



Streamlined Biodiversity Development Assessment Report

Royal Prince Alfred Hospital Redevelopment

Report prepared by Narla Environmental Pty Ltd

For Health Infrastructure

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NARLA

environmental

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Glossary

Acronym/ Term	Definition
Accredited Biodiversity Assessor	Individuals accredited by the Department of Planning and Environment (DPE) 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
DA	Development Application
DPE	NSW Department of Planning and Environment (formerly DPIE)
DPIE	NSW Department of Planning, Industry and Environment (now DPE)
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
IPA	Inner Protection Area
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.
NSW	The State of New South Wales
OEH	Office of Environment and Heritage (now DPIE)
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
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.
Subject Land	The footprint of the proposed development.
Subject Property	Royal Prince Alfred Hospital (Lots 1000/-/DP1159799, 101/-/DP1179349, 4/-/DP880430, 1/-/DP860610 and 11/-/DP809663)
Threatened species, populations and	Species, populations and ecological communities specified in Schedules 1 and 2 of the BC Act 2016.

Acronym/ Term	Definition
ecological communities	
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

Executive Summary

Narla Environmental was commissioned by Health Infrastructure ('the proponent') to prepare this Streamlined Biodiversity Development Assessment Report (SBDAR) to accompany a State Significant Development Application (SSDA) for the proposed Royal Prince Alfred Hospital (RPAH) Redevelopment located at located at 12 Missenden Road, Camperdown (Lot 1000/-/DP1159799), 114 Church Street, Camperdown (Lot 4/-/DP880430) and 68-81 Missenden Road, Camperdown (Lot 11/-/DP809663), together referred to as the 'Subject Property'). 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).

The proponent proposes to redevelop the existing RPAH facility at Missenden Road, Church Street and Carillon Avenue, Camperdown. The proposed development includes the following:

- Alterations and additions to the RPA Hospital East Campus, comprising:
 - Eastern wing: A new fifteen (15) storey building with clinical space for Inpatient Units (IPU's), Medical Imaging, Delivery, Neonatal and Women's Health Services, connecting to the existing hospital building and a rooftop helicopter landing site (HLS);
 - Eastern extension: A three (3) storey extension to the east the existing clinical services building to accommodate new operating theatres and associated plant areas;
 - Northern expansion: A two (2) storey vertical expansion over RPA Building 89 accommodating a new Intensive Care Unit and connected with the Eastern Wing;
 - Internal refurbishment: Major internal refurbishment to existing services including Emergency Department and Imaging, circulation and support spaces;
 - Enhanced Northern Entry/ Arrival including improved pedestrian access and public amenity;
 - Demolition of affected buildings, structures and trees;
 - Changes to internal road alignments and paving treatments; and
 - Landscaping works, including tree removal, tree pruning, and compensatory tree planting including off-site on University of Sydney land.
- Ancillary works to the RPA Hospital West Campus, comprising:
 - Temporary helicopter landing site above existing multi storey carpark;
 - Re-routing of existing services; and
 - Associated tree removal along Grose Street.

The development has been strategically positioned to minimise impacts on native vegetation and habitat as much as possible. The location of the Subject Property is within a highly degraded landscape, comprising a hospital and associated hardstands amongst areas of primarily planted native and exotic canopy trees and gardens.

The proposed development is expected to impact one (1) Plant Community Type (PCT) 1778: Smooth-barked Apple - Coast Banksia / Cheese Tree open forest on sandstone slopes on the foreshores of the drowned river valleys of Sydney, in addition to areas of planted native and exotic vegetation. Due to the altered condition of the vegetation across the site, no ecosystem credits are required to be offset for the proposed development.

No SAI species credit species are present within the site, therefore no species credits are required to be offset for the proposed development.

In order to avoid and 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 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. Furthermore, the proposed Tree Replacement Plan (Jacobs 2022a) comprises of a diverse range of native species across canopy and mid-stratum which will re-create canopy corridors that will be impacted by the works.

This SBDAR has been prepared in accordance with the industry specific Secretary's Environmental Assessment Requirements (SEARs), specifically point 11 – Biodiversity, which states the following:

- Assess any biodiversity impacts associated with the development in accordance with the Biodiversity Conservation Act 2016 and the Biodiversity Assessment Method 2020, including the preparation of a Biodiversity Development Assessment Report (BDAR), unless a waiver is granted, or the development is on biodiversity certified land; and
- 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."

As the development has not been granted a BDAR waiver and is not located on biodiversity certified land, this SBDAR has been prepared.

1. Introduction

1.1 Overview

Narla was commissioned by Health Infrastructure (HI; ‘the proponent’) to prepare this SBDAR to accompany a State Significant Development Application (SSDA) for the proposed Royal Prince Alfred Hospital (RPAH) Redevelopment located at 12 Missenden Road, Camperdown (Lot 1000/DP1159799), 114 Church Street, Camperdown (Lot 11/DP809663) and 68-81 Missenden Road, Camperdown (Lot 101/DP1179349), together referred to as the ‘Subject Property’ (**Figure 1**). This SBDAR is required as the proposed works are part of a SSDA. Section 7.9(2) of the NSW *Biodiversity Conservation Act 2016* (BC Act) stipulates the following:

- “Any such application is to be accompanied by a biodiversity development assessment report unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.

This SBDAR 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). The report will also recommend appropriate measures to mitigate any potential ecological impacts in line with the requirements of the Consent Authority.

1.2 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 area clearing threshold for small area developments as outlined in the BAM (DPIE 2020a; **Table 1**).

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**).

Table 1. 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	≤5ha
1000ha or more	≤10ha

1.3 The Proposed Development

The proponent proposes to redevelop the existing RPAH facility at Missenden Road, Church Street and Carillon Avenue, Camperdown. The proposed development includes the following works (**Appendix A; Appendix B; Appendix C**):

- Alterations and additions to the RPA Hospital East Campus, comprising:
 - Eastern wing: A new fifteen (15) storey building with clinical space for Inpatient Units (IPU's), Medical Imaging, Delivery, Neonatal and Women's Health Services, connecting to the existing hospital building and a rooftop helicopter landing site (HLS);
 - Eastern extension: A three (3) storey extension to the east the existing clinical services building to accommodate new operating theatres and associated plant areas;
 - Northern expansion: A two (2) storey vertical expansion over RPA Building 89 accommodating a new Intensive Care Unit and connected with the Eastern Wing;
 - Internal refurbishment: Major internal refurbishment to existing services including Emergency Department and Imaging, circulation and support spaces;
 - Enhanced Northern Entry/ Arrival including improved pedestrian access and public amenity;
 - Demolition of affected buildings, structures and trees;
 - Changes to internal road alignments and paving treatments; and
 - Landscaping works, including tree removal, tree pruning, and compensatory tree planting including off-site on University of Sydney land.
- Ancillary works to the RPA Hospital West Campus, comprising:
 - Temporary helicopter landing site above existing multi storey carpark;
 - Re-routing of existing services; and
 - Associated tree removal along Grose Street.

The proposed development has been divided into two components, which are collectively referred to as the 'Subject Land' (**Figure 1**):

- External Works (2.17ha): including new buildings, expansions, new parking and a temporary helicopter pad; and
- Internal Refurbishment (1.06ha): Existing Buildings subject internal upgrades, which require no vegetation removal.

The Subject Land covers an area of approximately 3.23ha, located within the grounds of the existing RPAH, which is primarily contains existing buildings, roads and courtyards. Native and exotic vegetation of all strata were scattered throughout the Subject Land, although the assemblage of species and location (e.g. planted streets trees and manicured gardens) indicate that the native trees have been historically planted.

1.4 Site Location and Description

The Royal Prince Alfred (RPA) Hospital campus is located in Sydney's inner west suburb of Camperdown, within the City of Sydney Local Government Area (LGA; **Figure 2**) in the Metropolitan Local Aboriginal Land Council (LALC), encompassing an area of approximately 6.95ha. The campus is situated between the University of Sydney to the east and the residential area of Camperdown to the west. A north-south arterial road (Missenden Road) divides the campus into two distinct portions, known as the East and West Campuses. The northern boundary of the campus is defined by the Queen Elizabeth II Rehabilitation Centre and the southern extent of the campus is defined by Carillon Avenue.

The works are proposed to both the East and West Campuses, as well as some off-site works occurring within the University of Sydney. The site comprises the following land titles:

- East campus:
 - Lot 1000 DP 1159799 (12 Missenden Road, Camperdown, 2050)
- West campus:
 - Lot 11 DP 809663 (114 Church Street, Camperdown, 2050); and
 - Lot 101 DP 1179349 (68-81 Missenden Road, Camperdown 2050)

Off-site works are proposed on University of Sydney land, known as Lot 1 DP 1171804 (3 Parramatta Road, Camperdown, 2050) and Lot 1001 DP 1159799 (12A Missenden Road, Camperdown, 2050).

