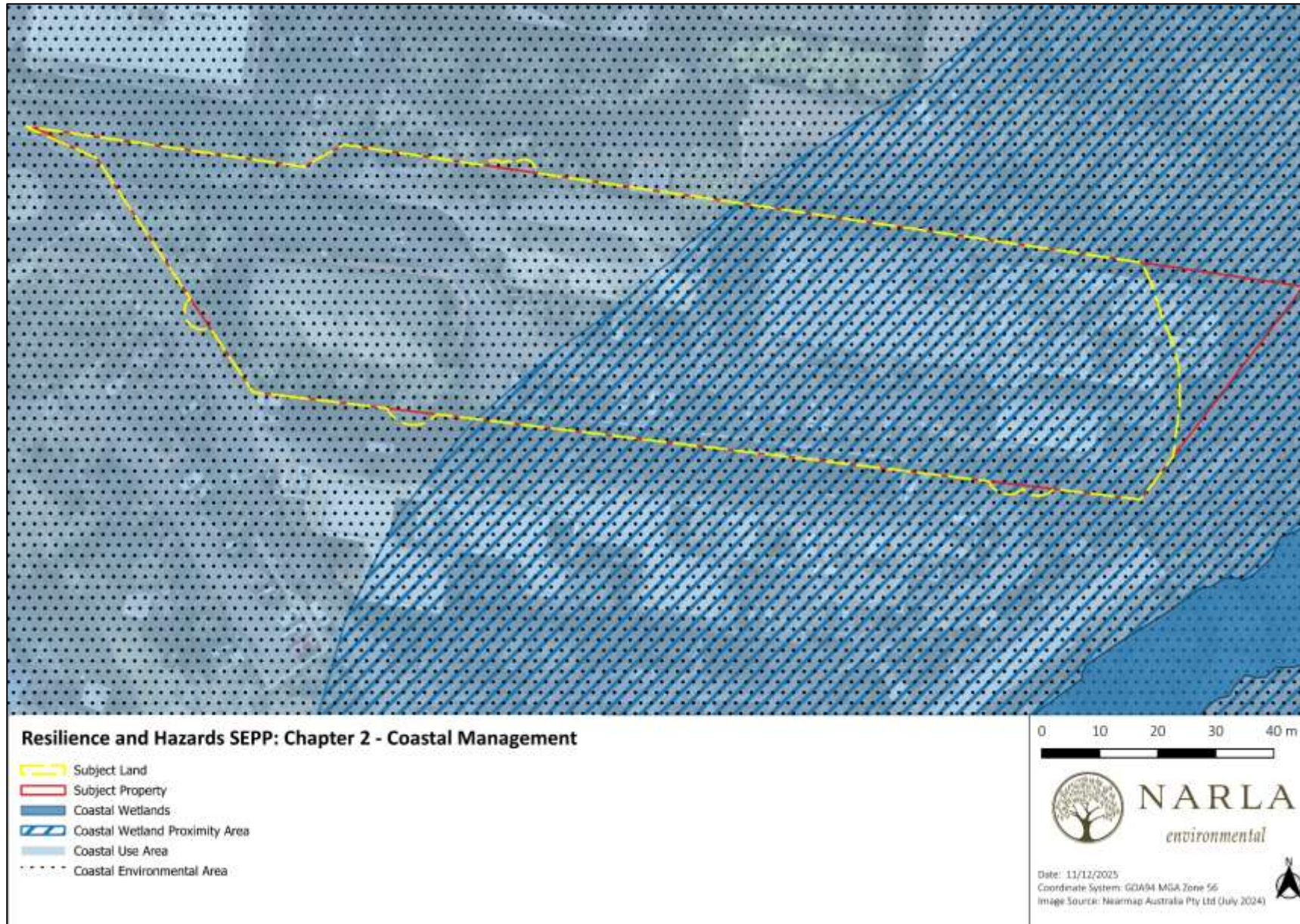


Figure 8. Areas mapped under Chapter 2 of the Resilience and Hazards SEPP within and immediately surrounding the Subject Land.



Figure 9. The extent of native vegetation and habitat connectivity occurring within the 1500m buffer. Native Vegetation

## 4. Native Vegetation

---

### 4.1 Plant Community Types (PCT) Identified within the Subject Land

#### 4.1.1 Historically Mapped Vegetation

The majority of the vegetation within the Subject Land has been mapped as “Not classified”, however, the NSW State Vegetation Type Map (DPE 2022b) indicates the presence of two (2) native vegetation communities in close proximity (**Figure 10**):

- PCT 3592: Coastal Enriched Sandstone Forest; and
- PCT 4091: Grey Mangrove – River Mangrove Forest

#### 4.1.2 Plant Community Type Selection Process

Field surveys conducted by Narla confirmed that one (1) native vegetation communities occurred within the Subject Land in conjunction with areas of Planted Native Vegetation and Exotic Dominated Vegetation. Plant Community Type selection for this vegetation community was undertaken using information and databases provided in the BioNet Vegetation Classification System (NDCCEEW 2025d)

The following selection criteria were used in the PCT Filter Tool to develop the PCT shortlist:

- IBRA Bioregion: Sydney Basin
- IBRA Subregion: Pittwater
- Dominant Species: *Eucalyptus piperita*, *Angophora costata*, *Elaeocarpus reticulatus*, *Pittosporum undulatum*, *Syncarpia glomulifera*, *Homalanthus populifolius*, *Corymbia gummifera*, *Glochidion ferdinandi*, *Casuarina glauca*, *Allocasuarina littoralis*, *Cyathea australis* and *Lomandra longifolia*.

This process delivered a selection of ten (10) PCTs that occur within the Pittwater IBRA Subregion (and Sydney Basin Bioregion) and contained at least eleven (11) out of the twelve (12) dominant species identified. The geographical distribution characterised by each shortlisted PCT was then compared against the geographical characteristics and geology of the Subject Land, leaving just two (2) candidate PCTs (**Table 3**). The steps taken to justify the presence/absence of the candidate PCTs within the Subject Land are detailed in **Table 4**.



Figure 10. Historically mapped vegetation communities surrounding the Subject Land.

**Table 3. Output from the PCT Filter Tool (NDCCEEW 2025d) and subsequent shortlisting of dominant PCTs. Green shading indicates the selected best fit dominant PCT.**

Plant Community Type (PCT)	Subject Land within known distribution/landscape position and on correct geology. (NCCEEW 2025d)	No. of Floristic Matches (/12)
PCT 3136: Blue Gum High Forest	No. This PCT occurs on a range of shale or shale-influenced substrates including gullies, ridgelines and slopes underlain by Wianamatta Group shales. The Subject Land is located on sandstone soils, not shale.	11
PCT 3176: Sydney Enriched Sandstone Moist Forest	Yes. This PCT is found in enriched sandstone gullies of the Sydney coastal sandstone plateaus. The Subject Land is located within a sandstone gully.	11
PCT 3234: Hunter Coast Lowland Spotted Gum Moist Forest	No. This PCT is common on low-lying Narrabeen sandstone escarpments and hills between Pittwater and the lower Central Coast between Wagstaff, Bouddi and Wamberal. The Subject Land is not located within this distribution.	11
PCT 3242: Lower North Ranges Turpentine Moist Forest	No. This PCT is found on the sheltered slopes of coastal hills and ranges between Gosford and Taree, Hunter and lower north coasts. The Subject Land is not located within this distribution.	11
PCT 3262: Sydney Turpentine Ironbark Forest	No. This PCT is found on shale or sheltered shale-sandstone soils mainly in the northern suburbs of Sydney and lower Blue Mountains. The Subject Land is located on sandstone soils, not shale.	12
PCT 3586: Northern Sydney Scribbly Gum Woodland	No. This PCT is found on Hawkesbury Sandstone ridgetops on the coastal and hinterland parts of the Hornsby plateau, northern Sydney. The Subject Land is not located on a sandstone ridgetop.	11
PCT 3592: Sydney Coastal Enriched Sandstone Forest	Yes. This PCT is found on slightly enriched Hawkesbury Sandstone soils on sheltered slopes and occasionally crests on the Sydney coastal sandstone plateaus. The Subject Land is located on a sheltered slope on sandstone soils.	11
PCT 3594: Sydney Coastal Sandstone Foreshores Forest	No. This PCT is found along the foreshores of major waterways and coastal escarpments of Sydney. The Subject Land is not located along the foreshore.	12
PCT 3595: Sydney Coastal Sandstone Gully Forest	No. This PCT is widespread north of the Appin road on the Woronora Plateau, extending onto the Hornsby Plateau at Lane Cove and Ku-ring-gai, Brisbane Water and Dharug national parks. It occurs at elevations of 40-410 metres asl, and in higher coastal rainfall zones of over 1000 mm mean annual rainfall. The Subject Land is below this elevation range.	12
PCT 4006: Northern Paperbark-Swamp Mahogany Saw-sedge Forest	No. This PCT occurs on low-lying coastal alluvial swamps and depressions and back barrier sand flats between Sydney and Yamba, Central Coast and north coast. The Subject located on an alluvial swamp or depression no a back barrier sand flat.	12

Table 4. PCT Selection Criteria. Green indicates the selected PCT.

Candidate PCT	Description (NDCCEEW 2025d)	Justification
<p>PCT 3176: Sydney Enriched Sandstone Moist Forest</p>	<p>A very tall, occasionally extremely tall moist shrubby and ferny sclerophyll open forest found in enriched sandstone gullies of the Sydney coastal sandstone plateaus. The tree canopy very frequently includes a high cover of <i>Angophora costata</i>, <i>Syncarpia glomulifera</i> and <i>Eucalyptus pilularis</i> with occasional <i>Eucalyptus piperita</i>. <i>Eucalyptus saligna</i> is rare however abundant on creek lines downslope of shale soils. Commonly there is a tall mid-stratum of <i>Allocasuarina torulosa</i>, less frequently <i>Allocasuarina littoralis</i>, with <i>Elaeocarpus reticulatus</i>, <i>Pittosporum undulatum</i> and <i>Notelaea longifolia</i>. A smaller shrub layer includes <i>Leucopogon lanceolatus</i> and <i>Polyscias sambucifolia</i>. Typically the ground layer is ferny, very frequently with a high cover of <i>Calochlaena dubia</i>, <i>Pteridium esculentum</i> and occasionally <i>Blechnum cartilagineum</i>. A diversity of graminoids, small climbers and grasses adds to a high ground cover amongst the sandstone boulders. This PCT is most extensively distributed within the low elevation gullies that incise the shale rich landscapes of the north shore of Sydney where rainfall exceeds 1100 mm per annum. However, the degree of shale influence and sheltering also sustains the persistence of the PCT in lower rainfall outliers near Campbelltown and Menai. This community grades into PCT 3592 on exposed adjoining slopes and occasionally into rainforest PCT 3038 in narrow bands along creek lines.</p>	<p>It is acknowledged that this Vegetation Zone within this Subject Land is highly altered, owing to its location within an urbanised landscape. However, owing to several species being locally occurring they are required to be assigned to a PCT. Narla have therefore assigned this PCT to this Vegetation Zone within the Subject Land as it most accurately describes the geology, landscape features and dominant canopy species located within the Subject Land, particularly the presence <i>Syncarpia glomulifera</i> which is described as key components of this PCT which led to it being considered as the “Best Fit”.</p>

Candidate PCT	Description (NDCCEE 2025d)	Justification
<p>PCT 3592: Sydney Coastal Enriched Sandstone Forest</p>	<p>A tall to very tall shrubby sclerophyll open forest found on slightly enriched Hawkesbury Sandstone soils on sheltered slopes and occasionally crests on the Sydney coastal sandstone plateaus. The tree canopy very frequently includes a high cover of <i>Angophora costata</i> commonly in combination with <i>Corymbia gummifera</i> and <i>Eucalyptus piperita</i>, with <i>Eucalyptus pilularis</i> occasionally locally abundant. A taller mid-stratum is characterised by very frequent however sparse cover of <i>Pittosporum undulatum</i> and <i>Allocasuarina littoralis</i> or <i>Allocasuarina torulosa</i>. A mid-dense lower shrub layer is comprised of dry sclerophyll species that commonly include <i>Leptospermum trinervium</i>, <i>Persoonia levis</i>, <i>Lomatia silaifolia</i>, <i>Acacia ulicifolia</i> and <i>Dodonaea triquetra</i>, with <i>Banksia serrata</i> and <i>Banksia spinulosa</i> recorded occasionally. The ground layer is typically a sparse cover of graminoids that almost always includes <i>Dianella caerulea</i> and <i>Lomandra longifolia</i> with the grass <i>Entolasia stricta</i> and fern <i>Pteridium esculentum</i>, with frequent occurrences of climbers such as <i>Smilax australis</i>. This PCT is primarily distributed at elevations of less than 200 metres asl downslope of shale soils on the north shore of Sydney and Sutherland and on the Narrabeen sandstone escarpment along the Pittwater Peninsular. It grades into a heathy forest PCT 3595 on rocky Hawkesbury Sandstone gullies or moist shrub and fern forest PCT 3176 with increased shelter in deeper gullies.</p>	<p>Owing to the similarity in landscape position and diagnostic floristic species between this PCT and PCT 3176, the discerning factor was the better representation of the diagnostic tree species <i>Syncarpia glomulifera</i> which is described as key components of PCT 3176.</p>

#### 4.1.3 Final PCT and Vegetation Zone Selection

Field surveys conducted by Narla confirmed areas of Exotic Dominated Vegetation, Planted Native Vegetation as well as one (1) native PCT within the Subject Land:

- PCT 3176: Sydney Enriched Sandstone Moist Forest

This PCT within the Subject Land has therefore been assigned to the following vegetation zone:

- Zone 1: PCT 3176 – Low Condition (Historically Altered).

The other vegetation within the Subject Land that did not conform to a locally occurring PCT will hereafter be referred to as:

- Exotic Dominated Vegetation; and
- Planted Native Vegetation.

These vegetation communities are detailed in **Table 5** and **Table 6** and displayed in **Figure 11**.

Table 5. PCT 3176 identified within the Subject Land.

Vegetation Zone 1: PCT 3176 – Low Condition (Historically Altered).



Vegetation class	Coastal Valley Grassy Woodlands
Field survey effort	One (1) 20x50m VIS plot (inclusive of 20x20m floristic plot) was established. Owing to the high number of ecotones present within the Subject Land, the VIS plot was conducted in the bushland immediately to the east of the Subject Land and Property ( <b>Figure 11</b> ). It is to be acknowledge that this vegetation is considered to be of a higher quality than that present within the Subject Land, however this location was chosen utilising a precautionary approach to ensure that the vegetative impacts were adequately assessed.
Total Area within the Subject Land	0.13ha
Description of vegetation within the Subject Land	This vegetation within the Subject Land was highly altered owing to its prolonged exposure in an urban setting and contained consisted of a mixture of native species such as <i>Syncarpia glomulifera</i> , <i>Casuarina glauca</i> , <i>Glochidion ferdinandi</i> , <i>Cyathea</i>

**Vegetation Zone 1: PCT 3176 – Low Condition (Historically Altered).**

	<p><i>australis</i>, <i>Elaeocarpus reticulatus</i>, <i>Youngia japonica</i> and <i>Lomandra longifolia</i>. These species were interspersed amongst a number of common landscaped plants and environmental weeds.</p>
<p><b>Structure of locally native vegetation</b></p>	<p>This data was collected from a VIS plot outside the Subject Land in what is considered higher value vegetation, to ensure vegetative impacts were appropriately covered without the inclusion of ecotones.</p> <p>Canopy cover within the plot was moderate within the plot, with native trees accounting for 30.1% cover. Shrubs cover within the plot was also moderate at 18.6% cover. Native groundcovers were also moderate with 44.1% grass, 1.5% forb, 1% fern and 3.4% other. A high coverage of leaf litter (56%) was apparent with 20m of fallen logs. High Threat Exotics were low at 0.3% cover.</p> <p>The VIS plots contained a high diversity of tree stem sizes, with tree stems recorded in all DBH class including regenerating stems, with one (1) large trees (&gt;80DBH). No hollow bearing trees were located within this zone.</p>
<p><b>TEC Status (BC Act 2016)</b></p>	<p>This vegetation within the Subject Land <b>DOES NOT</b> conform to the BC Act listed Critically Endangered Ecological Community Hygrocybeae Community of Lane Cove Bushland Park in the Sydney Basin Bioregion (see <b>Section 4.2.1</b>).</p>
<p><b>TEC Status (EPBC Act 1999)</b></p>	<p>N/A</p>
<p><b>Scientific Reference from VIS (NDCCEW 2025d)</b></p>	<p>Connolly, D., Binns, D., Turner, K., Hager, T., Lyons, M., Magarey, E. (in prep.) A revised classification of Plant Community Types for eastern New South Wales. NSW DPIE, Parramatta</p>
<p><b>Estimate of percent cleared value of PCT in the major catchment area</b></p>	<p>23.11%</p>

Table 6. Exotic Dominated Vegetation within the Subject Land.


Exotic Dominated Vegetation	
	
<b>Total Area within the Subject Land</b>	0.05ha
<b>Field survey effort</b>	No VIS plots were conducted within this zone owing to its exotic nature.
<b>Description of vegetation</b>	This vegetation within this portion of the Subject Land comprised of exotic landscaped garden beds as well as common exotic weed vegetation typical of an urban environment. Species included <i>Clivia miniata</i> , <i>Erigeron karvinskianus</i> , <i>Acetosa sagittata</i> , <i>Cinnamomum camphora</i> , <i>Ehrharta erecta</i> , <i>Murraya paniculata</i> , <i>Ochna serrulata</i> , <i>Nandina domestica</i> , <i>Gazania rigens</i> and <i>Cycas revoluta</i> as well as others.
<b>Justification of vegetation assignment</b>	The vegetation within this zone comprises of exotic species typical of its environment within an urban landscape. As this vegetation cannot be reasonably assigned a locally occurring PCT, it has been called “Exotic dominated Vegetation”.
<b>TEC Status (BC Act 2016 and EPBC Act 1999)</b>	No associated TECs

Table 7. Planted Native Vegetation within the Subject Land.


Planted Native Vegetation	
	
Total Area within the Subject Land	0.06ha
Field survey effort	No VIS plots were conducted within this zone owing to its planted nature (see Section 2).
Description of vegetation	This vegetation within this portion of the Subject Land comprised of planted native such as <i>Eucalyptus saligna</i> , <i>Angophora floribunda</i> , <i>Callistemon citrinus</i> and <i>Lomandra longifolia</i> in clearly landscaped garden beds. Other common exotic landscape species were also planted amongst these native species.
Justification of vegetation assignment	The vegetation within this zone is comprised of planted native vegetation and exotic species as part of landscaped garden beds. It has therefore been assessed as “Planted Native Vegetation” in accordance with the BAM. Further justification is provided in Section 2.
TEC Status (BC Act 2016 and EPBC Act 1999)	No associated TECs



Figure 11. Narla field validated vegetation mapping and location of the VIS plot in relation to the Subject Land.

## 4.2 Threatened Ecological Communities

### 4.2.1 Listing under the Biodiversity Conservation Act 2016: Hygrocybeae Community of Lane Cove Bushland Park in the Sydney Basin Bioregion- Critically Endangered Ecological Community

Areas of PCT 3176 relates to the NSW Hygrocybeae Community of Lane Cove Bushland Park TEC when occurring in the catchment of Gore Creek including Lane Cove Bushland Park, as per paragraph 5 of the Final Determination (NSW Scientific Committee 2000). As the Subject Land is not located within the Gore Creek catchment including Lane Cove Bushland Park, Vegetation Zone 1 does not qualify for protection under the BC Act 2016 as this TEC.

### 4.2.2 Listing under the Environment Protection and Biodiversity Conservation Act 1999

The vegetation within the Subject Land is not associated with any TECs listed under the EPBC Act 1979.

## 4.3 Assessing Patch Size

A patch is defined by the BAM (DPIE 2020a) as an area of native vegetation that occurs on the Subject Land and includes native vegetation that has a gap of less than 100m from the next area of native vegetation (or  $\leq 30$ m for non-woody ecosystems). A patch may extend onto adjoining land.

For each vegetation zone, the assessor must determine the patch size in hectares and assign it to one of the following classes:

- <5ha
- 5–<25ha
- 25–<100ha
- $\geq 100$ ha.

The patch size class is used to assess habitat suitability on the Subject Land for threatened species. The assessor may assign more than one patch size class to the vegetation zone if both of the following apply:

- A vegetation zone comprises two or more discontinuous areas of native vegetation, and
- The areas of discontinuous native vegetation have more than one patch size class.

As areas outside of the Subject Property were not assessed as part of the scope of this assessment, the vegetation zones identified within the Subject Land have been allocated to the following ecosystem categories to allow for aerial mapping of patch size within the broader area (**Table 8; Figure 12**)

- Woody Ecosystems (Vegetation Zone 1: PCT 3176).

According to the BAM (DPIE 2020a), exotic vegetation and planted native vegetation does not require assessment under Chapter 4 of the BAM, and as such, patch size for the vegetation mapped as Exotic Dominated Vegetation and Planted Native Vegetation does not need to be determined.

**Table 8. Patch size classes that each PCT and associated vegetation zone fall into.**

Plant Community Type	Vegetation Zone	Patch Size Class
PCT 3176	Zone 1	>100ha



Figure 12. Patch size for the vegetation zone identified within the Subject Land.

## 4.4 Vegetation Integrity Survey (VIS) Plots

One (1) 20x50m VIS plot (inclusive of 20x20m floristic plot) was established. Owing to the high number of ecotones present within the Subject Land, the VIS plot was conducted in the bushland immediately to the east of the Subject Land and Property (**Figure 11**). It is to be acknowledged that this vegetation is considered to be of a higher quality than that present within the Subject Land, however this location was chosen utilising a precautionary approach to ensure that the vegetative impacts were adequately assessed.

Plot data gathered for each attribute used to assess the function of the Subject Land vegetation is detailed in **Appendix B**. Vegetation Integrity (VI) Scores represented by existing vegetation within each vegetation zone is detailed in **Table 9**.

### 4.4.1 Determining future vegetation integrity scores

Most projects will result in complete clearing of vegetation and threatened species habitat within the Subject Land. In this scenario, the assessor must assess the proposed future value of each of the VI attributes as zero in the BAMC. However, in circumstances where partial clearing of vegetation is proposed and remaining vegetation will be maintained, the assessor may determine that the future value of the relevant VI attributes is greater than zero (DPIE 2020a).

Subsequently, each vegetation zone will be managed in several zones to reflect the different levels of vegetation clearing required (**Figure 13**):

- Vegetation Zone 1: PCT 3176– Low Condition (Historically Altered):
  - Management Zone 1: PCT 3176 - Complete removal. This area will require the removal of all vegetation to allow for the proposed development including all trees listed in the associated arborist report for removal.
  - Management Zone 2: PCT 3176 - IPA Management. This area will require management of the ongoing vegetation to IPA requirements. No tree removal is proposed in this zone as all trees for removal have been assigned to Management Zone 1.

The attributes influencing future vegetation scores within this management zone are detailed in **Table 10**. Owing to the exotic nature of the vegetation within the area identified as Exotic Dominated Vegetation and the planted nature of the vegetation within the area mapped as Planted Native Vegetation, they have not been assigned to a management zone and does not require further vegetation assessment.



Figure 13. Management Zone within the Subject Land. Areas of Planted Native Vegetation and Exotic Dominated Vegetation have not been assigned to a management zone.

Table 9. Vegetation integrity scores for each identified zone.

Vegetation Zone	Management Zone	Area (ha)	Survey Effort	Composition Condition Score	Structure Condition Score	Function Condition Score	VI Score	Future VI Score	Change in VI Score	Total VI Loss	Hollow bearing trees
Zone 1: PCT 3176 – Low Condition	Zone 1 – Complete removal	0.07	1 x VIS Plot (20m x 50m)	57.8	35.7	73.7	53.4	0	-53.4	-42.9	Absent
	Zone 2 – IPA Management	0.06						22.8	-30.6		

Table 10. Management Zones within the Subject Land, and relevant vegetation attributes (composition, structure and function) affecting future VI scores.

Vegetation Zone	Management Zone	Changes in current vegetation attributes	Vegetation attributes not changed	Future vegetation scores and justification
Zone 1 – PCT 3176 Low Condition	Zone 1 – Complete removal	All vegetation will be removed	NA	<ul style="list-style-type: none"> <li>All vegetation within this zone has been assessed as lost as a result of the proposed development as well as potential future indirect impacts.</li> <li>Future composition, structure and function score is 0.</li> <li>This zone also includes all trees listed in the associated arborist report for removal.</li> </ul>
	Zone 2 – IPA Management	All attributes not associated with trees have been removed.	Attributes relating to trees have been retained.	<ul style="list-style-type: none"> <li>This area will require management of the ongoing vegetation to IPA requirements. No tree removal is proposed in this zone as all trees for removal have been assigned to Management Zone 1. Therefore, all attributes associated with trees have been retained. All other vegetation and attributes has been removed to allow for future management.</li> </ul>

## 5. Threatened Species

### 5.1 Candidate Ecosystem Credit Species

Ecosystem credit species associated with the Subject Land are listed below in **Table 11**. No species predicted by the BAM calculator (NDCCEEW 2025f) as potential ecosystem credits were excluded from the assessment due to habitat constraints.

**Table 11. Candidate ecosystem credits predicted to occur within the Subject Land.**

Scientific Name	BC Act Status	Sensitivity to Gain	Excluded from Assessment	Reason for Exclusion from Assessment
<i>Artamus cyanopterus cyanopterus</i> Dusky Woodswallow	Vulnerable	Moderate	No	–
<i>Callocephalon fimbriatum</i> Gang-gang Cockatoo (Foraging)	Endangered	Moderate	No	–
<i>Calyptorhynchus lathami lathami</i> South-eastern Glossy Black-Cockatoo (Foraging)	Vulnerable	High	No	–
<i>Climacteris picumnus victoriae</i> Brown Treecreeper (eastern subspecies)	Vulnerable	High	No	–
<i>Daphoenositta chrysoptera</i> Varied Sittella	Vulnerable	Moderate	No	–
<i>Dasyurus maculatus</i> Spotted-tailed Quoll	Vulnerable	High	No	–
<i>Glossopsitta pusilla</i> Little Lorikeet	Vulnerable	High	No	–
<i>Haliaeetus leucogaster</i> White-bellied Sea-Eagle (Foraging)	Vulnerable	High	No	–
<i>Hieraetus morphnoides</i> Little Eagle (Foraging)	Vulnerable	Moderate	No	–
<i>Hirundapus caudacutus</i> White-throated Needletail	Vulnerable	High	No	–
<i>Ixobrychus flavicollis</i> Black Bittern	Vulnerable	Moderate	No	–
<i>Lathamus discolor</i> Swift Parrot (Foraging)	Endangered	Moderate	No	–
<i>Lophoictinia isura</i> Square-tailed Kite (Foraging)	Vulnerable	Moderate	No	–
<i>Micronomus norfolkensis</i> Eastern Coastal Free-tailed Bat	Vulnerable	High	No	–
<i>Miniopterus australis</i> Little Bent-winged Bat (Foraging)	Vulnerable	High	No	–
<i>Miniopterus orianae oceanensis</i> Large Bent-winged Bat (Foraging)	Vulnerable	High	No	–
<i>Petroica phoenicea</i> Flame Robin	Vulnerable	Moderate	No	–
<i>Pteropus poliocephalus</i> Grey-headed Flying-fox (Foraging)	Vulnerable	High	No	–
<i>Saccolaimus flaviventris</i> Yellow-bellied Sheath-tail-bat	Vulnerable	High	No	–
<i>Varanus rosenbergi</i> Rosenberg's Goanna	Vulnerable	High	No	–

## 5.2 Candidate Species Credit Species Summary

This section provides a summary of the candidate species credit fauna and flora species for the Subject Land derived from BAMC (NDCCEEW 2025f). A summary of the targeted survey effort applied to each species is provided along with the results of the survey effort, specifically whether or not the species credit needs to be offset through retiring of Biodiversity Offset Credits (**Table 12** and **Table 13**).