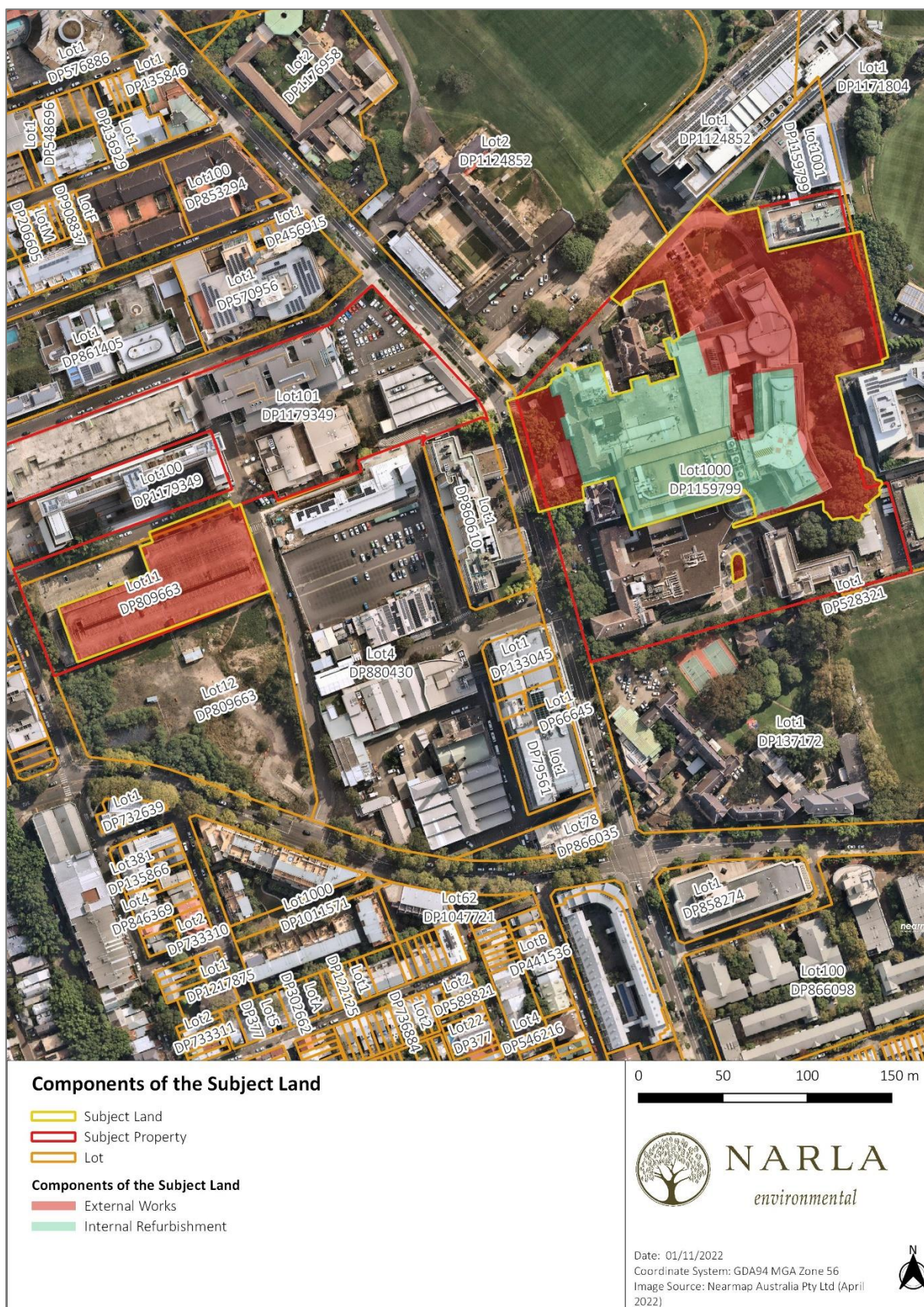


Figure 1. The components of the Subject Land.



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 City of Sydney LGA, including:

- Relevant State and Commonwealth Databases & Datasets:
 - NSW BioNet. The website of the Atlas of NSW Wildlife (DPE 2022a)
 - NSW BioNet. Threatened Biodiversity Data Collection (DPE 2022b)
 - NSW BioNet. Vegetation Classification System (DPE 2022c)
 - NSW Government Spatial Services: Six Maps Clip & Ship (NSW Government Spatial Services 2022)
- Vegetation and Soil Mapping:
 - The Native Vegetation of the Sydney Metropolitan Area (OEH 2016);
 - 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 2019a)
 - Biodiversity Assessment Method Calculator Version 1.4.0.00 (DPE 2021a)
 - Biodiversity Offsets and Agreement Management System (BOAMS)
 - Surveying threatened plants and their habitats - NSW survey guide for the Biodiversity Assessment Method (DPIE 2020b)
 - Threatened Species Survey and Assessment: Guidelines for developments and activities. Working Draft (DEC 2004)
- Council Documents:
 - Sydney Local Environmental Plan (SLEP) 2012;
 - Sydney Development Control Plan (SDCP) 2012.

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

- Tree Retention and Removal Plan (Jacobs 2022a; **Appendix A**);
- Concept Design Plan (Jacobs 2022b; **Appendix B**);
- Temporary Helicopter Pad (Jacobs 2022c; **Appendix C**); and
- Tree Replantation Strategy (Turf Design Studio 2022).

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 SAILs within the Subject Land; and

- Discuss and recommend efforts to avoid and minimise impacts on biodiversity values.
- 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 planted native vegetation occurs within an area that is comminated by exotic species and non-indigenous native species, therefore it cannot be reasonably be assigned to a PCT. The majority of planted native vegetation within the Subject Land includes *Corymbia citriodora* (Lemon-scented Gum), *Lophostemon confertus* (Brush Box), *Harpullia pendula* (Tulipwood), *Flindersia australis* (Crows Ash), *Cupaniopsis anacardioides* (Tuckeroo) and *Melia azedarach* (White Cedar). These species occur alongside exotic vegetation that dominated the Subject Land, including *Cinnamomum camphora* (Camphor Laurel) *Jacaranda mimosifolia* (Jacaranda), *Ficus macrocarpa* (Chinese banyan), *Platanus x acerifolia* (London Plane Tree), *Cupressus* spp. (Cyperus Pine), *Camellia japonica* (Camellia), *Celtis sinensis* (Chinese Celtis), *Magnolia grandiflora* (Southern Magnolia), *Monstera deliciosa* (Swiss Cheese Plant) and *Nandina domestica* (Sacred Bamboo) The groundlayer was predominately either existing hardstand, an exotic lawn or planted groundcovers in garden beds. The lawn comprised of various exotic grasses and groundcovers such as *Stenotaphrum secundatum*, *Cenchrus clandestinus*, *Poa annua* and *Stellaria media* and the garden beds had common horticultural species such as *Ophiopogon japonicus* (Dwarf Lilyturf) and *Agapanthus praecox* (Lily of the Nile). Some native groundcover species included *Cotula australis* and *Dianella caerulea*.

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 planted native vegetation predominately includes non-locally indigenous species that have been planted for the purposes of landscaping and aesthetics within the hospital grounds.

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 planted native vegetation has been planted for the purposes of landscaping and aesthetics within the hospital grounds using species that are commonly planted as street trees and other urban uses.

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 planted native vegetation has been planted for the purposes of landscaping and aesthetics within the hospital grounds using species that are commonly planted as street trees and other urban uses. This was not undertaken voluntarily for revegetation, environmental rehabilitation or restoration without a legal obligation to secure or provide for management of the native vegetation.

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 native vegetation has been planted for garden landscaping and roadside planting purposes. The vegetation is planted within a landscaped setting within hospital grounds and along roadsides.

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). 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 (DPE 2022a). There is however potential that planted native vegetation may provide intermittent foraging habitat for threatened species such as *Glossopsitta pusilla* (Little Lorikeet), *Lathamus discolor* (Swift Parrot) 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.

3. Landscape

3.1 IBRA bioregion and subregion

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

3.2 Mitchell Landscapes

Mitchell (Mitchell 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 occurs within the 'Ashfield Plains' Mitchell Landscape Ecosystem (**Figure 4**). This landscape is characterised by undulating hills and valleys on horizontal Triassic shale and siltstone, occasional quartz sandstones especially near the margin of the Port Jackson landscape. General elevation 0 to 45m, local relief <20m. Coastal extension of the Cumberland Plain landscape. Red and brown texture-contrast soils on crests grading to yellow harsh texture-contrast soils in valleys. Open forest of Broad-leaved Ironbark (*Eucalyptus fibrosa* ssp. *fibrosa*), Grey Box (*Eucalyptus moluccana*), with tea-tree (*Leptospermum* sp.) along creeks and forests of Turpentine (*Syncarpia glomulifera*), Red Mahogany (*Eucalyptus resinifera*), Grey Gum (*Eucalyptus punctata*), Sydney Blue Gum (*Eucalyptus saligna*) and Blackbutt (*Eucalyptus pilularis*) with a grassy understorey of Kangaroo Grass (*Themeda triandra*) on moister sites.

3.3 Topography, Geology and Soils

The Subject Land is located on a slight eastern facing slope, with elevation ranging between 25m to 37m ASL (Google 2022). The Subject Land is mapped as occurring on the Blacktown soil landscape as per Soil Landscapes of the Sydney 1:100,000 Sheet (Chapman et al. 2009). The Blacktown soil landscape is characterised by –gently undulating rises on Wianamatta Group shales and Hawkesbury shale. Local relief to 30 m with slopes usually <5% on broad rounded crests and ridges with gently inclined slopes. The Wianamatta Group contains Ashfield Shale consisting of laminite and dark grey siltstone, and Bringelly Shale which consists of shale, with occasional calcareous claystone, laminite and coal. This unit is occasionally underlain by claystone and laminite lenses within the Hawkesbury Sandstone such as at Duffys Forest. Soil material generally consists of brown-black loams, clay loams, light clay, and light grey mottled clay.

3.4 Areas of Geological Significance and Soil Hazards

The Subject Land did not contain any areas of geological significance, such as karsts, caves, cliffs or crevices. The Subject Land is mapped as occurring on Class 5 Acid Sulfate Soils as per the Sydney LEP 2012 (**Figure 5**).