**Table 12. Candidate Fauna Credit Species predicted to occur within the Subject Land.**

Scientific Name	Included in Assessment?	Targeted Survey conducted?	Present within Subject Land?	Biodiversity Risk Weighting	Biodiversity Offset Credits Required?
<i>Chalinolobus dwyeri</i> Large-eared Pied Bat	Yes. The SAI threshold for this species is potential breeding habitat and presence of breeding individuals. Potential breeding habitat is identified as land within 100m of rocky areas containing caves, overhangs, crevices, cliffs, escarpments, old mines, tunnels, culverts, or derelict concrete buildings. As rocky areas containing cliffs were located in the broader Subject Property this species was included in the assessment.	NA	<b>Assumed Present</b>	Very High – 3	<b>Yes</b>
<i>Lathamus discolor</i> Swift Parrot (Breeding)	No, the Subject Land is not included on the map of important areas for Swift Parrot.	NA	NA	Very High - 3	No
<i>Miniopterus australis</i> Little Bent-winged Bat (Breeding)	Yes. This species is known to breed in caves, tunnels, mines and culverts. As such habitat constraints are present within the Subject Land, this species was included in the assessment.	NA	<b>Assumed Present</b>	Very High – 3	<b>Yes</b>
<i>Miniopterus orianae oceanensis</i> Large Bent-winged Bat (Breeding)	Yes. This species is known to breed in caves, tunnels, mines and culverts. As such habitat constraints are present within the Subject Land, this species was included in the assessment.	NA	<b>Assumed Present</b>	Very High – 3	<b>Yes</b>

Table 13. Candidate Flora and Fungi Species Credit Species predicted to occur within the Subject Land.

Scientific Name	Included in Assessment?	Targeted Survey conducted?	Present within Subject Land?	Biodiversity Risk Weighting	Biodiversity Offset Credits Required?
<i>Camarophyllopsis kearneyi</i>	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. Furthermore, this species is restricted to Lane Cove Bushland Park. As the Subject Land does not occur near Lane Cove Bushland Park or within Lane Cove local government area, this species is unlikely to be present and therefore this was excluded from the assessment.	N/A	NA	Very High - 3	No
<i>Deyeuxia appressa</i>	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. The vegetation within the Subject Land has been verified via satellite imagery as having been managed for an extended period, including regular mowing. According to the TBDC, this species is a highly restricted NSW endemic, known from only two pre-1942 records in the Sydney area. The species was first collected in 1930 at Herne Bay, Saltpan Creek, off the Georges River, south of Bankstown, and again in 1941 from Killara, near Hornsby. It has not been collected since and may now be extinct in the wild due to the significant habitat loss and development that has occurred in these areas. The Subject Land is not near Bankstown or Killara. The TBDC also shows that the species is mesophytic, meaning it grows in moist conditions, which are not present within the Subject Land.	N/A	NA	Very High - 3	No
<i>Diuris bracteata</i>	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. Therefore it was excluded from the assessment.	NA	NA	Very High - 3	No

Scientific Name	Included in Assessment?	Targeted Survey conducted?	Present within Subject Land?	Biodiversity Risk Weighting	Biodiversity Offset Credits Required?
<i>Hygrocybe anomala</i> var. <i>ianthinomarginata</i>	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. Furthermore, this species is mostly restricted to Lane Cove Bushland Park as well as a few other locations including the Royal National Park, Chatswood, Castle Hill and the Springwood. As the Subject Land does not occur in Lane Cove Bushland Park or within any of the know locations, and due to the highly degraded vegetation within the Subject Land managed as a planted garden beds or as distributed exotic dominated vegetation, this species was excluded from the assessment as it was considered unlikely to occur within the Subject Land.	NA	NA	Very High – 3	No
<i>Hygrocybe aurantipes</i>	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. Furthermore, this species is mostly restricted to Lane Cove Bushland Park as well as a few other locations including the Royal National Park, Chatswood, Northbridge and the Blue Mountains. As the Subject Land does not occur in Lane Cove Bushland Park or within any of the know locations, and due to the highly degraded vegetation within the Subject Land managed as a planted garden beds or as distributed exotic dominated vegetation, this species was excluded from the assessment as it was considered unlikely to occur within the Subject Land.	NA	NA	Very High – 3	No
<i>Hygrocybe austropratensis</i>	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. Furthermore, this species is mostly restricted to Lane Cove	NA	NA	Very High – 3	No

Scientific Name	Included in Assessment?	Targeted Survey conducted?	Present within Subject Land?	Biodiversity Risk Weighting	Biodiversity Offset Credits Required?
	Bushland Park as well as a few other locations including the Royal National Park, Chatswood, Wolli Creek, Northbridge, Marsfield and the Blue Mountains. As the Subject Land does not occur in Lane Cove Bushland Park or within any of the know locations, and due to the highly degraded vegetation within the Subject Land managed as a planted garden beds or as distributed exotic dominated vegetation, this species was excluded from the assessment as it was considered unlikely to occur within the Subject Land.				
<i>Hygrocybe collucera</i>	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. Furthermore, this species is mostly restricted to Lane Cove Bushland Park as well as a few other locations including the Royal National Park, Chatswood, Wolli Creek and the Blue Mountains. As the Subject Land does not occur in Lane Cove Bushland Park or within any of the know locations, and due to the highly degraded vegetation within the Subject Land managed as a planted garden beds or as distributed exotic dominated vegetation, this species was excluded from the assessment as it was considered unlikely to occur within the Subject Land.	NA	NA	Very High – 3	No
<i>Hygrocybe griseoramosa</i>	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. Furthermore, this species is mostly restricted to Lane Cove Bushland Park as well as a few other locations including the Royal National Park, Chatswood, Wolli Creek and the Blue Mountains. As the Subject Land does not occur in Lane Cove Bushland Park or within any of the know locations, and due to the highly degraded vegetation	NA	NA	Very High – 3	No

Scientific Name	Included in Assessment?	Targeted Survey conducted?	Present within Subject Land?	Biodiversity Risk Weighting	Biodiversity Offset Credits Required?
	within the Subject Land managed as a planted garden beds or as distributed exotic dominated vegetation, this species was excluded from the assessment as it was considered unlikely to occur within the Subject Land.				
<i>Hygrocybe lanecovens</i>	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. Furthermore, this species is mostly restricted to Lane Cove Bushland Park as well as a few other locations including the Royal National Park and Chatswood. As the Subject Land does not occur in Lane Cove Bushland Park or within any of the know locations, and due to the highly degraded vegetation within the Subject Land managed as a planted garden beds or as distributed exotic dominated vegetation, this species was excluded from the assessment as it was considered unlikely to occur within the Subject Land.	NA	NA	Very High – 3	No
<i>Hygrocybe reesia</i>	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. Furthermore, this species is mostly restricted to Lane Cove Bushland Park as well as a few other locations including the Royal National Park, Chatswood, Castle Hill, Northbridge, Marsfield, East Linfield and the Blue Mountains. As the Subject Land does not occur in Lane Cove Bushland Park or within any of the know locations, and due to the highly degraded vegetation within the Subject Land managed as a planted garden beds or as distributed exotic dominated vegetation, this species was excluded from the assessment as it was considered unlikely to occur within the Subject Land.	NA	NA	Very High – 3	No

Scientific Name	Included in Assessment?	Targeted Survey conducted?	Present within Subject Land?	Biodiversity Risk Weighting	Biodiversity Offset Credits Required?
<i>Hygrocybe rubronivea</i>	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. Furthermore, this species is mostly restricted to Lane Cove Bushland Park as well as a few other locations including the Royal National Park, Chatswood, Wollie Creek and the Blue Mountains. As the Subject Land does not occur in Lane Cove Bushland Park or within any of the know locations, and due to the highly degraded vegetation within the Subject Land managed as a planted garden beds or as distributed exotic dominated vegetation, this species was excluded from the assessment as it was considered unlikely to occur within the Subject Land.	NA	NA	Very High – 3	No
<i>Prostanthera marifolia</i> Seaforth Mintbush	Yes. Whilst the vegetation within the Subject Land was considered to be highly degraded such that this species was unlikely to be present. A targeted survey was conducted for this species within the Subject Land owing to potential habitat in the neighbouring areas.	NA	NA	Very High - 3	No
<i>Rhizanthella slateri</i> Eastern Australian Underground Orchid	No. As per Section 5.2.3(2ai) of the BAM (DPIE 2020a), it was determined that the habitat constraints and microhabitats within the Subject Land are so degraded that the species is unlikely to use the area. Therefore it was excluded from the assessment.	NA	NA	Very High - 3	No
<i>Rhodamnia rubescens</i> Scrub Turpentine	Yes. Whilst the vegetation within the Subject Land was considered to be highly degraded such that this species was unlikely to be present. A targeted survey was conducted for this species within the Subject Land owing to potential habitat in the neighbouring areas.	Yes	No	Very High – 3	No

### 5.3 Surveys for SAIL Species Credit and their Habitats

Surveys were undertaken for SAIL species credit species and their habitats considered to have potential to occur within the Subject Land (**Figure 14**). These surveys were implemented in accordance with Section 5.3 of the BAM and all relevant OEH, DPE and NDCCEEW threatened species survey guidelines.

Surveys were undertaken on the 18<sup>th</sup> of September 2024 by experienced Narla Ecologists, Chris Moore and Kayla Spithoven, within the Subject Land and the areas immediately adjacent. Weather conditions taken from the nearest weather station (station no. 066214) in the lead up and during the field survey are outlined in **Table 14**.

Pre-survey weather conditions were considered less than ideal for the emergence of cryptic flora and fungi species, owing to the low amount of rain in the lead up to the site visit in conjunction with moderate temperatures. This is considered unlikely to have been adequate time to stimulate the required growth for certain species should their flowering time coincide with the site assessment.

**Table 14. Weather conditions taken from the nearest weather stations (Station number 066214) in the lead up and during the field survey (BOM 2025). Survey date is in bold.**

Timing/activities	Undertaken By (Approximate Hours Spent)	Date	Day	Temperature		Rainfall (mm)
				Min	Max	
Lead up to the survey	-	11/09/2024	Wednesday	11.9	22.7	0
		12/09/2024	Thursday	15.9	20.7	0
		13/09/2024	Friday	11.4	19.6	2
		14/09/2024	Saturday	9.7	23.4	0
		15/09/2024	Sunday	8.5	16.5	0
		16/09/2024	Monday	6.6	19.9	0
		17/09/2024	Tuesday	9.3	22	0
<b>Vegetation and Habitat Assessment Survey</b>	<b>Chris Moore and Kayla Spithoven (10 hours)</b>	<b>18/09/2024</b>	<b>Wednesday</b>	9.3	26.9	0

#### 5.3.1 Fauna Species Credit Survey

A total of Four (4) SAIL threatened fauna species were identified within the BAMC (NDCCEEW 2025f) as having the potential to occur within the Subject Land. One (1) of these species were excluded from assessment due to the following: (BAM Section 5.2.2, DPIE 2020b):

- The assessor determines that microhabitats required by a species are absent from the Subject Land (or specific vegetation zone) [(Section 5.2.3(2ai) of the BAM (DPIE 2020a)].

The remaining three (3) species were assumed present, as the Subject Land contained suitable potential habitat, so these species are therefore required to be assumed present as no suitable surveys in accordance with relevant guidelines has been conducted to rule out their presence at the time of writing this report.

##### 5.3.1.1 Threatened Microchiropteran Bat Survey

Owing to the presence of human-made structures within the Subject Land that will require demolition to facilitate the proposed works, a targeted survey for threatened microchiropteran bat (microbats) species with potential to

utilise such habitat was conducted. The following threatened microbat species, which are known to inhabit buildings, occur within the locality of the Subject Land (NDCCEEW 2025b):

- *Miniopterus orianae oceanensis* (Large Bent-winged Bat);
- *Miniopterus australis* (Little Bent-winged Bat)
- *Saccolaimus flaviventris* (Yellow-bellied Sheath Tail Bat);
- *Falsistrellus tasmaniensis* (Eastern False Pipistrelle);
- *Scoteanax rueppellii* (Greater Broad-nosed Bat);
- *Micronomus norfolkensis* (Eastern Coastal Free-tailed Bat); and

The survey was conducted during daylight hours, on the 18<sup>th</sup> of September 2024 by experienced Narla Ecologists Chris Moore and Kayla Spithoven. During the site assessment the Ecologists conducted a walk over of both the inside and outside of all structures which are proposed to be demolished as part of this SSDA (**Appendix D**).

The ecologists focussed searches on potential entry and exit points as well as cracks, crevices and holes that could be utilised for roosting. Each area of potential habitat were examined using an endoscope as well as a EchoMeter Touch 2 Pro to record any potential individuals for analysis.

No threatened or no non-threatened microbats were observed within or surrounding the structures during the site assessment.

### 5.3.2 Flora Species Credit Survey

A total of fourteen (14) SAI threatened flora species were identified within the BAMC (NDCCEEW 2025f) as having the potential to occur within the Subject Land. Following the site assessment, twelve (12) of these species were identified as being unlikely to occur within the Subject Land due to the following (BAM Section 5.2.3; DPIE 2020a):

- The assessor determines that the habitat constraints or microhabitats are degraded to the point that the species is unlikely to use the subject land (or specific vegetation zones) [(Section 5.2.3(2ai) of the BAM (DPIE 2020a)]

A targeted survey was undertaken for the remaining two (2) species during their NDCCEEW approved survey periods (**Table 15**) in accordance with the ‘Surveying threatened plants and their habitats – NSW survey guide for the Biodiversity Assessment Method’ (DPIE 2020b; **Figure 14**). These species were not detected within the Subject Land.