3.5 Hydrology

No mapped watercourses or associated riparian areas were located within the Subject Land. In the wider locality, three (3) mapped watercourses were present, ranging from 1st to 2nd order streams (**Figure 6**).

3.6 State Environmental Planning Policy (Resilience and Hazards) 2021: Coastal Management

The Subject Land does not contain any areas of native vegetation identified as 'Coastal Wetlands' or 'Littoral Rainforest' as per chapter 2 of the State Environmental Planning Policy (Resilience and Hazards) 2021: Coastal

Management. However, a small area within the broader locality (within the 1500m buffer) is identified 'Coastal Wetlands' (Figure 7).

3.7 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. The area of ocean to the east was however not included in any calculations for native vegetation extent.

Native vegetation covered approximately 75ha within the buffer circle (total area included in calculation = 899ha) and was assigned to the 0-10% class. Areas of native vegetation were confirmed using information collected during the site assessment, as well as aerial imagery. Areas not assessed as native vegetation included sports ovals, parks, golf courses, and planted exotic vegetation.

Many areas of native vegetation within the 1500m buffer provide connectivity (albeit patchy) that may facilitate the movement of threatened species. This is primarily made up of urban street trees and gardens (Figure 8).

3.8 Areas of Outstanding Biodiversity Value

No Areas of Outstanding Biodiversity Value occur on the Subject Land or within the 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. Risk of Acid Sulfate Soils within the Subject Land and broader locality.



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



Figure 7. Areas mapped under chapter 4 (Coastal Management) of the State Environmental Planning Policy (Resilience and Hazards) 2021, in relation to the Subject Land and general locality.



Figure 8. The extent of native vegetation and habitat connectivity occurring within the 1500m buffer.

4. Native Vegetation

4.1 Dominant Plant Community Type (PCT) Identified within the Subject Land

4.1.1 Historically Mapped Vegetation

Historical mapping by OEH (2016) indicates the presence of one (1) vegetation within the Subject Land:

- Urban Exotic/Native vegetation.

4.1.2 Plant Community Type Selection Process

Field surveys conducted by Narla confirmed that one (1) dominant native vegetation community occurred within the Subject Land, with the remainder of native and exotic vegetation classified as 'Planted Native Vegetation' (see **Section 2**). Due to the highly modified nature of the landscape and vegetation within the locality, landscape features and geology were not considered accurate in determining the PCT present within the Subject Land. Therefore, historical vegetation mapping within the locality was heavily relied upon in conjunction with the species present within the Subject Land, to determine the "Best-Fit" PCT.

Plant Community Types reliant on rivers, swamps and riparian soil (e.g Floodplain Forests, Saltmarsh and Wetlands) were excluded as the Subject Land did not have such constraints that support these vegetation types. Therefore, the following two (2) candidate PCTs that contained consistent native vegetation within the Subject Land were considered:

- PCT 1778: Smooth-barked Apple – Coast Banksia / Cheese Tree open forest on sandstone slopes on the foreshores of the drowned river valleys of Sydney; and
- PCT 1828: Coachwood – Lilly Pilly – Water Gum gallery rainforest in sandstone gullies of the Sydney basin.

Plant Community Type 1778 was chosen as the best fit community due to the presence of *Livistona australis* which is listed as associated species in *The Native Vegetation of the Sydney Metropolitan Area* (OEH 2016). Furthermore, this PCT is a dry sclerophyll forest which was considered a better fit than PCT 1828 which is a Warm Temperate Rainforest.

4.1.3 Final PCT and Vegetation Zone Selection

Field surveys conducted by Narla confirmed that one (1) PCT was identified within the Subject Land:

- PCT 1778: Smooth-barked Apple – Coast Banksia / Cheese Tree open forest on sandstone slopes on the foreshores of the drowned river valleys of Sydney.

Two vegetation zones were identified within the Subject Land that consisted of differing vegetation types:

- Zone 1: PCT 1778 (Low Condition); and
- Zone 2: Planted Native and Exotic Vegetation

These vegetation zones are detailed in **Table 2** and **Table 3**, and displayed in **Figure 9**.

Table 2. Vegetation identified within the Subject Land (Zone 1)

PCT 1778: Smooth-barked Apple - Coast Banksia / Cheese Tree open forest on sandstone slopes on the foreshores of the drowned river valleys of Sydney




Vegetation class	Sydney Coastal Dry Sclerophyll Forests
Extent within Subject Land (approximate)	0.05ha
Description in VIS	
<p>Coastal Sandstone Foreshores Forest is found on sheltered sandstone slopes along the foreshores of Sydney's major waterways and coastal escarpments. It is an open forest with a moist shrub layer and a ground cover of ferns, rushes and grasses. The flora of this community has a maritime influence given its exposure to prevailing sea breezes. The canopy can be dominated by pure stands of Smooth-barked Apple (<i>Angophora costata</i>), though more regularly this is found in combination with other tree species. Localised patches of Bangalay (<i>Eucalyptus botryoides</i>) and Coast Banksia (<i>Banksia integrifolia</i>) occur closest to the coast, whereas Sydney Peppermint (<i>Eucalyptus piperita</i>) and Blackbutt (<i>Eucalyptus pilularis</i>) prefer more protected locations and in the case of the latter some minor shale enrichment in the soil. A prominent layer of hardy mesic small trees and shrubs is present. These include Sweet Pittosporum (<i>Pittosporum undulatum</i>), Cheese Tree (<i>Glochidion ferdinandi</i>) and Blueberry Ash (<i>Elaeocarpus reticulatus</i>). In the suburban environment the proliferation of these species in the understorey at long unburnt sites has generated considerable debate, particularly as there appears to be strong correlation between time since fire and their density (Rose and Fairweather 1997). It is also appears that these species are more common in these littoral zones than in other sheltered sandstone forests situated further away from the coast.</p> <p>This forest is restricted to sandstone soils derived from either Hawkesbury or Narrabeen geology. The distribution is coastal and requires a combination of low elevation (between two and 45 metres above sea level)</p>	

PCT 1778: Smooth-barked Apple - Coast Banksia / Cheese Tree open forest on sandstone slopes on the foreshores of the drowned river valleys of Sydney

and mean annual rainfall that exceeds 1100 millimetres per annum. It is noticeable that most sites are exposed to salt-laden winds. Samples are situated up to 10 kilometres from the coastline, but still in close proximity to major waterways.

Condition Class	Low Condition
Field survey effort	A site assessment was conducted by experienced Narla Ecologist Jonathan Coy on the 16 th August 2022. One (1) 20m x 25m BAM plot was established. Due to the restricted nature of the Subject Land, with multiple buildings present, the size of the BAM plot was altered to ensure it best represented the vegetation within the zone. This also meant that the BAM plot was partially situated outside of the Subject Land.
Description of vegetation within the Subject Land	The vegetation within this zone was a mix of native and exotic species. The Canopy included the native species of <i>Corymbia maculata</i> (Spotted Gum) and exotic species such as the High Threat Exotic (HTE) <i>Cinnamomum camphora</i> (Camphor Laurel). Where native species were present below the canopy, they included <i>Livistona australis</i> (Cabbage Tree Palm) and <i>Acmena smithii</i> (Common Lilly Pilly), however was still dominated by exotic and naturalised species such as <i>Celtis sinensis</i> , <i>Cordyline fruticosa</i> , <i>Camellia japonica</i> , <i>Ctenanthe lubbersiana</i> and <i>Solanum nigrum</i> . The HTE <i>Cestrum parqui</i> (Green Cestrum) was also present within this stratum. No native groundcovers were observed within this zone.
Structure of vegetation	<p>A low canopy cover was evident within the BAM plot, with native trees totalling 1% cover. No native shrubs were recorded within the plot. A very low native groundcover was also present, including 0% grass, 0% forb and 0.1% fern. A coverage of other native species was present at 4% in the form of palms and climbers. High Threat Exotics accounted for 41%. A high cover of leaf litter (49.1%) was also apparent, with no fallen logs recorded.</p> <p>The BAM plot contained a low diversity of tree stem sizes, with tree stems recorded in one (1) DBH classes, with no large trees (>50cm DBH) or regenerating stems. No hollow-bearing trees were recorded within the BAM plot.</p>
Scientific Reference from VIS (DPE 2022c)	OEH (2013) The Native Vegetation of the Sydney Metropolitan Area Version 2.0 NSW Office of Environment and Heritage Sydney.
TEC Status (BC Act 2016 and EPBC Act 1999)	This PCT does not conform to a TEC.
Estimate of percent cleared value of PCT in the major catchment area	90.00 %

Table 3. Vegetation identified within the Subject Land (Zone 2).

Planted Native and Exotic Vegetation	
	
Extent within Subject Land (approximate)	0.75ha
Description of the vegetation within the Subject Land	<p>This vegetation community was dominated by common garden exotic and native ornamental garden plants and environmental weeds. The canopy layer was dominated by exotic species including <i>Cinnamomum camphora</i> (Camphor Laurel), <i>Jacaranda mimosifolia</i> (Jacaranda), <i>Ficus macrocarpa</i> (Chinese banyan), <i>Platanus x acerifolia</i> (London Plane Tree), <i>Howea forsteriana</i> (Kentia Palm) and <i>Cupressus</i> spp. (Cyperus Pine). Several native canopy species that are not locally occurring included <i>Corymbia citriodora</i> (Lemon-scented Gum), <i>Lophostemon confertus</i> (Brush Box), <i>Harpullia pendula</i> (Tulipwood), <i>Flindersia australis</i> (Crows Ash), <i>Cupaniopsis anacardioides</i> (Tuckeroo) and <i>Melia azedarach</i> (White Cedar).</p> <p>The shrub layer was dominated by commonly planted exotics and natives, including <i>Camellia japonica</i> (Camellia), <i>Celtis sinensis</i> (Chinese Celtis), <i>Magnolia grandiflora</i> (Southern Magnolia), <i>Monstera deliciosa</i> (Swiss Cheese Plant), <i>Nandina domestica</i> (Sacred Bamboo), <i>Callistemon citrinus</i> (Crimson Bottlebrush) and <i>Doryanthes excelsa</i> (Gymea Lilly). The ground layer was heavily dominated by planted exotic species and environmental weeds, including <i>Agapanthus praecox</i> (Lily of the Nile), <i>Stenotaphrum secundatum</i> (Buffalo Grass), <i>Trifolium repens</i> (White Clover) <i>Ophiopogon japonicus</i> (Dwarf Lilyturf), <i>Poa annua</i> (Winter Grass), <i>Parietaria judaica</i> (Pellitory), <i>Stellaria media</i> (Chickweed), <i>Bidens pilosa</i> (Black-jack), and <i>Conyza bonariensis</i> (Fleabane).</p>
Justification of Vegetation Assignment	<p>The vegetation within this zone comprised planted native and exotic species as part of horticultural landscaping and street trees within RPAH grounds. The majority of planted native species were not locally indigenous species. The planted native vegetation cannot be reasonably assigned a locally occurring PCT. Further justification is provided in Section 2.1.</p>
Associated TEC	None.

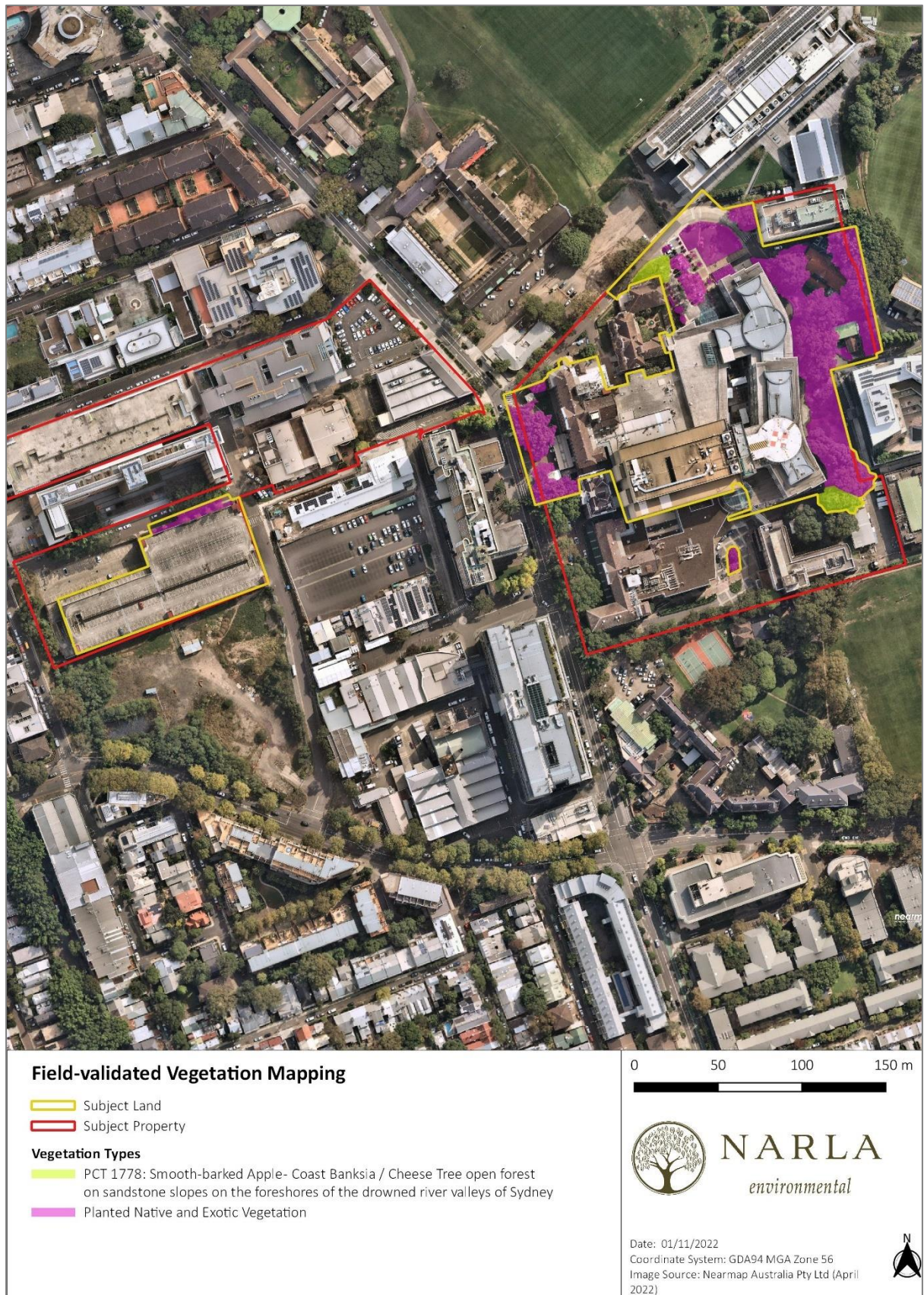


Figure 9. Narla field validated vegetation mapping and location of BAM plots within the Subject Land.

4.1 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 ≤ 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:

- <5 ha
- $5-<25$ ha
- $25-<100$ ha
- ≥ 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.

Patch size for Vegetation Zone 1 was determined using information collected during the site assessment, as well as aerial imagery and Google Street View to assess the broader area. The vegetation was classified as woody vegetation, and as such, patch size included areas of woody native vegetation that had a gap of less than 100m from the next area of native vegetation. Patch size for Vegetation Zone 1 is detailed in **Table 4** and **Figure 10**.

According to Section D of the BAM (DPIE 2020a), planted native vegetation does not require assessment under Chapter 4 of the BAM, and as such, patch size for Vegetation Zone 2 does not need to be determined.

Table 4. Patch size class for each PCT and associated vegetation zone.

Plant Community Type	Vegetation Zone	Patch Size Class
PCT 1778 (Low Condition)	Zone 1	25-<100ha
Planted Native and Exotic Vegetation	Zone 2	No assessment required.



Figure 10. The patch size of Vegetation Zone 1 occurring within the 1500m buffer. The patch does however extend further than the buffer boundary.

4.2 Vegetation Integrity Survey (VIS) Plots

One (1) BAM VIS plot was established within the PCT assigned to the Subject Land. Plot data gathered for each attribute used to assess the function of the vegetation within Subject Land is displayed in **Appendix D**. Vegetation Integrity (VI) Scores represented by existing vegetation within each vegetation zone is detailed in **Table 5**.

According to Section D of the BAM (DPIE 2020a), planted native vegetation does not require assessment under Chapter 4 of the BAM, and as such, the assessment of vegetation integrity for Vegetation Zone 2 is not required, and no management zone was applied to this vegetation.

4.2.1 Determining future vegetation integrity scores

Most projects will result in complete clearing of vegetation and threatened species habitat within the development footprint. 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 are greater than zero (DPIE 2020a).

The Subject Land will be only be exposed to complete clearing, subsequently Vegetation Zone has been assessed as single management zone (**Figure 11**):

- Management Zone 1: PCT 1778 (Low Condition) – Complete Clearing.

The attributes influencing future vegetation scores within each of these management zones are detailed in **Table 6**.