**Table 15. Species credit flora species requiring targeted surveys. Targeted surveys were conducted within endorsed survey periods.**

Candidate Flora Species	Survey Period (BAMC)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<i>Prostanthera marifolia</i> Seaforth Mintbush									✓			
<i>Rhodamnia rubescens</i> Scrub Turpentine									✓			
<b>Key</b>	✓ = Surveyed						= NDCCEEW Endorsed Survey Period					

## 5.4 Species Polygons

### 5.4.1 Confirmed Present

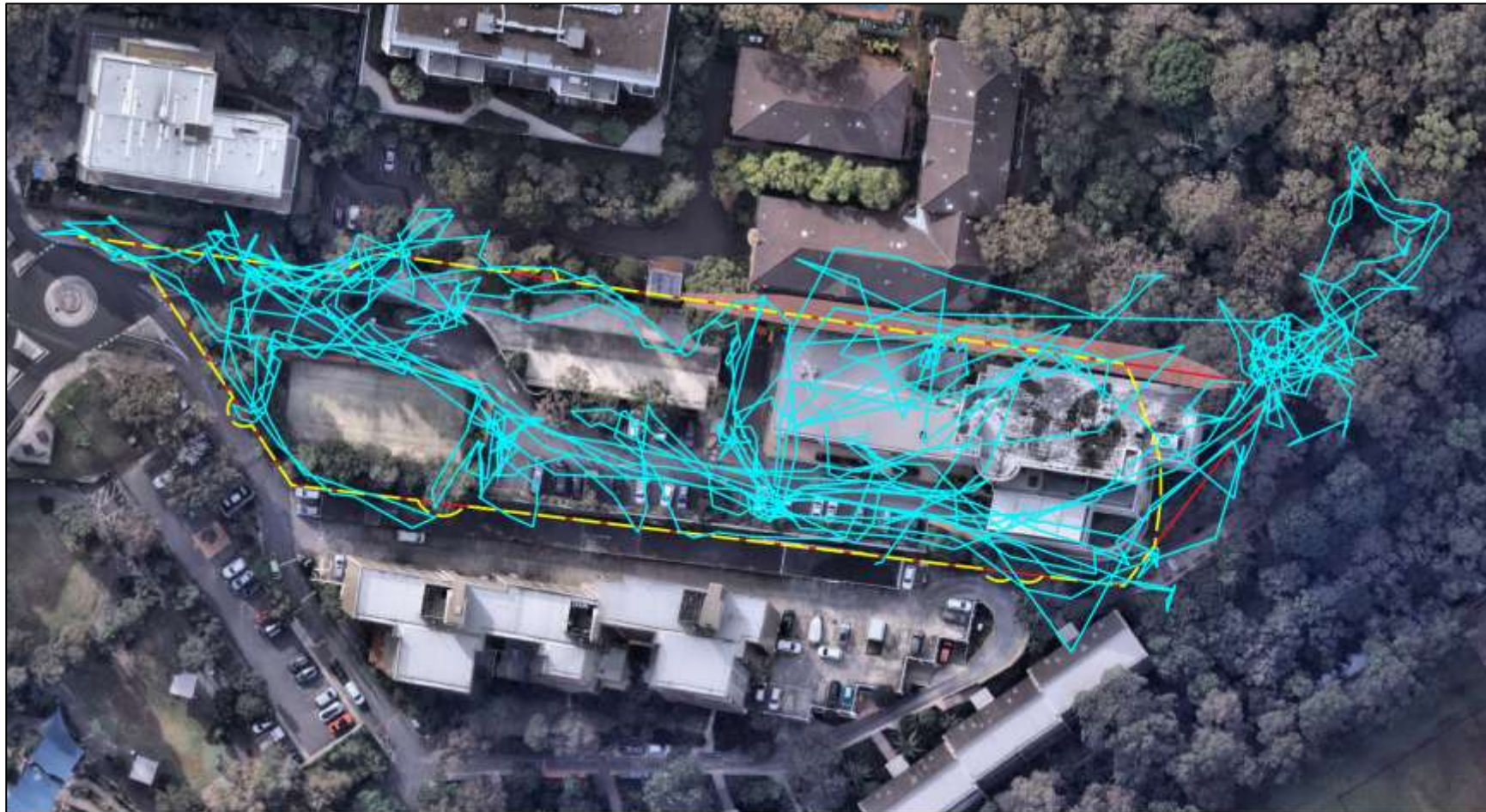
No SAIL species were confirmed to be present within the Subject Land.

### 5.4.2 Assumed Present

Three (3) species were assumed present within the Subject Land owing to the presence of suitable habitat and no suitable surveys having been conducted to rule out their presence at the time of writing this report. Where a species credit species is assumed to be present within the Subject Land, the assessor must assign a species polygon that encompasses the entire vegetation zone(s) within which the candidate species is predicted to occur.

The following species have been assumed present within the Subject Land and were assigned species polygons as per below:

- *Chalinolobus dwyeri* (Large-eared Pied Bat): The species polygon for this species has been assigned to all vegetation zones that occurs within potential breeding habitat (i.e. within 100m of mapped rocky areas with crevices; **Figure 15**). Areas of Exotic Dominated Grassland have been excluded.
- *Miniopterus australis* (Little Bent-winged Bat): Species polygon boundaries should have a 100 metre radius buffer around an accurate GPS point location centred on the cave/feature entrance (**Figure 15**).
- *Miniopterus orianae oceanensis* (Large Bent-winged Bat): Species polygon boundaries should have a 100 metre radius buffer around an accurate GPS point location centred on the cave/feature entrance (**Figure 15**).



**Targeted Survey Effort for Threatened Species and their Habitats**

-  Subject Land
-  Subject Property
-  Targeted Survey Effort
-  Rock Cliff Face



**NARLA**  
environmental

Date: 11/12/2025  
 Coordinate System: GDA94 MGA Zone 56  
 Image Source: Nearmap Australia Pty Ltd (July 2024)



Figure 14. Targeted survey effort for species credit species and their habitats within the Subject Land.



Figure 15. Cave Bats Species Polygon.

## 6. Prescribed Impacts

Certain projects may have impacts on biodiversity values in addition to, or instead of, impacts from clearing vegetation and/or loss of habitat. For many of these impacts, the biodiversity values may be difficult to quantify, replace or offset, making avoiding and minimising impacts critical. Prescribed biodiversity impacts require an assessment of the impacts of the development on the habitat of threatened species or ecological communities. This is discussed in **Table 16**.

**Table 16. Prescribed and uncertain impacts associated with the proposed development.**

Will there be impacts on any of the following?	Yes/No	If Yes, Address all of the assessment questions from section 6 of the BAM
<p>Habitat of threatened entities including:</p> <ul style="list-style-type: none"> <li>▪ karst, caves, crevices, cliffs, rocks and other geological features of significance, or</li> <li>▪ human-made structures, or</li> <li>▪ non-native vegetation</li> </ul>	<p>Yes</p>	<p>The Subject Land contains a large rock cliff face along its northern border. This feature is not proposed to be impacted however by the proposed works, and will continue to provide the same quality of habitat it currently does both during works and once they are complete.</p> <p>The Subject Land contains several buildings/structures that will be demolished as part of the development. The following threatened microbat species may utilise some of these human-made structures for roosting and breeding:</p> <ul style="list-style-type: none"> <li>▪ <i>Falsistrellus tasmaniensis</i> (Eastern False Pipistrelle);</li> <li>▪ <i>Micronomus norfolkensis</i> (Eastern Coastal Free-tailed Bat);</li> <li>▪ <i>Saccolaimus flaviventris</i> (Yellow-bellied Sheath-tail-bat); and</li> <li>▪ <i>Scoteanax rueppellii</i> (Greater Broad-nosed Bat).</li> </ul> <p>Two (2) other species may use such structures for roosting purposes, but not breeding purposes:</p> <ul style="list-style-type: none"> <li>▪ <i>Miniopterus australis</i> (Little Bent-winged Bat); and</li> <li>▪ <i>Miniopterus orianae oceanensis</i> (Large bent-winged Bat).</li> </ul> <p>A survey was undertaken for threatened microbats (<b>Section 5.3.1.1; Appendix D</b>) and no microbats, or evidence of microbats, were observed. However, as a precaution this prescribed impact is assessed further in <b>Section 8.2</b>.</p>

Will there be impacts on any of the following?	Yes/No	If Yes, Address all of the assessment questions from section 6 of the BAM
		Non-native vegetation within the Subject Land is not expected to provide habitat for threatened species, considering its occurrence in a highly altered and urbanised landscape.
On areas connecting threatened species habitat, such as movement corridors	No	It is unlikely the proposed development will interrupt connectivity for any threatened species, owing to the areas of habitat connectivity that will continue to exist in vegetated areas immediately adjacent the Subject Land as well the proposed landscape plan which will ensure areas of habitat continue to exist across the Subject Property.
That affect water quality, water bodies and hydrological processes that sustain threatened entities (including from subsidence or upsidence from underground mining)	No	It is not expected that the removal of vegetation within the Subject Land will impact upon any hydrological processes that sustain threatened entities.
On threatened and protected animals from turbine strikes from a wind farm	No	No wind farms are associated with the proposed development.
On threatened species or fauna that are part of a TEC from vehicle strikes.	No	A slight increase in vehicular activity is expected as a result of the proposed development. However, due to the current use of the Subject Land, the highly urbanised nature of the area and the low speeds that would be required for access, this is considered unlikely to impact any potentially occurring threatened species.

## 7. Avoid, Minimisation and Mitigation of Impacts

### 7.1 Impact Mitigation and Minimisation Measures

This section details the measures to be implemented before, during and post construction to avoid and minimise the impacts of the project (Table 17).

**Table 17. Table of measures to be implemented before, during and after construction to avoid and minimise the impacts of the project.**

Action	Outcome	Timing	Responsibility
<b>Project Location and Design (avoidance and minimisation)</b>	Owing to the nature of the development and bushfire prone nature of the property, complete avoidance of impacts to the vegetation present could not be avoided. Efforts to minimise impacts as much as possible were carried out however, with the project deliberately avoiding areas of intact bushland located in the easternmost extent of the Subject Property. This included a reduction in the originally recommended APZ area which was for the whole property to be maintained as an IPA. The vegetation to be impacted however, is highly altered and disturbed, consisting of areas of native canopy trees within a landscaped setting as well as areas of commonly planted native landscape species, and exotic vegetation. The implementation of the associated landscape plan (Land and Form Studios 2025c) will see a high number of native species planted across the property ensuring that areas of connectivity and ecological features remain across the site post works.	Pre-construction phase	Proponent
<b>Preparation of a Construction Environmental Management Plan (CEMP)</b>	A CEMP may be required for the construction phase of the project and will be prepared prior to issue of the Construction Certificate. The CEMP would include, as a minimum, industry-standard measures for the management of soil, surface water, weeds and pollutants, as well as site-specific measures, including the procedures outlined below. The proposed mitigation measures would include environmental safeguards for protection of neighbouring properties and nearby waterways in accordance with relevant policy documentation and Government guidelines. In order to address the potential impacts of the proposal on biodiversity, the mitigation and management measures outlined within this table would be implemented as part of the CEMP for the site.	Pre-construction phase	Proponent Construction Contractor
<b>Tree Protections</b>	Australian Standard 4970 (2025) Protection of Trees on Development Sites (AS-4970) outlines that a Tree Protection Zone (TPZ) is the principal means of protecting trees on construction sites. It is an area	Pre-construction phase	Proponent Arborist

Action	Outcome	Timing	Responsibility
	<p>isolated from construction disturbance so that the tree remains viable. Ideally, works should be avoided within the TPZ.</p> <p>A Minor Encroachment is less than 10% of the TPZ and is outside the SRZ. A Minor Encroachment is considered acceptable by AS-4970 when it is compensated for elsewhere and contiguous within the TPZ.</p> <p>A Major Encroachment is greater than 10% of the TPZ or inside the SRZ. Major Encroachments generally require root investigations undertaken by non-destructive methods or the use of tree sensitive construction methods.</p> <p>Tree protection measures (exclusion fencing) are to be placed around all trees proposed to be retained within the vicinity of the proposed works under the guidance of a qualified arborist, to avoid any accidental damage to retained vegetation.</p>		
<b>Assigning a Project Ecologist for vegetation clearing</b>	<p>Prior to construction, the applicant should commission the services of a qualified and experienced Ecologist Consultant with a minimum tertiary degree in Science, Conservation, Biology, Ecology, Natural Resource Management, Environmental Science or Environmental Management. The Ecologist must be licensed with a current Department of Primary Industries Animal Research Authority permit and New South Wales Scientific License issued under the BC Act. The Ecologist will be commissioned to:</p> <ul style="list-style-type: none"> <li>▪ Undertake an extensive pre-clearing survey, delineating habitat-bearing trees and shrubs to be retained/removed, as well as inspect buildings prior to demolition for the presence of microbats; and</li> <li>▪ Supervise the clearance of trees and shrubs (native and exotic) in order to capture, treat and/or relocate any displaced fauna.</li> </ul>	Prior to and during vegetation clearance works	Proponent Project Ecologist
<b>Erosion and Sedimentation</b>	<p>Appropriate erosion and sediment control must be erected and maintained at all times during construction in order to avoid the potential of incurring indirect impacts on biodiversity values. As a minimum, such measures should comply with the relevant industry guidelines such as 'the Blue Book' (Landcom 2004).</p>	Construction phase	Proponent Construction Contractor

Action	Outcome	Timing	Responsibility
<b>Erection of temporary fencing and bunting</b>	Temporary fencing should be erected around retained native vegetation that may incur indirect impacts on biodiversity values due to the construction works.	Construction phase	Proponent Construction Contractor
<b>Storage and Stockpiling (Soil and Materials)</b>	Allocate all storage, stockpile and laydown sites away from any native vegetation that is planned to be retained. Avoid importing any soil from outside the site as this can introduce weeds and pathogens to the site in order to avoid the potential of incurring indirect impacts on biodiversity values.	Construction phase	Construction Contractors
<b>Stormwater</b>	Potential impacts relating to stormwater and runoff will be managed during construction and operation phases. The CEMP will guide stormwater management during the construction phase of development.	Post-construction phase	Proponent Construction Contractors/ Architect

## 8. Assessment of Impacts

---

### 8.1 Direct Impacts

#### 8.1.1 Full Clearing

The complete clearing of the following vegetation communities have been assessed as part of the proposed development:

- 0.07ha of Vegetation Zone 1: PCT 3176: Low Condition (Historically Altered);
- 0.01ha of Exotic Dominated Vegetation; and
- 0.06ha of Planted Native Vegetation.