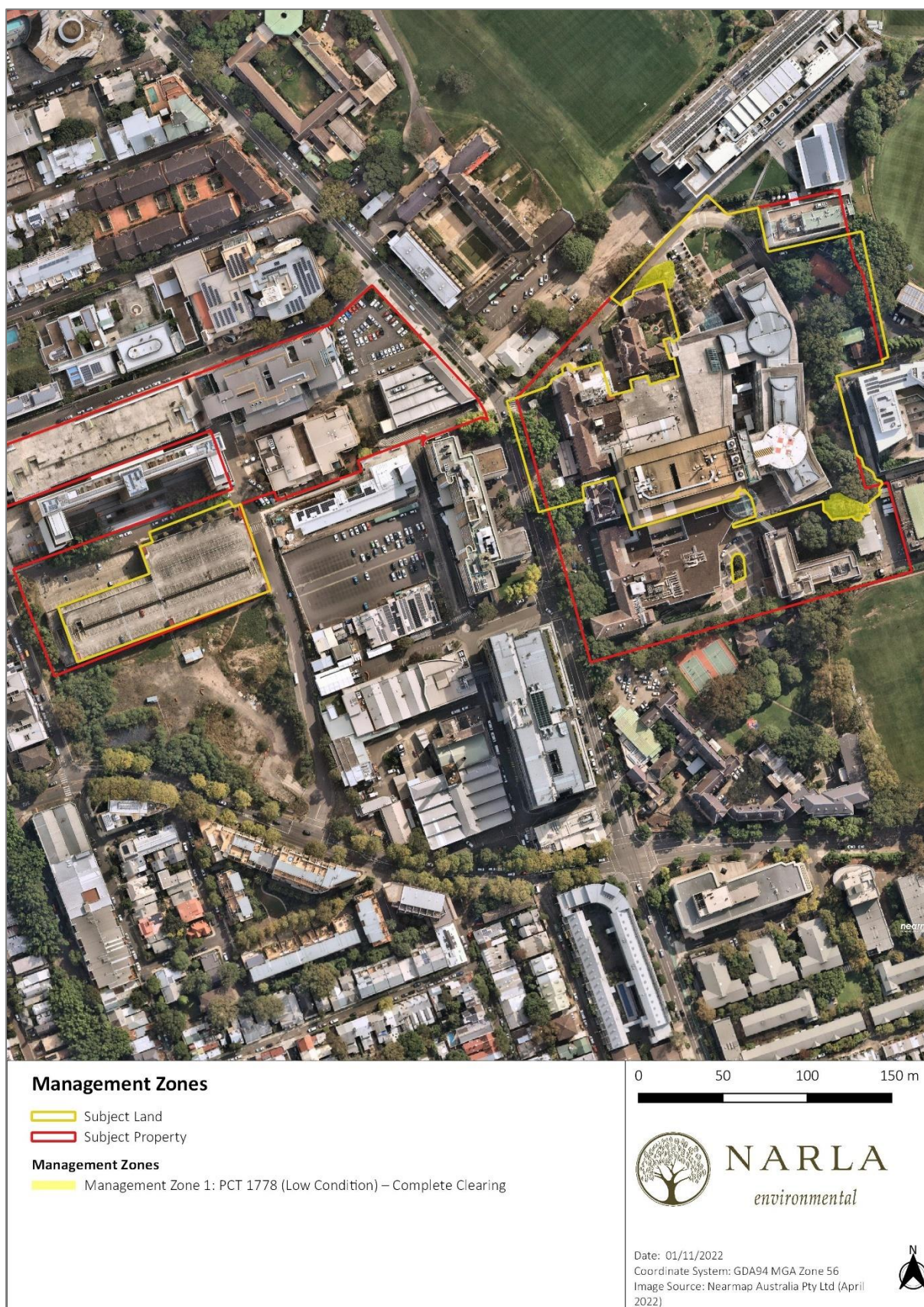


Figure 11. Management zones within the Subject Land.

Table 5. Vegetation integrity scores for each identified zone.

PCT	Management Zone	Area (ha)	Survey Effort	Patch Size	Composition Condition Score	Structure Condition Score	Function Condition Score	VI Score	Future VI Score	Change in VI Score	Total VI Loss	Hollow bearing trees
PCT 1778: Smooth-barked Apple - Coast Banksia / Cheese Tree open forest on sandstone slopes on the foreshores of the drowned river valleys of Sydney	Zone 1 – Total Impact	0.05	One 500m ² (20m x 25m) VIS Plot	25- <100ha	10.8	2.5	16.4	7.6	0	-7.6	-7.6	Absent

Table 6. 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 1778, Low Condition	Zone 1: Total Impact	All vegetation will be removed	NA	<ul style="list-style-type: none"> All vegetation within the development footprint is required for removal to allow for the proposed development. Future composition, structure and function score is 0.

5. Threatened Species

5.1 Candidate Ecosystem Credit Species

Ecosystem credit species associated with the Subject Land are listed below in **Table 7**. Two (2) species predicted by the BAM calculator as potential ecosystem credits were excluded from the assessment due to habitat constraints.

Table 7. Candidate ecosystem credits predicted to occur within the Subject Land.

Scientific Name	BC Act Status	Excluded from Assessment	Reason for Exclusion from Assessment
<i>Anthochaera phrygia</i> Regent Honeyeater (Foraging)	Critically Endangered	No	-
<i>Artamus cyanopterus cyanopterus</i> Dusky Woodswallow	Vulnerable	No	-
<i>Calyptorhynchus lathami</i> Glossy Black-Cockatoo (Foraging)	Vulnerable	Yes	No <i>Allocasuarina</i> or <i>Casuarina</i> species present
<i>Daphoenositta chrysoptera</i> Varied Sittella	Vulnerable	No	-
<i>Dasyurus maculatus</i> Spotted-tailed Quoll	Vulnerable	No	-
<i>Glossopsitta pusilla</i> Little Lorikeet	Vulnerable	No	-
<i>Haliaeetus leucogaster</i> White-bellied Sea-Eagle (Foraging)	Vulnerable	Yes	Not within 1km of river lakes, wetlands or large dams or creeks.
<i>Hirundapus caudacutus</i> White-throated Needletail	Vulnerable (EPBC Act only)	No	-
<i>Lathamus discolour</i> Swift Parrot (Foraging)	Endangered	No	-
<i>Micronomus norfolkensis</i> Eastern Coastal Free-tailed Bat	Vulnerable	No	-
<i>Miniopterus australis</i> Little Bent-winged Bat (Foraging)	Vulnerable	No	-
<i>Miniopterus orianae oceanensis</i> Large Bent-winged bat (Foraging)	Vulnerable	No	-
<i>Pandion cristatus</i> Eastern Osprey (Foraging)	Vulnerable	No	-
<i>Pteropus poliocephalus</i> Grey-headed Flying-fox (Foraging)	Vulnerable	No	-

5.2 Candidate Species Credit Species Summary

This section provides a summary of the candidate species credit fauna species for the Subject Land derived from BAMC (DPIE 2021a). 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 8**). No candidate species credit flora species were derived from the BAMC (DPIE 2021a).

Table 8. 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>Anthochaera phrygia</i> Regent Honeyeater (Breeding)	No, the Subject Land is not included on the map of important areas for Regent Honeyeaters.	No	NA	Very High – 3	No
<i>Lathamus discolor</i> Swift Parrot (Breeding)	NO, the Subject Land is not included on the map of important areas for Swift Parrot.	No	NA	High – 2.5	No
<i>Miniopterus australis</i> Little Bent-winged Bat (Breeding)	No. The SAI threshold for this species is breeding habitat. This species is known to breed in caves, tunnels, mines and culverts. As such habitat constraints are not present within the Subject Land, this species was excluded from the assessment as it does not meet the SAI threshold for this species.	No	NA	Very High - 3	No
<i>Miniopterus orianae oceanensis</i> Large Bent-winged Bat (Breeding)	No. The SAI threshold for this species is breeding habitat. This species is known to breed in caves, tunnels, mines and culverts. As such habitat constraints are not present within the Subject Land, this species was excluded from the assessment as it does not meet the SAI threshold for this species.	No	NA	Very High - 3	No

5.3 Targeted Species Credit Surveys

5.3.1 Fauna Species Credit Survey

A total of four (4) SAI threatened fauna species were identified within the BAMC (DPE 2021a) as having the potential to occur within the Subject Land. All four (4) species were excluded from assessment due to the following:

- Species are considered unlikely to occur and no further assessment is required for that species if it is determined that no habitat constraints are present on the entire Subject Land for the threatened species (as per Section 5.2.2 of the BAM, DPIE 2020a).

5.3.2 Flora Species Credit Survey

No threatened flora species were identified within the BAMC (DPIE 2021a) as having the potential to occur within the Subject Land or were incidentally located during the site assessment.

5.4 Species Polygons

No SAI species credits species were present or assumed present within the Subject Land, therefore no Species Polygons are required.

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 9**.

Table 9. 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
Habitat of threatened entities including: <ul style="list-style-type: none"> ▪ karst, caves, crevices, cliffs, rocks and other geological features of significance, or ▪ human-made structures, or ▪ non-native vegetation 	Yes	<p>There are no karsts, caves, crevices, cliffs and other features of geological significance on or near the Subject Land.</p> <p>The Subject Land contains a number of buildings that will be demolished as part of the development. Although the exterior of these buildings do not appear to have any obvious entry points that would provide access to habitat for threatened microbats, this cannot be confirmed without survey. A number of threatened microbat species may utilise these human-made structures for roosting and breeding, including:</p> <ul style="list-style-type: none"> ▪ <i>Falsistrellus tasmaniensis</i> (Eastern False Pipistrelle); ▪ <i>Micronomus norfolkensis</i> (Eastern Coastal Free-tailed Bat); ▪ <i>Saccolaimus flaviventris</i> (Yellow-bellied Sheath-tail-bat); and ▪ <i>Scoteanax rueppellii</i> (Greater Broad-nosed Bat). <p>Non-native vegetation within the Subject Land is not expected to provide habitat for threatened species, considering it mostly constituted of manicured gardens.</p>
On areas connecting threatened species habitat, such as movement corridors	No	<p>It is unlikely the proposed development will interrupt connectivity for any threatened species, particularly as the Subject Land is already highly fragmented, and connectivity will continue to exist in vegetation in the Subject Property and broader locality, mainly in the form of planted gardens and street trees, similar to the habitat found within the Subject Land.</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
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 groundwater processes within the surrounding landscape, particularly as the Subject Land is already largely altered and contains numerous hard surfaces and buildings.
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	Due to the nature of the proposed development, it is highly unlikely that vehicle strikes will be an issue given the slow speed requirements of vehicles within the hospital grounds.

7. Avoid, Minimisation, Mitigation and Management of Impacts

This section details the measures to be implemented before, during and post construction to avoid, minimise, mitigate and manage the impacts of the project (Table 10).

Table 10. Table of measures to be implemented before, during and after construction to avoid, minimise, mitigate and manage the impacts of the project.

Action	Outcome	Timing	Responsibility
Project Location and Design (Avoid and Minimise)	The development has been strategically positioned to minimise impacts on native vegetation and habitat as much as possible. The location of the Subject Property is within a highly degraded landscape, comprising a hospital and associated hardstands amongst areas of primarily planted native and exotic canopy trees and gardens.	Pre-construction phase	Proponent
Preparation of a Construction Environmental Management Plan (CEMP)	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
Tree Protections	<p>Australian Standard 4970 (2009) 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 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. 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>	Pre-construction phase	Proponent Arborist

Action	Outcome	Timing	Responsibility
	Tree protection fencing is to be installed around all trees to be retained prior to any works commencing.		
Assigning a Project Ecologist for vegetation clearing	<p>Prior to construction, the applicant should commission the services of a qualified and experienced Ecologist Consultant (minimum 3 years' experience) 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"> ▪ Undertake an extensive pre-clearing survey, delineating habitat-bearing trees and shrubs to be retained/removed; ▪ Undertake a pre-clearing survey within the roof cavity of existing buildings prior to demolition to determine the location of any microbat roost sites, and relocate microbats if required. If a breeding colony is present, microbat relocation and demolition should be undertaken outside of the breeding season; ▪ Supervise the clearance of trees and shrubs (native and exotic) in order to capture, treat and/or relocate any displaced fauna. This extends to any vegetation to be impacted outside of the Subject Land (e.g. incursion of the structural root zone). 	Prior to and during vegetation clearance and demolition works	Proponent Project Ecologist
Landscaping	The proposed Tree Replacement Plan (Jacobs 2022a) comprises of a diverse range of native species across canopy and mid-stratum which will re-create canopy corridors that will be impacted by the works. This plan includes the removal of weeds and HTEs such as <i>Cinnamomum camphora</i> (Camphor Laurel) to be replaced by native species, which is a net gain for biodiversity overall.	Construction phase; Post-construction phase	Proponent Landscaper / Landscape Architect
Erosion and Sedimentation	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).	Construction phase	Proponent Construction Contractor
Erection of temporary fencing	Temporary fencing should be erected around retained native vegetation that may incur indirect impacts on biodiversity values due to the construction works. This includes all vegetation outside of the Subject Land that is in residential backyards.	Construction phase	Proponent Construction Contractor
Storage and Stockpiling (Soil and Materials)	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	Construction phase	Construction Contractors

Action	Outcome	Timing	Responsibility
	weeds and pathogens to the site in order to avoid the potential of incurring indirect impacts on biodiversity values.		
Stormwater	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

The proposed development will result in impacts the following vegetation:

- 0.05ha of PCT 1778 Smooth-barked Apple - Coast Banksia / Cheese Tree open forest on sandstone slopes on the foreshores of the drowned river valleys of Sydney; and
- 0.75ha of planted native and exotic vegetation

8.1 Prescribed Impacts

As there is potential for the Subject Land to contain habitat for a number of threatened microbat species in the form of human-made structures, an assessment of this prescribed impact must be undertaken in accordance with Section 8.3 of the BAM (DPIE 2020a). This is discussed in **Table 11**.

Table 11. 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
Habitat of threatened entities (human-made structures)	<p>There is the potential that threatened microbat species use buildings (in particular, roof cavities) within the Subject Land for roosting and potentially breeding. The demolition of these buildings 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 suitable roosting/breeding habitat nearby.</p> <p>To manage these impacts, a pre-clearing survey for microbats in the roof space 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"> ▪ <i>Falsistrellus tasmaniensis</i> (Eastern False Pipistrelle) ▪ <i>Micronomus norfolkensis</i> (Eastern Coastal Free-tailed Bat) ▪ <i>Saccolaimus flaviventris</i> (Yellow-bellied Sheathtail-bat) ▪ <i>Scoteanax rueppellii</i> (Greater Broad-nosed Bat). 	While the demolition of potential roost/breeding 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. Habitat connectivity will continue to exist in the locality through streets trees and planted vegetation, which would provide alternative and potentially higher-quality roost/breeding sites for these species.

8.2 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 12**.

Table 12. Indirect impacts associated with the proposed development.

Indirect Impact	Nature, extent, frequency 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	The Subject Land however, is very well maintained, and will continue to be maintained post-construction. The vegetation adjacent to the Subject Land is already disturbed, comprising numerous exotic species. Nevertheless, there is the potential to impact native vegetation adjacent to the Subject Land through an increase of weeds.	The vegetation surrounding the Subject Land comprises of PCT 1778 and planted exotic / native vegetation that could be indirectly impacted by the proposal. Threatened species that may use vegetation adjacent to the Subject Land for foraging or roosting may be indirectly impacted by a decrease in habitat viability.	This potential impact is expected to be localised and will not have an overall impact on the bioregional persistence of threatened species.
(b) reduced viability of adjacent habitat due to edge effects	Due to the modified nature of vegetation within and surrounding the Subject Land, it is unlikely the proposed development will result in a reduction in the viability of adjacent habitat. This area of vegetation is already highly degraded, with large infestations of exotic weeds evident.	The vegetation surrounding the Subject Land comprises of PCT 1778 and planted exotic / native vegetation that could be indirectly impacted by the proposal.	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, frequency 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.
		Threatened species that may use vegetation adjacent to the Subject Land for foraging or roosting may be indirectly impacted by a decrease in habitat viability.	
(c) reduced viability of adjacent habitat due to noise, dust or light spill	<p>An increase in noise is to be expected during construction during, which may impact on species roosting or foraging in habitat adjacent to the site. 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. Post-construction it is expected that noise levels will return to normal levels for the locality.</p> <p>The construction may increase dust in adjacent habitat. Dust can impact on a plants ability to 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, particularly as dust suppression methods should be included in the CEMP prepared for the site.</p> <p>It is expected that the construction would occur during normal working hours, and as such light spill is not expected to affect adjacent habitat. As the Subject Property currently operates as a hospital, and will continue to do so after redevelopment, no change in light spill from the site is anticipated, as the species</p>	There is potential that threatened species use habitat adjacent to the Subject Land.	While the construction and operation of the precinct may have a localised impact to threatened species, this is not expected to impact on their bioregional persistence, considering large areas of habitat connectivity allowing their movement away from impacted areas.

Indirect Impact	Nature, extent, frequency 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.
	who area likely to utilise this area are those which commonly utilise urban areas.		
(d) transport of weeds and pathogens from the site to adjacent vegetation	As previously discussed, it is highly unlikely the proposed construction and on-going operation may lead to an increase in weed infiltration into adjacent habitat due to enhanced edge effects. It is not expected that weeds will be transported via human or vehicular traffic into surrounding areas during construction and operation of the precinct. Temporary fencing will be erected around retained native vegetation to avoid such indirect impacts occurring during construction.	N/A	N/A
(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 given that most of the site is already completely devoid of vegetation and is unsuitable for habitation. No habitat is to be removed beyond the Subject Land, although disturbances from noise during construction and operation may deem such habitats unsuitable for certain species. However, due to the large areas of habitat connectivity adjoining the Subject Land, it is unlikely that this impact will be significant as such habitats will continue to provide food resources and shelter for fauna species.	N/A	N/A
(f) loss of breeding habitats	An increase in noise is to be expected during construction. As such, there is potential for disturbance to breeding habitats directly adjacent to the Subject Land. However, due to the urban and public nature of the Subject Land and its surrounds,	There is potential that threatened species use habitat adjacent to the Subject Land.	While the construction and operation of the precinct may have a localised impact to threatened species, this is not expected to impact on their bioregional persistence, considering

Indirect Impact	Nature, extent, frequency 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.
	such impacts are not expected to be exacerbated by the proposal.		large areas of habitat connectivity allowing their movement away from impacted areas.
(g) trampling of threatened flora species	No threatened flora species were recorded within the Subject Land. Although no threatened flora species have been historically recorded in vegetated areas adjacent to the Subject Property, there is still the potential for such species to exist in these areas, albeit unlikely. However, due to the urban and public nature of the Subject Land and its surrounds, such impacts are not expected to be exacerbated by the proposal.	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) in adjacent vegetation increases during construction. The dumping/littering of food resources may provide a food source for fauna, including threatened species. However, this may also encourage invasive species into such habitats. This impact can be mitigated by the appropriate disposal of rubbish.	There is 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) and negative impacts (increase in predators) to such species.	This impact is expected to be localised and will not have an overall impact on the bioregional persistence of the threatened species.

Indirect Impact	Nature, extent, frequency 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.
(k) wood collection	This issue is not likely to affect the vegetation surrounding the Subject Land during and post-construction, particularly as the majority of vegetation surrounding the Subject Land cannot be accessed.	NA	NA
(l) bush rock removal and disturbance	This issue is not likely to affect the vegetation surrounding the Subject Land. No bush rock was observed within or adjacent to the Subject Land.	N/A	N/A
(m) increase in predatory species populations	There is potential that predatory species, such as foxes and cats, already inhabit areas within and surrounding the Subject Land, as it is highly urbanised and modified. It is therefore highly unlikely the development will result in an increase in predatory species populations, particularly as post-construction the site will be used in a similar.	N/A	N/A
(n) increase in pest animal populations	There is potential that pest animal populations already inhabit areas within and surrounding the Subject Land, as it is highly urbanised and modified. It is therefore highly unlikely the development will result in an increase in pest animal populations, particularly as post-construction the site will be used in a similar manner.	N/A	N/A
(o) increased risk of fire	It is not expected that the proposal will increase the risk of fire due to the already highly urbanised nature of the locality.	N/A	N/A

Indirect Impact	Nature, extent, frequency 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) disturbance to specialist breeding and foraging habitat, e.g., beach nesting for shorebirds.	No specialist breeding and foraging habitat was identified within or adjacent to the Subject Land. It is therefore not expected that the proposed development will disturb any specialist breeding and foraging habitat.	N/A	N/A

9. Thresholds for Assessing and Offsetting

9.1 Impacts on Native Vegetation

The proposed development will result in impacts the following vegetation:

- 0.05ha of PCT 1778 Smooth-barked Apple - Coast Banksia / Cheese Tree open forest on sandstone slopes on the foreshores of the drowned river valleys of Sydney; and
- 0.75ha of planted native and exotic vegetation

Due to the low condition of PCT 1778, there is no requirement for the purchase and retirement of Biodiversity Offset Credits, as the vegetation integrity score for this zone was too low.