#### 8.1.2 Partial Clearing – IPA Management

The partial clearing of the following vegetation communities as a result of ongoing IPA management have been assessed as part of the proposed development:

- 0.06ha of Vegetation Zone 1: PCT 3176: Low Condition (Historically Altered); and
- 0.04ha of Exotic Dominated Vegetation.

### 8.2 Prescribed Impacts

As there is potential for the Subject Land to contain habitat for several threatened microbat species in the form of human-made structures (**Figure 16**), an assessment of this prescribed impact must be undertaken in accordance with Section 8.3 of the BAM (DPIE 2020a). Although a survey was undertaken for threatened microbats (**Section 5.3.1.1; Appendix D**) and no microbats were observed, this prescribed impact is still assessed in **Table 18**.

DRAFT REPORT - NOT FOR SUBMISSION TO CONSENT AUTHORITY

Table 18. Prescribed and uncertain impacts associated with the proposed development.

Prescribed Impact	Nature, extent and duration	Threatened Species and their habitat likely to be impacted	Consequences of the impacts on threatened entities
<p>Habitat of threatened entities (human-made structures)</p>	<p>There is the low potential that threatened microbat species use some of the buildings within the Subject Land for roosting. A survey was completed of all of the buildings considered to have potential habitat for roosting, and no microbats were observed, this does not exclude these species using such spaces in the future.</p> <p>If such species utilise this potential habitat in the future, the demolition of this building is expected to temporarily displace individuals and therefore only have a low impact of short duration. These species are highly mobile and there is ample roosting/breeding habitat nearby.</p> <p>To manage these impacts, a pre-clearing survey for microbats of the building is recommended prior to demolition. If any individuals are found to be present, they are to be captured and relocated (following demolition works) into surrounding bushland after sunset.</p>	<ul style="list-style-type: none"> <li>▪ <i>Falsistrellus tasmaniensis</i> (Eastern False Pipistrelle)</li> <li>▪ <i>Micronomus norfolkensis</i> (Eastern Coastal Free-tailed Bat)</li> <li>▪ <i>Saccolaimus flaviventris</i> (Yellow-bellied Sheath-tail-bat)</li> <li>▪ <i>Scoteanax rueppellii</i> (Greater Broad-nosed Bat).</li> <li>▪ <i>Miniopterus australis</i> (Little Bent-winged Bat)</li> <li>▪ <i>Miniopterus orianae oceanensis</i> (Large bent-winged Bat)</li> </ul>	<p>While the demolition of potential roost sites may have a temporary displacement-impact to local populations of threatened microbats, these species are highly mobile and as such, any impacts would be considered minor and temporary.</p> <p>Habitat connectivity will continue to exist in the locality through vegetated corridors immediately adjacent to the Subject Land, which would provide higher-quality roosting sites for these species.</p>



Figure 16. Prescribed Impacts

### 8.3 Indirect Impacts

Indirect impacts occur when the proposal or activities relating to the construction or operation of the proposal affect native vegetation, threatened ecological communities and threatened species habitat beyond the Subject Land. Impacts may also result from changes to land-use patterns, such as an increase in vehicular access and human activity on native vegetation, threatened ecological communities and threatened species habitat. The indirect impacts of this proposed development are outlined in **Table 19**.

**Table 19. Indirect impacts associated with the proposed development.**

Indirect Impact	Nature, extent and duration	TEC's/PCTs and/or Threatened Species and their habitat likely to be impacted	Consequences of the impacts for the bioregional persistence of the threatened species, threatened ecological communities and their habitats.
(a) inadvertent impacts on adjacent habitat or vegetation	<p>Vegetation and habitat directly adjacent to the Subject Land has the potential to experience ongoing indirect impacts as a result of the proposed development; although given the historical use of the Subject Land this is expected to be minimal. Impacts in close proximity to the neighbouring PCT (to the east of the Subject Land) have been reduced as much as possible to provide a significant buffer area between the works and bushland.</p> <p>The disturbance caused during construction may increase weed infestations within adjacent vegetation, which in turn may decrease its habitat value, however, as there is a buffer area between the works and neighbouring vegetation this potential impact is not considered to be significant.</p>	<p>PCT 3176, occurs both within and adjacent to the Subject Land. There is the low potential that threatened species occur in areas adjacent the Subject Land for temporary foraging that may be impacted by a decrease in habitat condition.</p>	<p>While changes to vegetation condition may have a minimal and temporarily localised impact to the PCT, threatened species and their habitats, this is not expected to impact on their bioregional persistence. .</p>

Indirect Impact	Nature, extent and duration	TEC's/PCTs and/or Threatened Species and their habitat likely to be impacted	Consequences of the impacts for the bioregional persistence of the threatened species, threatened ecological communities and their habitats.
(b) reduced viability of adjacent habitat due to edge effects	<p>The proposed development and ongoing utilisation may lead to an increase in weed infiltration into adjacent habitat due to enhanced edge effects. However, impacts in close proximity to the neighbouring PCT (to the east of the Subject Land) have been reduced as much as possible to provide a significant buffer area between the works and bushland. Therefore any potential impacts would be expected to be restricted to a couple of metres into adjacent vegetation at most.</p>	<p>PCT 3176, occurs both within and adjacent to the Subject Land. There is the low potential that threatened species occur in areas adjacent the Subject Land for temporary foraging that may be impacted by edge effects leading to a reduced viability in habitat.</p>	<p>While edge effects may have a minimal and temporarily localised impact to the PCT, threatened species and their habitats, this is not expected to impact on their bioregional persistence.</p>
(c) reduced viability of adjacent habitat due to noise, dust or light spill	<p>An increase in noise is to be expected during construction and ongoing human-use. As the Subject Land is located in a highly urbanised area, and is already currently regularly utilised, this is unlikely to impact on any species roosting adjacent to the site during the day as such noises are common within the locality. It is not expected that construction would occur throughout the night, and as such would not impact on nocturnal species that may utilise adjacent habitat, or diurnal species that roost in adjacent habitat.</p> <p>The construction may increase dust in adjacent habitat. Dust can impact on a plant's ability to</p>	<p>PCT 3176, occurs both within and adjacent to the Subject Land. There is the low potential that threatened species occur in areas adjacent the Subject Land for temporary foraging that may be an increase in noise, dust and light spill into adjacent habitats.</p>	<p>While the development may have a minimal and temporarily localised impact to the PCT, threatened species and their habitats, this is not expected to impact on their bioregional persistence.</p>

Indirect Impact	Nature, extent and duration	TEC's/PCTs and/or Threatened Species and their habitat likely to be impacted	Consequences of the impacts for the bioregional persistence of the threatened species, threatened ecological communities and their habitats.
	<p>photosynthesise and may increase plant mortality in the adjacent vegetation. It is however not expected that this would have such an impact to decrease the viability of adjacent habitat.</p> <p>It is expected that the utilisation of the area following construction may result in a decrease in the viability of the adjacent habitat due to increases in noise and light associated with the dwelling. However, this is again considered to be minimal owing to the highly urbanised nature of the locality and the Subject Land already being regularly utilised.</p>		
(d) transport of weeds and pathogens from the site to adjacent vegetation	<p>As previously discussed, the proposed construction and utilisation of the Subject Land may lead to an increase in weed infiltration into adjacent habitat due to enhanced edge effects. However, impacts in close proximity to the neighbouring PCT (to the east of the Subject Land) have been reduced as much as possible to provide a significant buffer area between the works and bushland. Therefore any potential impacts would be expected to be restricted to a</p>	<p>PCT 3176, occurs both within and adjacent to the Subject Land. There is the low potential that threatened species occur in areas adjacent the Subject Land for temporary foraging that may be impacted by weed and pathogen transportation leading to a reduced viability in habitat.</p>	<p>While weeds and pathogens may have a minimal and temporarily localised impact to the PCT, threatened species and their habitats, this is not expected to impact on their bioregional persistence.</p>

Indirect Impact	Nature, extent and duration	TEC's/PCTs and/or Threatened Species and their habitat likely to be impacted	Consequences of the impacts for the bioregional persistence of the threatened species, threatened ecological communities and their habitats.
	couple of metres into adjacent vegetation at most.		
(e) increased risk of starvation, exposure and loss of shade or shelter	It is highly unlikely that any threatened fauna would be exposed to increased risks from starvation, exposure, and loss of shade and shelter as a result of the proposed development. No habitat is to be removed beyond the Subject Land and owing to the highly altered and disturbed nature of the Subject Property and urbanised nature of the locality it is considered unlikely any threatened species would be placed at risk of starvation or exposure should it decrease in quality as a result of the proposed development.	N/A	N/A
(f) loss of breeding habitats	An increase in noise is to be expected during and post-construction. As such, there is potential for disturbance to breeding habitats directly adjacent to the Subject Land. However, owing to the highly urbanised and already consistently utilised nature of the Subject Land and the broader locality, it is considered unlikely the proposed development would result in any loss of breeding habitat should they occur in adjacent areas.	N/A	N/A

Indirect Impact	Nature, extent and duration	TEC's/PCTs and/or Threatened Species and their habitat likely to be impacted	Consequences of the impacts for the bioregional persistence of the threatened species, threatened ecological communities and their habitats.
(g) trampling of threatened flora species	No threatened flora species were identified within or surrounding the Subject Land. Furthermore, the lack of proximal threatened flora records within or immediately adjacent to the Subject Land, indicates the presence of any threatened flora species neighbouring the Subject Land to be highly unlikely. Therefore, it is not expected that trampling of threatened species will be associated with this project.	N/A	N/A
(h) inhibition of nitrogen fixation and increased soil salinity	It is unlikely that the inhibition of nitrogen fixation will affect vegetation adjacent to the Subject Land. Clearing will be limited to the Subject Land and as such is not expected to affect vegetation directly adjacent to the Subject Land.	N/A	N/A
(i) fertiliser drift	This issue is not likely to affect the vegetation within or surrounding the Subject Land.	N/A	N/A
(j) rubbish dumping	There is the possibility that rubbish dumping (including littering) increases during and post construction. The dumping/littering of food resources may provide a food source for fauna. However, this may also encourage invasive species into such habitats. This impact can be mitigated by the appropriate disposal of rubbish.	There is the very low potential that threatened fauna species use habitat adjacent to the Subject Land. Such species may be impacted by the dumping of rubbish, particularly food resources. This may result in both positive (food source)	This impact is expected to be localised and will not have an overall impact on the bioregional persistence of threatened species.

Indirect Impact	Nature, extent and duration	TEC's/PCTs and/or Threatened Species and their habitat likely to be impacted	Consequences of the impacts for the bioregional persistence of the threatened species, threatened ecological communities and their habitats.
		and negative impacts (increase in predators) to such species.	
(k) wood collection	No wood collection is anticipated to occur as a result of the proposed development.	N/A	N/A
(l) bush rock removal and disturbance	No bush rock was observed adjacent to the Subject Land. Only rock that was presence was a cliff face along the Subject Lands northern border. This is not proposed to be disturbed or removed as a result of the proposed works. Indirect impacts to this habitat are considered to be consistent with what is already experience on the property due to its current usage.	N/A	N/A
(m) increase in predatory species populations	Predatory species, such as cats, already likely inhabit areas within and surrounding the Subject Land. There is the possibility that other indirect impacts, such as an increase in rubbish dumping, may encourage predatory species into the area.	There is the very low potential that threatened fauna species use habitat adjacent to the Subject Land. Such species may be impacted by an increase in predatory species populations.	This impact is expected to be localised and will not have an overall impact on the bioregional persistence of threatened species.
(n) increase in pest animal populations	There is potential that pest animal populations already inhabit areas within and surrounding the Subject Land. There is the possibility that other indirect impacts, such as an increase in rubbish dumping, may encourage an increase in pest animal populations.	There is the very low potential that threatened fauna species use habitat adjacent to the Subject Land. Such species may be impacted by an increase in pest animal populations.	This impact is expected to be localised and will not have an overall impact on the bioregional persistence of threatened species.

Indirect Impact	Nature, extent and duration	TEC's/PCTs and/or Threatened Species and their habitat likely to be impacted	Consequences of the impacts for the bioregional persistence of the threatened species, threatened ecological communities and their habitats.
(o) increased risk of fire	The Subject Land is mapped as occurring within bushfire prone land. It is not expected that the proposed works will significantly alter the bushfire risk of the area surrounding the Subject Land especially considered the bushfire mitigation measures proposed as part of the works.	N/A	N/A
(p) disturbance to specialist breeding and foraging habitat, e.g., beach nesting for shorebirds.	A large rock face is present along the northern border of the Subject Land that may provide potential habitat for cave dwelling microbats. It is not anticipated that the proposed works will increase the impacts currently placed on this habitat owing to its already close proximity to existing occupied buildings that are regularly utilised.	Large-eared Pied Bat Little Bent-winged Bat Large Bent-winged Bat	Based on the already current usage of the Subject Land and the proximity to areas of potential habitat, the proposed works are expected to result in a negligible increase in impacts on the bioregional persistence of these threatened species.

## 9. Thresholds for Assessing and Offsetting

---

### 9.1 Impacts on Native Vegetation

The following native vegetation communities within the Subject Land is proposed to be impacted as a result of the proposed development:

- 0.13ha of Vegetation Zone 1: PCT 3176 - Low Condition (Historically Altered).

The purchase and retirement of Biodiversity Offset Ecosystem Credits will be required for Vegetation Zone 1 within the Subject Land (**Figure 17**). No Ecosystem Credits are required for the impacts to areas mapped as Exotic Dominated Vegetation or Planted Native Vegetation, owing to their exotic and not naturally occurring nature.

### 9.2 Impacts on Threatened Species

The following threatened species have been assumed present within the Subject Land and will therefore require the purchase and retirement of Biodiversity Offset Credits:

- *Chalinolobus dwyeri* (Large-eared Pied Bat);
- *Miniopterus australis* (Little Bent-winged Bat); and
- *Miniopterus orianae oceanensis* (Large Bent-winged Bat).

### 9.3 Critical Habitat or Significant Impacts on Threatened Entities

The proposed works are located within a highly urbanised and altered landscape. Impacts to vegetation are restricted to historically altered vegetation within an urbanised site. No areas of critical habitat are proposed to be impacted by the proposed works, as the only potential breeding habitat located in proximity to the Subject Land, is the large rock face, that will continue to provide the same quality of habitat post works that it currently does. Therefore no significant impact to any threatened entities are considered likely as a result of the proposed works.