As per Appendix L of the BAM (DPIE 2020a), impacts to areas of planted native vegetation are not required to be assessed any further under this chapter and no credits are required to be purchased and retired.

9.2 Impacts on Threatened Species

No threatened species are expected to be impacted by the proposal.

9.3 Serious and Irreversible Impacts (SAIL's)

No threatened species at risk of an SAIL are present within the Subject Land, therefore a determination of whether or not the proposed impacts are serious and irreversible is not required.



Figure 12. Impacts on native vegetation and offset requirements.

10. Biodiversity Offset Credit Requirements

10.1 Offset Requirement for Ecosystem Credits

No ecosystem credits are required to offset the biodiversity impacts of the proposed development.

10.2 Offset Requirement for Species Credits

No species credits are required to offset the biodiversity impacts of the proposed development.

11. Other Relevant Legislation and Planning Policies

11.1 State Environmental Planning Policy (Biodiversity and Conservation) 2021: Chapter 2 – Vegetation in Non-rural Areas

Chapter 2 of the SEPP regulates the clearing of native vegetation on urban land and land zoned for environmental conservation/management that does not require development consent. As the vegetation clearing associated with the proposed development requires development consent this chapter of the SEPP does not apply to the proposed development.

11.2 State Environmental Planning Policy (Biodiversity and Conservation) 2021 – 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. As the City of Sydney LGA is not included in Schedule 2, this chapter does not apply.

11.3 State Environmental Planning Policy (Biodiversity and Conservation) 2021 – Chapter 6: Bushland in Urban Areas

This chapter of the SEPP applies to the areas and parts of areas specified in Schedule 5 of the SEPP that adjoin bushland zoned or reserved for public open space purposes. The Sydney LGA is included in Schedule 5 of the SEPP, however the Subject Property is not located adjacent to land which is bushland zoned or reserved for public open space purposes, therefore this chapter does not apply to the Subject Land.

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

This Chapter of the SEPP 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;
- the coastal vulnerability area;
- the coastal environment area; or
- the coastal use area.

As the Subject Land does not occur within any of these listed areas, this SEPP does not apply.

12. References

Australian Government Department of the Environment and Energy (2018) Interim Biogeographic Regionalisation for Australia (IBRA), Version 7 (Subregions)

Australian Standard 4970 (2009) Protection of Trees on Development Sites

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Biodiversity Conservation Regulation (2017) <https://www.legislation.nsw.gov.au/#/view/regulation/2017/432>

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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.

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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 and Environment (DPE) (2021a) Biodiversity Assessment Method Calculator Version 1.4.0.00

Department of Planning and Environment (DPIE) (2022a) NSW BioNet. The website of the Atlas of NSW Wildlife <http://www.bionet.nsw.gov.au/>

Department of Planning and Environment (DPE) (2022b) NSW BioNet. Threatened Biodiversity Data Collection

Department of Planning and Environment (DPE) (2022c) NSW BioNet. Vegetation Classification System

Department of Planning and Environment (DPIE) (2022d) Soil Landscapes <http://espade.environment.nsw.gov.au>

Department of Planning and Environment (DPIE) (2022e) Biodiversity Values Map and Threshold Tool. <https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BOSETMap>

Google (2022) Google Earth Pro: Royal Prince Alfred Hospital

Jacobs (2022a) Royal Prince Alfred Hospital Development: Tree Retention and Removal Plan

Jacobs (2022b) Royal Prince Alfred Hospital Development: Concept Design Plan Level Roof

Jacobs (2022c) Royal Prince Alfred Hospital Development: Temporary Helicopter Pad

Jacobs (2022d) Royal Prince Alfred Hospital Development: SSDA Works Area Plan

Landcom (2004) Managing Urban Stormwater: Soils and Construction 'The Blue Book', Volume 1, Fourth Edition, New South Wales Government, ISBN 0-9752030-3-7

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<http://plantnet.rbgsyd.nsw.gov.au>

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

Threatened Species Scientific Committee (2016) Conservation Advice: *Lathamus discolor* - Swift Parrot
<https://www.environment.gov.au/biodiversity/threatened/species/pubs/744-conservation-advice-05052016.pdf>

Turf Design Studio (2022) RPA Hospital Redevelopment: tree Replantation Strategy.

13. Appendices

Appendix A. Tree Retention and Removal Plan (Jacobs 2022a).

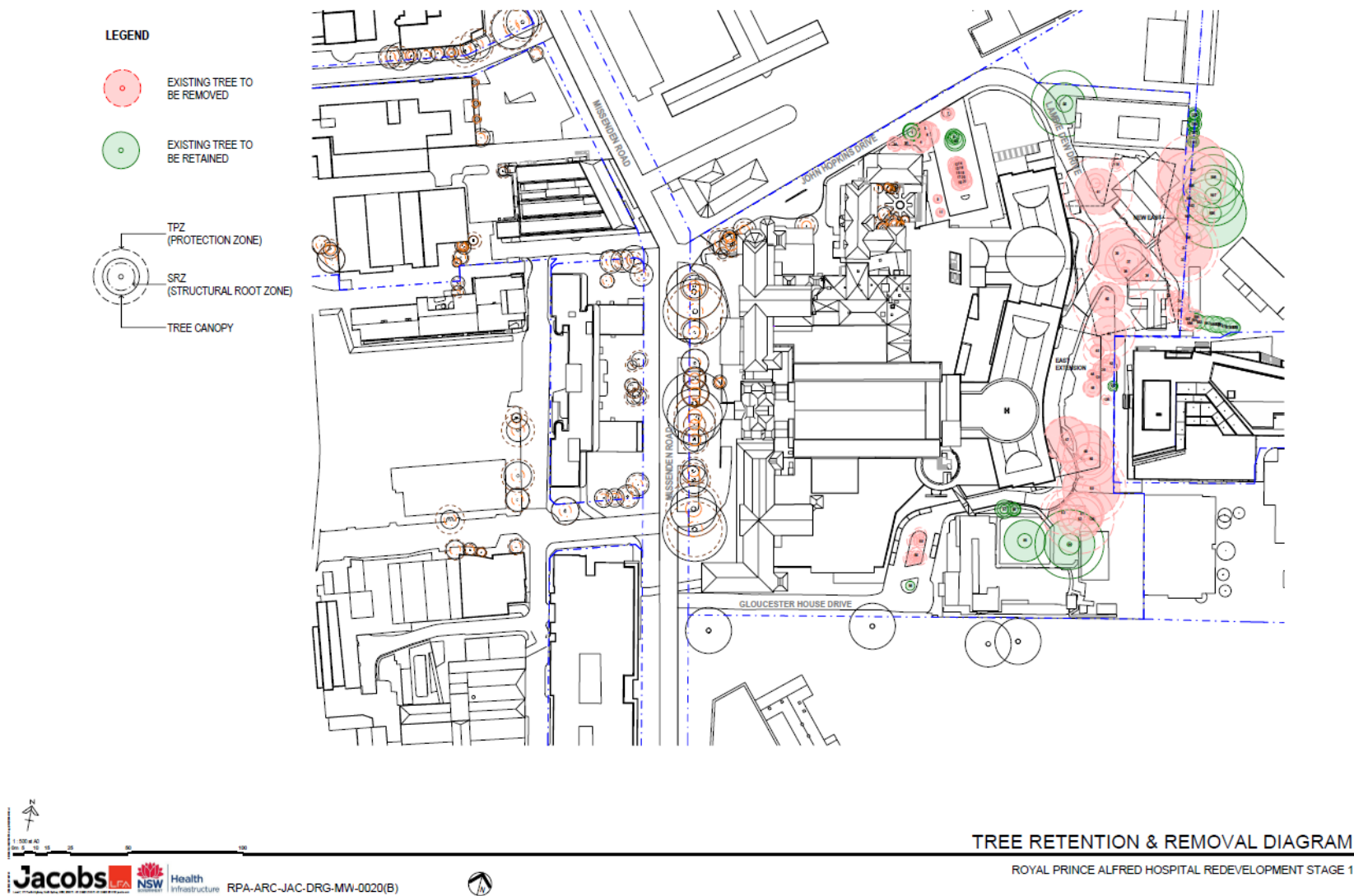
Appendix B. Concept Design (Jacob 2022b).

Appendix C. Temporary Helicopter Pad – Impact Area (Jacobs 2022c).