### 9.4 Serious and Irreversible Impacts (SAII's)

An impact is to be serious and irreversible if it is likely to contribute significantly to the risk of a threatened species (including endangered populations) or an ecological community becoming extinct based on the following 4 principles set out in clause 6.7 of the Biodiversity Conservation Regulation 2017 (NSW):

1. The impact will cause a further decline of a species or ecological community that is currently observed, estimated, inferred, or reasonably suspected to be in a rapid rate of decline.
2. The impact will further reduce the population size of the species or ecological community that is currently observed, estimated, inferred, or reasonably suspected to have a very small population size.
3. The impact is made on the habitat of the species or ecological community that is currently observed, estimated, inferred, or reasonably suspected to have a very limited geographic distribution.
4. The impacted species or ecological community is unlikely to respond to measures to improve its habitat and vegetation integrity, and therefore its members are not replaceable.

Three (3) threatened species assumed present within the Subject Land has been identified as an entity at risk of an SAII in the Threatened Biodiversity Data Collection (NDCCEEW 2025e):

- *Chalinolobus dwyeri* (Large-eared Pied Bat; Principle 4);
- *Miniopterus australis* (Little Bent-winged Bat; Principle 4); and
- *Miniopterus orianae oceanensis* (Large Bent-winged Bat; Principle 4).

#### 9.4.1 Cave Dwelling Microbats

The SAll threshold for *Chalinolobus dwyeri* (Large-eared Pied Bat), *Miniopterus australis* (Little Bent-winged Bat) and *Miniopterus orianae oceanensis* (Large Bent-winged Bat) is potential breeding habitat and presence of breeding individuals. As potential breeding habitat (rock area with crevices) was identified within and adjacent to the Subject Land, these species was therefore required to be assumed present as no suitable survey to rule out their presence had been conducted at the time of this assessment.

Potential breeding habitat for these species are PCTs associated with the species that contain rocky areas containing caves, overhangs, crevices, cliffs or escarpments (NDCCEEW 2025c). Due to the sensitivity of these species to any impact, a determination of whether or not the proposed impacts are serious and irreversible is to be undertaken in accordance with Section 9.1 of the BAM (DPIE 2020a) is required. As these species all adhere to the same principle (Principle 4) and have the same habitat requirements in relation to this project, they have been assessed within the same assessment to avoid repetition, this is outlined in **Table 20**.

**Table 20. Additional impact assessment provisions for Cave Dwelling Microbats that are associated with a serious and irreversible impact.**

<b>Serious and Irreversible Impact (SAll)</b> <b>Impact assessment provisions for threatened species or populations:</b> <i>Chalinolobus dwyeri</i> (Large-eared Pied Bat; Principle 4) <sup>1</sup> ; <i>Miniopterus australis</i> (Little Bent-winged Bat; Principle 4) <sup>2</sup> ; and <i>Miniopterus orianae oceanensis</i> (Large Bent-winged Bat; Principle 4) <sup>2</sup>	
<b>BC Act Status: 1 = Endangered; 2 = Vulnerable</b>	
<b>The action and measures taken to avoid the direct and indirect impact on the potential entity for a SAll</b>	The proposed development will require the removal/management of 0.13ha of native vegetation within 100m of a rock cliff face ( <b>Figure 14</b> ) that may provide breeding habitat for these species. These SAll species have not be surveyed for and as such have been assumed present. The proposed development will not result in any direct impacts to this habitat and as such potential breeding habitat (i.e overhangs and crevices) will continue to remain as it currently does. However, if this potential habitat is used by these species for breeding, there is potential that breeding individuals could be found foraging within the Subject Land. A number of measures have been taken to avoid direct and indirect impacts on these species, such as the incorporation of a largely native landscape plan (Land and Form Studios 2025c) to ensure potential foraging habitat continues to exist within the Subject Property as it currently does, post works.
<b>Evidence that the species is unlikely to respond to management (Principle 4)</b>	No data is available
<b>Number of individuals (mature and immature) present in the subpopulation on the subject land</b>	These species have not been surveyed for and are only assumed present. No individuals have been historically recorded within the Subject Land (NDCCEEW 2025d); however, the following records for these species exist within 10km radius of the Subject Land: <ul style="list-style-type: none"> <li>• Large-eared Pied Bat: one (1) record within 10km centred on the Subject Land, approximately 5km away, recorded in 2021;</li> <li>• Little Bent-winged Bat: 48 records within 10km centred on the Subject Land, approximately 600m away, recorded in 2020; and</li> </ul>

<b>Serious and Irreversible Impact (SAIL)</b> <b>Impact assessment provisions for threatened species or populations:</b> <i>Chalinolobus dwyeri</i> (Large-eared Pied Bat; Principle 4) <sup>1</sup> ; <i>Miniopterus australis</i> (Little Bent-winged Bat; Principle 4) <sup>2</sup> ; and <i>Miniopterus orianae oceanensis</i> (Large Bent-winged Bat; Principle 4) <sup>2</sup>	
<b>BC Act Status: 1 = Endangered; 2 = Vulnerable</b>	
	<ul style="list-style-type: none"> <li>Large Bent-winged Bat: 132 records within 10km centred on the Subject Land, approximately 350m away, recorded in 2008</li> </ul>
<b>Number of individuals (mature and immature) present as a percentage of total NSW population (%)</b>	<p>These species have not been surveyed for and are only assumed present. No individuals have been historically recorded within the Subject Land (NDCCEEW 2025d); however, the following records for these species exist within 10km radius of the Subject Land:</p> <ul style="list-style-type: none"> <li>Large-eared Pied Bat: one (1) record within 10km centred on the Subject Land, approximately 5km away, recorded in 2021;</li> <li>Little Bent-winged Bat: 48 records within 10km centred on the Subject Land, approximately 600m away, recorded in 2020; and</li> <li>Large Bent-winged Bat: 132 records within 10km centred on the Subject Land, approximately 350m away, recorded in 2008</li> </ul>
<b>Number of individuals (mature and immature) to be impacted by the proposal</b>	No individuals are expected to be impacted by the proposal.
<b>Individuals (mature and immature) to be impacted by the proposal as a percentage of total NSW population (%)</b>	No individuals are expected to be impacted by the proposal.
<b>Area of habitat to be impacted (ha) (for species measured by area only)</b>	No breeding habitat (i.e. rocky cliff face) is to be directly impacted as a result of the proposed development, however 0.13ha of vegetation near potential breeding habitat will require clearing and management. This vegetation may be used by foraging individuals if the potential habitat nearby is utilised as a breeding site. It is not expected that other populations of these species will be impacted by the proposed development
<b>Area of the species' geographic range to be impacted by the proposal (ha)</b>	No breeding habitat (i.e. rocky cliff face) is to be directly impacted as a result of the proposed development, however 0.13ha of vegetation near potential breeding habitat will require clearing and management. This vegetation may be used by foraging individuals if the potential habitat nearby is utilised as a breeding site. It is not expected that other populations of these species will be impacted by the proposed development
<b>Area of the species' geographic range to be impacted as a percentage of the total area or extent of occupancy (%)</b>	Large-eared Pied Bats have a patchy distribution throughout its range, which extends from Rockhampton in Queensland south to Bungonia in the NSW Southern Highlands (NDCCEEW 2025i). Little Bent-winged Bats occur all along the east coast and ranges of Australia from Cape York in Queensland to Wollongong in NSW (NDCCEEW 2025g). Large Bent-winged occur along the east and north-west coast of Australia (NDCCEEW 2025h). Approximately 0.13ha of vegetation will be impacted as part of the proposed development, however, the proposed works are not expected to impact on potential rocky habitat within and adjacent to the Subject Land. This reduction will result in a negligible impact to the area of occupancy for these species.

<b>Serious and Irreversible Impact (SAII)</b> Impact assessment provisions for threatened species or populations: <i>Chalinolobus dwyeri</i> (Large-eared Pied Bat; Principle 4) <sup>1</sup> ; <i>Miniopterus australis</i> (Little Bent-winged Bat; Principle 4) <sup>2</sup> ; and <i>Miniopterus orianae oceanensis</i> (Large Bent-winged Bat; Principle 4) <sup>2</sup>	
<b>BC Act Status: 1 = Endangered; 2 = Vulnerable</b>	
<b>Individuals impacted</b>	No individuals are expected to be impacted by the proposal. Approximately 0.13ha of vegetation is proposed to be impacted that is within 100m of potential rocky areas which are within and adjacent to the Subject Land. Surveys have not been undertaken to ascertain whether breeding individuals are located within this habitat.
<b>Viability of a fragmented population</b>	No fragmentation of a population will occur as a result of the proposed development. These species are highly mobile and habitat connectivity will continue to exist as it currently does within the broader Subject Property and locality.



Figure 17. Impacts on native vegetation and offset requirements.

## 10. Biodiversity Offset Credit Requirements

The preferred approach to offset the residual impacts of the proposal is to purchase and retire the appropriate species credits from registered Biodiversity Stewardship Sites that comply with the trading rules of the NSW BOS in accordance with the 'like for like' report generated by the BAM calculator. If such credits are unavailable, credits would be sourced in accordance with the 'variation report' generated by the BAMC.

A payment to the Biodiversity Conservation Trust (BCT) would be considered as a contingency option if a suitable number and type of biodiversity credits cannot be secured. A quote will be required from the BCT to determine the costings of any credits to be offset through a payment to the BCT.

### 10.1 Offset Requirement for Ecosystem Credits

Two (2) ecosystem credit required to offset the biodiversity impacts of the proposed development (Table 21).

Table 21. Ecosystem credits required to offset the proposed development.

PCT	Vegetation Zone	BC Act Status	EPBC Act Status	Total Area (ha)	Ecosystem Credits Required
PCT 3176: Sydney Enriched Sandstone Moist Forest	Zone 1: Low Condition	NA	NA	0.13	2
<b>Total Ecosystem Credits</b>					<b>2</b>

### 10.2 Offset Requirement for Species Credits

Three (3) species credits species will require offsetting through the retiring of biodiversity offset species credits under the BOS as a result of the proposed development owing to these species being assumed present (Table 22).

Table 22. Species credits required to be offset for the proposed development.

Species	BC Act Status	Vegetation Zone	Total Area (ha)	Ecosystem Credits Required
<i>Chalinolobus dwyeri</i> (Large-eared Pied Bat)	Endangered	Zone 1: Low Condition (Historically Altered)	0.13ha	4
<i>Miniopterus australis</i> (Little Bent-winged Bat)	Vulnerable	Zone 1: Low Condition (Historically Altered)	0.13ha	4
<i>Miniopterus orianae oceanensis</i> (Large Bent-winged Bat)	Vulnerable	Zone 1: Low Condition (Historically Altered)	0.13ha	4
<b>Total Species Credits</b>				<b>12</b>

# 11. Other Relevant Legislation and Planning Policies

---

## 11.1 State Environmental Planning Policy (Biodiversity and Conservation) 2021

### 11.1.1 Chapter 4: Koala Habitat Protection 2021

This Policy aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline. This chapter of the SEPP applies to LGAs that are listed in Schedule 2 'Local government areas' of the SEPP and that have an area of at least 1ha. As the Lane Cove LGA is not included in Schedule 2 of the SEPP, the development controls of this Chapter do not apply to the proposed development.

### 11.1.2 Part 6.3: Foreshores and Waterways Area:

- (1) In deciding whether to grant development consent to development in the Foreshores and Waterways Area, the consent authority must consider the following—
  - (a) whether the development is consistent with the following principles—
    - (i) Sydney Harbour is a public resource, owned by the public, to be protected for the public good,
    - (ii) the public good has precedence over the private good,
    - (iii) the protection of the natural assets of Sydney Harbour has precedence over all other interests,
  - (b) whether the development will promote the equitable use of the Foreshores and Waterways Area, including use by passive recreation craft,
  - (c) whether the development will have an adverse impact on the Foreshores and Waterways Area, including on commercial and recreational uses of the Foreshores and Waterways Area,
  - (d) whether the development promotes water-dependent land uses over other land uses,
  - (e) whether the development will minimise risk to the development from rising sea levels or changing flood patterns as a result of climate change,
  - (f) whether the development will protect or reinstate natural intertidal foreshore areas, natural landforms and native vegetation,
  - (g) whether the development protects or enhances terrestrial and aquatic species, populations and ecological communities, including by avoiding physical damage to or shading of aquatic vegetation,
  - (h) whether the development will protect, maintain or rehabilitate watercourses, wetlands, riparian lands, remnant vegetation and ecological connectivity.
- (2) Development consent must not be granted to development in the Foreshores and Waterways Area unless the consent authority is satisfied of the following—
  - (a) having regard to both current and future demand, the character and functions of a working harbour will be retained on foreshore sites,
  - (b) if the development site adjoins land used for industrial or commercial maritime purposes—the development will be compatible with the use of the adjoining land,
  - (c) if the development is for or in relation to industrial or commercial maritime purposes—public access that does not interfere with the purposes will be provided and maintained to and along the foreshore,

- (d) if the development site is on the foreshore—excessive traffic congestion will be minimised in the zoned waterway and along the foreshore,
- (e) the unique visual qualities of the Foreshores and Waterways Area and its islands, foreshores and tributaries will be enhanced, protected or maintained, including views and vistas to and from—
  - (i) the Foreshores and Waterways Area, and
  - (ii) public places, landmarks and heritage items.

The proposed works are in keeping with the surrounding landscape and will not adversely impact the foreshore environment. The Subject Property currently contains a utilised office block within an urban setting and the conversion of this site for an alternative use, is not expected to adversely alter the foreshore environment beyond what is largely already occurring with the property. The works will not impact surrounding land uses or general aesthetic of the area and will not significant impact the natural environment.

## 11.2 State Environmental Planning Policy (Resilience and Hazards) 2021 – Chapter 2: Coastal Management

Chapter 2 of the State Environmental Planning Policy (Resilience and Hazards) 2021 applies to land within the coastal zone. The coastal zone means the area of land comprised of the following coastal management areas:

- The coastal wetlands and littoral rainforests area;
- Proximity areas to Coastal Wetlands and Littoral Rainforests;
- The coastal vulnerability area;
- The coastal environment area; or
- The coastal use area.

The following coastal management areas intersect the Subject Land (**Figure 8**), therefore the relevant development provisions of the SEPP apply to the proposed development:

- Coastal Wetland Proximity Area;
- The coastal environment area; and
- The coastal use area.

### 11.2.1 Development on land in proximity to coastal wetlands or littoral rainforest

The Subject Land contains land mapped as ‘Coastal Wetlands Proximity Area’. As such, development consent must not be granted unless the consent authority is satisfied that the proposed development will not significantly impact on:

- The biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or
- The quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.

The proposed development satisfies the objectives, as it has been appropriately designed and sited to avoid impacts to the adjacent coastal wetland. The Subject Land contains a historically altered site, that has already been largely developed. The quantity and quality of the surface and ground water flows is not expected to be altered or changed in such a way when compared to what is already occurring that would negatively impact the adjacent wetlands.

Additionally, mitigation strategies that will be put in place to protect the ‘nearby ‘Coastal Wetland’ including appropriate sedimentation and erosion measures such as erection of effective sedimentation fences to protect the coastal wetland areas from potentially harmful sediment runoff and erosion.

### 11.2.2 Development on land within the coastal environment area

As the Subject Land is mapped within “coastal environment area” the following controls apply to the proposed development as per the SEPP.

Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the following:

- The integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment,
- Coastal environmental values and natural coastal processes,
- The water quality of the marine estate (within the meaning of the Marine Estate Management Act 2014), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1,
- Marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms,
- Existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,
- Aboriginal cultural heritage, practices and places,
- The use of the surf zone.

Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that—

- The development is designed, sited and will be managed to avoid an adverse impact referred to in subclause (1), or
- If that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or
- If that impact cannot be minimised—the development will be managed to mitigate that impact.

This section does not apply to land within the Foreshores and Waterways Area within the meaning of State Environmental Planning Policy (Biodiversity and Conservation) 2021, Chapter 6. As the Subject Land is located within the Foreshores and Waterways Area this section does not apply to the proposed works.

### 11.2.3 Development on land within the coastal use area

As the Subject Land is mapped within “coastal use area” the following controls apply to the proposed development as per the SEPP.

Development consent must not be granted to development on land that is within the coastal use area unless the consent authority:

- Has considered whether the proposed development is likely to cause an adverse impact on the following:
  - Existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,
  - Overshadowing, wind funnelling and the loss of views from public places to foreshores,
  - The visual amenity and scenic qualities of the coast, including coastal headlands,
  - Aboriginal cultural heritage, practices and places,
  - Cultural and built environment heritage, and
- Is satisfied that:
  - The development is designed, sited and will be managed to avoid an adverse impact referred to in paragraph (a). or
  - If that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or

- If that impact cannot be minimised—the development will be managed to mitigate that impact, and
- Has taken into account the surrounding coastal and built environment, and the bulk, scale and size of the proposed development.

This section does not apply to land within the Foreshores and Waterways Area within the meaning of State Environmental Planning Policy (Biodiversity and Conservation) 2021, Chapter 6. As the Subject Land is located within the Foreshores and Waterways Area this section does not apply to the proposed works.

## 12. Conclusion

---

The proposed works have been designed and sited to minimise impacts to native vegetation as much as possible. Whilst complete avoidance was not possible owing to the scale of the development in conjunction with the bushfire prone nature of the property, efforts have been taken to minimise ecological impacts such as adopting a reduced APZ area from what was originally recommended to avoid impacts to the higher quality vegetation in the east of the Subject Property. The proposed works have also utilised a largely native landscape plan to ensure that ecological features persist within the Subject Land as they currently do post works.

The proposed development is expected to impact one (1) Plant Community Types (PCT):

- PCT 3176: Sydney Enriched Sandstone Moist Forest

Two (2) ecosystem credit are required to be offset for the impacts to this PCT. This vegetation is not associated with any threatened ecological communities listed under either the Biodiversity Conservation Act (BC Act) or the Environment Protection and Biodiversity Act (EPBC Act).

Due to suitable habitat being present within the Subject Property and no targeted surveys having been conducted at the time of writing this report the following threatened species and species credits are required to be 'assumed present' and offset accordingly:

- Four (4) species credits for *Chalinolobus dwyeri* (Large-eared Pied Bat);
- Four (4) species credits for *Miniopterus australis* (Little Bent-winged Bat); and
- Four (4) species credits for *Miniopterus orianae oceanensis* (Large Bent-winged Bat);

Considering the retiring of credits proposed to offset impacts, if the mitigation measures proposed in this report are adhered to, then the proposed works are considered to have a minimal impact on locally biodiversity.

## 13. References

---

- Aboriginal Land Council (2025) Land Council Interactive Map <https://alc.org.au/land-council-map/>
- Australian Government Department of the Environment and Energy (2018) Interim Biogeographic Regionalisation for Australia (IBRA), Version 7 (Subregions)
- Australian Bureau of Meteorology (BOM) (2025) Sydney New South Wales. Daily Weather Observations <http://www.bom.gov.au/>
- Australian Bushfire Consulting Services (2025) Bush Fire Assessment Report - 300 Burns Bay Road Lane Cove
- Australian Standard 4970 (2025) Protection of Trees on Development Sites
- Biodiversity Conservation Act (2016) <https://legislation.nsw.gov.au/#/view/act/2016/63/full>
- Biodiversity Conservation Regulation (2017) <https://www.legislation.nsw.gov.au/#/view/regulation/2017/432>
- Chapman G.A., Murphy C.L., Tille P.J., Atkinson G. and Morse R.J., (Chapman et al.) (2009) Soil Landscapes of the Sydney 1:100,000 Sheet map, Ed. 4, Department of Environment, Climate Change and Water, Sydney.
- Creative Planning Solutions (2025) Arboricultural Impact Assessment - 300 Burns Bay Road Lane Cove
- Department of Environmental Conservation (DEC) (2004) Threatened Species Survey and Assessment: Guidelines for developments and activities (working draft), New South Wales Department of Environment and Conservation, Hurstville, NSW.
- Department of Planning, Industry and Environment (DPIE) (2019a) Guidance to assist a decision-maker to determine a serious and irreversible impact <https://www.environment.nsw.gov.au/-media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/guidance-decision-makers-determine-serious-irreversible-impact-190511.pdf>
- Department of Planning, Industry and Environment (DPIE) (2020a) Biodiversity Assessment Method
- Department of Planning, Industry and Environment (DPIE) (2020b) Surveying threatened plants and their habitats - NSW survey guide for the Biodiversity Assessment Method
- Department of Planning, Industry and Environment (DPIE) (2021) Species Credit threatened bats and their habitats NSW guide of the Biodiversity Assessment Method
- Department of Planning, Industry and Environment (DPIE) (2020c) NSW Survey Guide for Threatened Frogs: A guide for the survey of threatened frogs and their habitats for the Biodiversity Assessment Method.
- Department of Planning and Environment (DPE) (2022a) Guidance for the Biodiversity Development Assessment Report Template
- Department of Planning and Environment (DPE) (2022b) NSW State Vegetation Type Map
- Google Earth (2025) 300 Burns Bay Road Lane Cove
- Landcom (2004) Managing Urban Stormwater: Soils and Construction 'The Blue Book', Volume 1, Fourth Edition, New South Wales Government, ISBN 0-9752030-3-7
- Land and Form Studios (2025a) Tree Management Plan - 300 Burns Bay Road Lane Cove

Land and Form Studios (2025b) Ground Floor Plan- 300 Burns Bay Road Lane Cove

Land and Form Studios (2025c) Landscape Plan - 300 Burns Bay Road Lane Cove

Mitchell, P.B (2002) NSW Ecosystems Study: Background and Methodology (Unpublished).

Naylor, S.D (1995) Acid Sulfate Soil Risk Map Sheet, Department of Land and Water Conservation, Sydney.

Nearmap Australia Pty Ltd (2025) 300 Burns Bay Road Lane Cove

NSW Department of Climate Change, Energy, the Environment and Water (NDCCEEW) (2025a) Biodiversity Values Map and Threshold Tool

NSW Department of Climate Change, Energy, the Environment and Water (NDCCEEW) (2025b) NSW BioNet. The website of the Atlas of NSW Wildlife <http://www.bionet.nsw.gov.au/>

NSW Department of Climate Change, Energy, the Environment and Water (NDCCEEW) (2025c) NSW BioNet. Threatened Biodiversity Data Collection

NSW Department of Climate Change, Energy, the Environment and Water (NDCCEEW) (2025d) NSW BioNet. Vegetation Classification System

NSW Department of Climate Change, Energy, the Environment and Water (NDCCEEW) (2025e) Soil Landscapes <http://espade.environment.nsw.gov.au>

NSW Department of Climate Change, Energy, the Environment and Water (NDCCEEW) (2025f) Biodiversity Assessment Method Calculator Version 1.5.0.00

NSW Department of Climate Change, Energy, the Environment and Water (NDCCEEW) (2025g) Little Bent-winged Bat – Species Profile

NSW Department of Climate Change, Energy, the Environment and Water (NDCCEEW) (2025h) Large Bent-winged Bat – Species Profile

NSW Department of Climate Change, Energy, the Environment and Water (NDCCEEW) (2025) Large-eared Pied Bat – Species Profile

NSW Government Spatial Services (2025) Six Maps Clip & Ship <https://maps.six.nsw.gov.au/clipnship.html>

NSW Legislation (2025a) State Environmental Planning Policy (Biodiversity and Conservation) 2021

NSW Legislation (2025b) State Environmental Planning Policy (Resilience and Hazards) 2021

NSW Scientific Committee. (2000) Hydrocybeae Community of Lane Cove Bushland Park - endangered ecological community listing

PlantNET (2025) The NSW Plant Information Network System, Royal Botanic Gardens and Domain Trust, Sydney. <http://plantnet.rbgsyd.nsw.gov.au>

Robinson, L. (2003) 'Field Guide to the Native Plants of Sydney', Third Edition, Kangaroo Press

## 14. Appendices

---

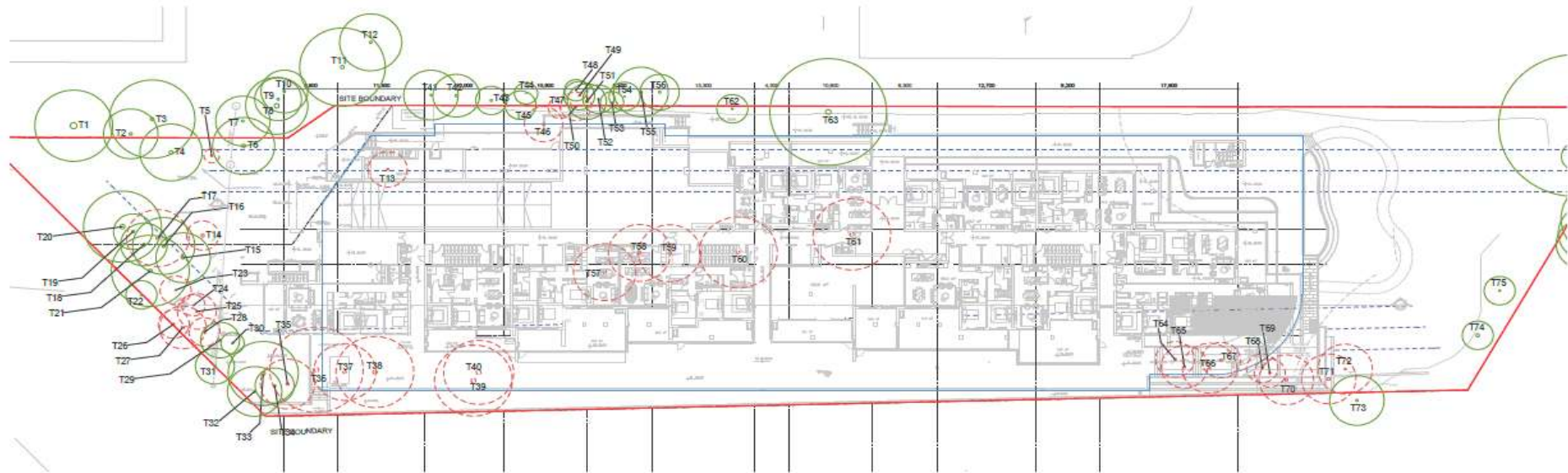
Appendix A. Tree Management Plan (Land and Form Studios 2025a)

Appendix B. BAM Site - Field Survey Forma (copied directly from Electronic Data Sheet).

Appendix C. BAMC Generated Biodiversity Credit Report.

Appendix D. Photos from microbat inspection.

# Tree Management Plan



Please refer to the Arboricultural Impact Assessment prepared by Creative Planning Solutions (Project No. H498, Rev Draft-P1, dated 5 December 2025). The assessment identifies a total of eighty-five (85) trees located on and immediately adjoining the site.

Based on the current proposal, the development will result in the removal of thirty-two (32) trees. These removals comprise:

- 20 trees located within the footprint of the proposed building, basement, retaining walls or associated paved/landscaped areas.
- 2 trees subject to major and unsustainable encroachments into their Notional Root Zones (NRZ) and Structural Root Zones (SRZ), as defined under AS4970-2025.
- 2 trees identified as dead with no habitat value.

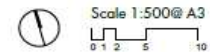
- 8 trees to be removed to satisfy the bushfire Inner Protection Area (IPA)

A total of fifty-three (53) trees are recommended for retention and protection. These include trees with no anticipated impacts, as well as those subject to minor or moderate encroachments deemed sustainable under AS4970-2025

One tree (Tree 32) will experience a major encroachment from the proposed pathway and stormwater infrastructure; however, retention is supported subject to strict root-sensitive construction and arborist supervision.

While a proportion of the existing vegetation will be removed to accommodate the proposed works and bushfire compliance, the future landscape design will introduce substantial replacement planting across deep soil zones and podium areas. This will deliver a long-term improvement in canopy cover, landscape quality and site amenity relative to existing conditions.

- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED



Appendix B. BAM Site - Field Survey Forma (copied directly from Electronic Data Sheet). Plot taken from adjoining bushland.

BAM Site – Field Survey Form					
Date:	18.09.2024	Plot ID:	Plot 1	Photo #:	0
Zone:	0	Plot Dimensions:	20x50	Easting:	329100.29
Datum:	0	Middle bearing from 0m:	52	Northing:	6256191.53
PCT:	Zone 1: PCT 3176 (Plot Taken in Bushland Neighbouring Subject Land)				

Growth Form	Scientific Name	Cover	Abundance
Tree (TG)	<i>Eucalyptus piperita</i>	5	2
Tree (TG)	<i>Angophora costata</i>	15	5
Fern (EG)	<i>Pteridium esculentum</i>	1	10
Grass & grasslike (GG)	<i>Lomandra longifolia</i>	40	100
Shrub (SG)	<i>Elaeocarpus reticulatus</i>	7	10
HTE	<i>Asparagus aethiopicus</i>	0.1	4
Shrub (SG)	<i>Breynia oblongifolia</i>	2	7
Shrub (SG)	<i>Pittosporum undulatum</i>	7	10
Forb (FG)	<i>Dianella caerulea</i>	1	10
Other (OG)	<i>Smilax glycyphylla</i>	2	40
HTE	<i>Ligustrum sinense</i>	0.1	5
Other (OG)	<i>Marsdenia suaveolens</i>	1	20
Tree (TG)	<i>Notelaea longifolia</i>	2	5
HTE	<i>Cinnamomum camphora</i>	0.1	3
Shrub (SG)	<i>Homalanthus populifolius</i>	1	3
Tree (TG)	<i>Corymbia gummifera</i>	4	2
Tree (TG)	<i>Glochidion ferdinandi</i>	2	4
Forb (FG)	<i>Xanthosia pilosa</i>	0.3	5
Other (OG)	<i>Pandorea pandorana</i>	0.2	10
Forb (FG)	<i>Opercularia spp.</i>	0.1	5
Shrub (SG)	<i>Zieria smithii</i>	0.1	2
Grass & grasslike (GG)	<i>Entolasia marginata</i>	4	4000
Forb (FG)	<i>Gonocarpus teucrioides</i>	0.1	1
Shrub (SG)	<i>Acacia longifolia</i>	0.2	2
Tree (TG)	<i>Allocasuarina littoralis</i>	2	4
Shrub (SG)	<i>Lomatia silaifolia</i>	0.2	2
Other (OG)	<i>Xanthorrhoea spp.</i>	0.2	2
Grass & grasslike (GG)	<i>Oplismenus aemulus</i>	0.1	10
Shrub (SG)	<i>Pomaderris spp.</i>	1	2
Tree (TG)	<i>Acacia elata</i>	0.1	1
Shrub (SG)	<i>Polyscias sambucifolia</i>	0.1	1

DBH	# Tree Stems Count	# Hollow Bearing Trees
80+cm	1	0
50-79cm	1	
30-49cm	Present	
20-29cm	Present	
10-19cm	Present	
5-9cm	Present	
<5cm	Present	

Length of Logs (m)	20
--------------------	----

BAM Attribute (1x1m)	Litter Cover (%)
1 (5m)	75
2 (15m)	75
3 (25m)	60
4 (35m)	30
5 (45m)	40
Average	56

Growth Form	Composition Data (Count of Native Cover)	Structure Data (Sum of Cover)
Tree	7	30.1
Shrub	9	18.6
Grass	3	44.1
Forb	4	1.5
Fern	1	1
Other	4	3.4
High Threat Exotics	3	0.3



## BAM Biodiversity Credit Report (Like for like)

### Proposal Details

Assessment Id	Proposal Name	BAM data last updated *
00062923/BAAS21009/25/00062924	300 Burns Bay Road Lane Cove	05/08/2025
Assessor Name	Assessor Number	BAM Data version *
Christopher Moore	BAAS21009	Current classification (live - default) (82)
Proponent Names	Report Created	BAM Case Status
	09/03/2026	Finalised
Assessment Revision	BOS entry trigger	Assessment Type
2	BOS Threshold: Biodiversity Values Map	Part 4 Developments (Small Area)
Date Finalised	* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.	
09/03/2026		

### Potential Serious and Irreversible Impacts

Name of threatened ecological community	Listing status	Name of Plant Community Type/ID
<b>Nil</b>		
Species		
<b>Chalinolobus dwyeri</b> / Large-eared Pied Bat		
<b>Miniopterus australis</b> / Little Bent-winged Bat		

Assessment Id	Proposal Name	Page 1 of 4
00062923/BAAS21009/25/00062924	300 Burns Bay Road Lane Cove	

# BAM Biodiversity Credit Report (Like for like)

**Miniopterus orianae oceanensis** / Large Bent-winged Bat

## Additional Information for Approval

PCT Outside Ibra Added

None added

PCTs With Customized Benchmarks

PCT

No Changes

Predicted Threatened Species Not On Site

Name

No Changes

## Ecosystem Credit Summary (Number and class of biodiversity credits to be retired)

Name of Plant Community Type/ID	Name of threatened ecological community	Area of impact	HBT Cr	No HBT Cr	Total credits to be retired
3176-Sydney Enriched Sandstone Moist Forest	Not a TEC	0.1	0	2	2



## BAM Biodiversity Credit Report (Like for like)

<b>Miniopterus australis</b> / Little Bent-winged Bat	<b>3176_Classname1</b>	0.1	4.00
<b>Miniopterus orianae oceanensis</b> / Large Bent-winged Bat	<b>3176_Classname1</b>	0.1	4.00

### Credit Retirement Options

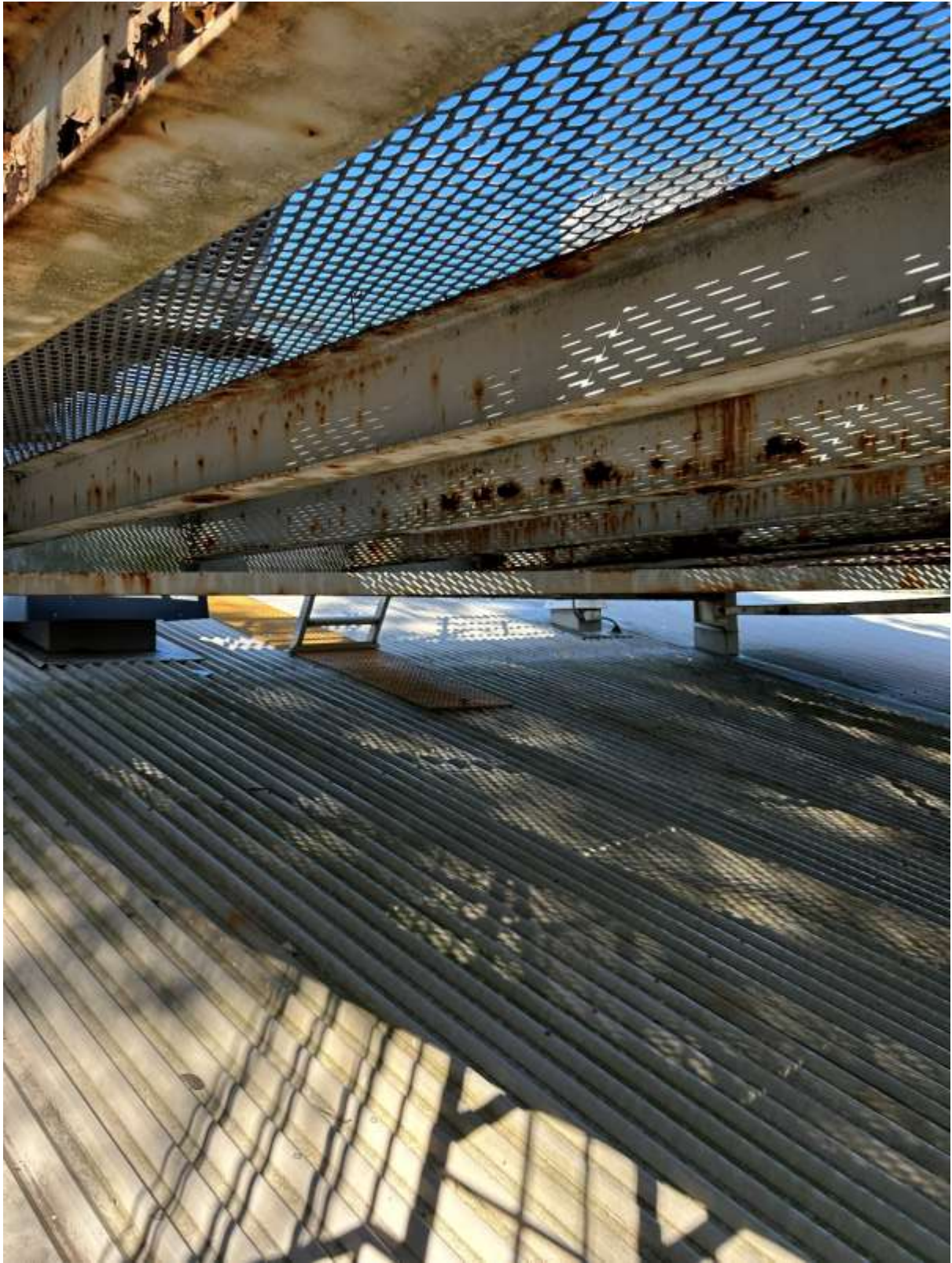
Like-for-like credit retirement options

<b>Chalinolobus dwyeri</b> / Large-eared Pied Bat	Spp	IBRA subregion
	<b>Chalinolobus dwyeri</b> / Large-eared Pied Bat	Any in NSW
<b>Miniopterus australis</b> / Little Bent-winged Bat	Spp	IBRA subregion
	<b>Miniopterus australis</b> / Little Bent-winged Bat	Any in NSW
<b>Miniopterus orianae oceanensis</b> / Large Bent-winged Bat	Spp	IBRA subregion
	<b>Miniopterus orianae oceanensis</b> / Large Bent-winged Bat	Any in NSW

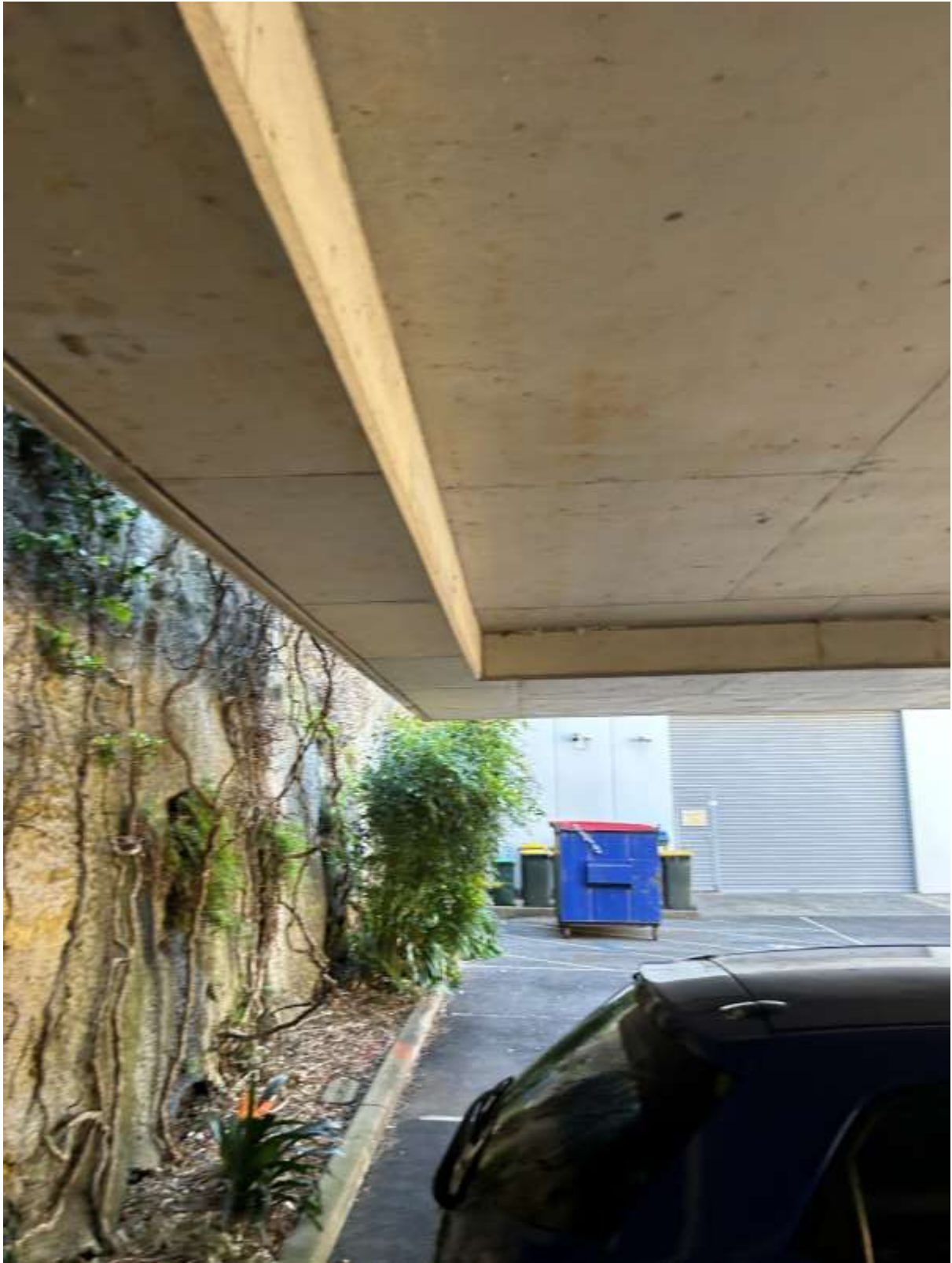
Appendix D. Photos from microbat inspection.













**NARLA**  
*environmental*

**Eastern Sydney Office**

Unit 2.01, 4-10 Bridge Street  
Pymble  
NSW 2073

**Western Sydney Office**

7 Twentyfifth Avenue  
West Hoxton  
NSW 2171

**Hunter Valley Office**

10/103 Glenwood Drive  
Thornton  
NSW 2322

[www.narla.com.au](http://www.narla.com.au)

Ph: 02 9986 1295