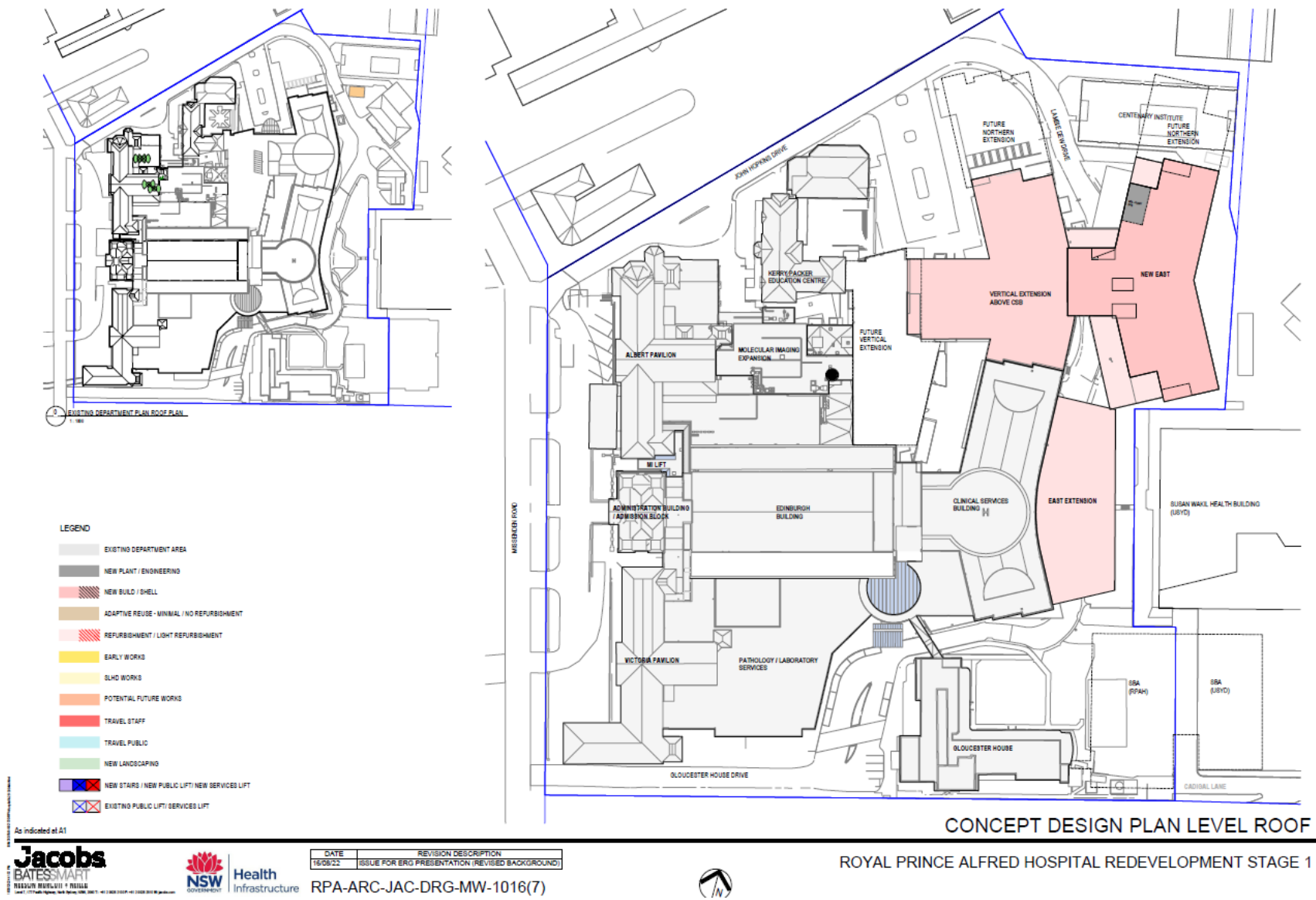
Appendix D. BAM Site - Field Survey Forma (copied directly from Electronic Data Sheet).

Appendix E. BAMC Generated Biodiversity Credit Report.

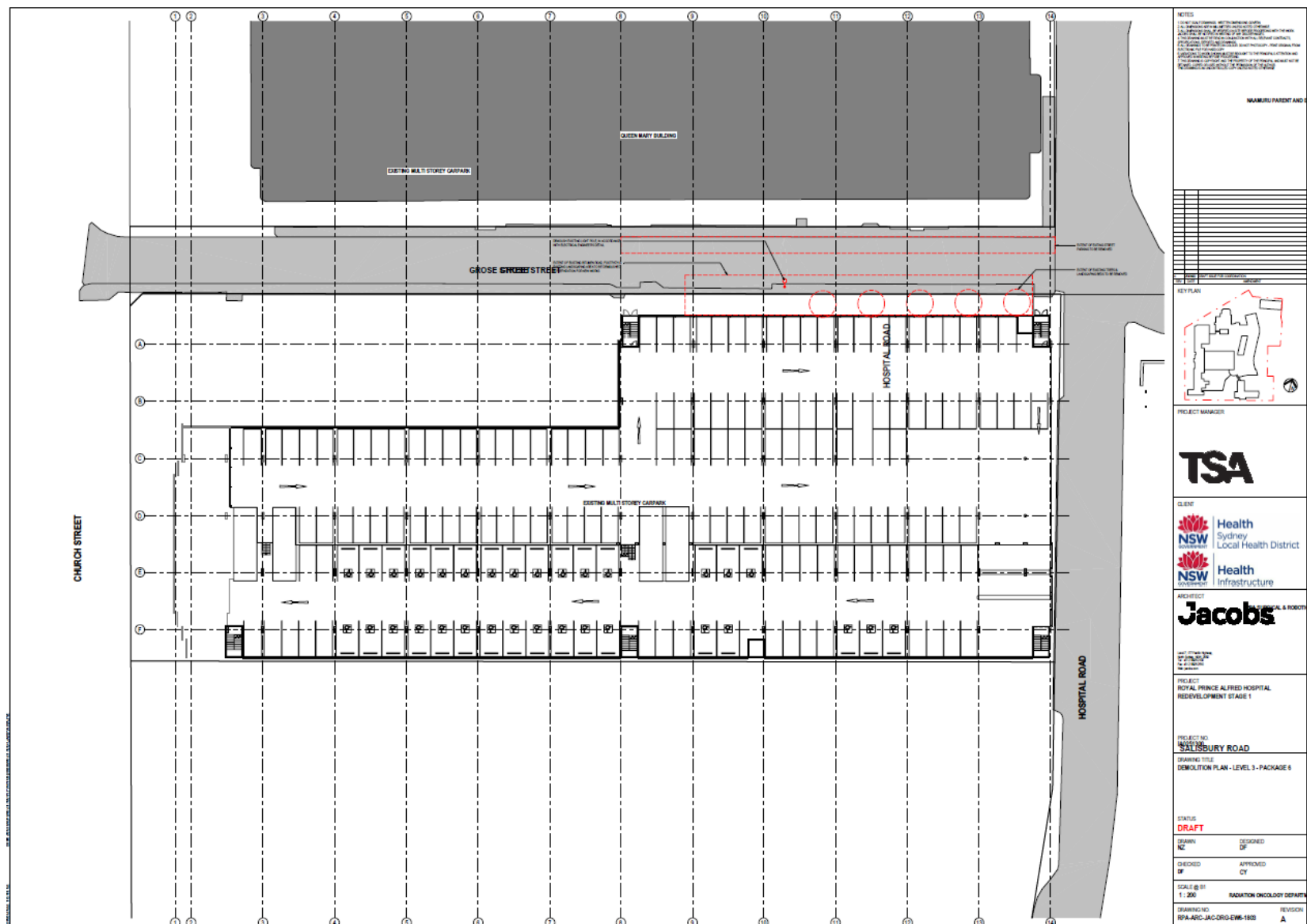
Appendix A. Tree Retention and Removal Plan (Jacobs 2022a).



Appendix B. Concept Design (Jacob 2022b).



Appendix C. Temporary Helicopter Pad – Impact Area (Jacobs 2022c).



Appendix D. BAM Site - Field Survey Form (copied directly from Electronic Data Sheet).

BAM Site – Field Survey Form					
Date:	16.08.2022	Plot ID:	1	Photo #:	-
Zone:	56	Plot Dimensions:	20 x 25	Easting:	332079
Datum:	GDA 94	Middle bearing from 0m:	159	Northing:	6248600
PCT:	PCT 1778: Smooth-barked Apple - Coast Banksia / Cheese Tree open forest on sandstone slopes on the foreshores of the drowned river valleys of Sydney				
Growth Form	Scientific Name	Cover	Abundance		
Exotic	<i>Corymbia citriodora</i>	2	1		
HTE	<i>Cinnamomum camphora</i>	40	10		
Other (OG)	<i>Livistona australis</i>	2	10		
Other (OG)	<i>Howea forsteriana</i>	1	1		
Exotic	<i>Rhapis excelsa</i>	0.1	3		
Exotic	<i>Celtis sinensis</i>	1	10		
Exotic	<i>Cedrus atlantica</i>	2	1		
Tree (TG)	<i>Acmena smithii</i>	0.5	1		
Fern (EG)	<i>Platycerium spp.</i>	0.1	5		
HTE	<i>Cestrum parqui</i>	0.5	15		
Exotic	<i>Dietes grandiflora</i>	0.1	1		
HTE	<i>Ehrharta erecta</i>	0.5	50		
Exotic	<i>Cordyline fruticosa</i>	1	10		
Exotic	<i>Agapanthus spp.</i>	20	150		
Exotic	<i>Camellia japonica</i>	1	4		
Exotic	<i>Aspidistra elatior</i>	0.1	10		
Tree (TG)	<i>Melia azedarach</i>	0.5	3		
Exotic	<i>Ctenanthe lubbersiana</i>	0.1	1		
Exotic	<i>Solanum nigrum</i>	0.1	10		
Exotic	<i>Monstera deliciosa</i>	2	20		
Exotic	<i>Parietaria judaica</i>	0.5	100		
Exotic	<i>Ravenala madagascariensis</i>	1	5		
Exotic	<i>Jacaranda mimosa</i>	1	1		
Exotic	<i>Stellaria media</i>	0.5	50		
Other (OG)	<i>Cordyline stricta</i>	1	10		
DBH	# Tree Stems Count	# Hollow Bearing Trees			
80+cm	Absent	0			
50-79cm	Absent				
30-49cm	Absent				
20-29cm	Absent				
10-19cm	Present				
5-9cm	Absent	-			
<5cm	Absent				
Length of Logs (m)		0			

BAM Attribute (1x1m)		Litter Cover (%)
1 (5m)		0.5
2 (15m)		80
3 (25m)		70
4 (35m)		90
5 (45m)		5
Average		49.1
Growth Form	Composition Data	Structure Data
	(Count of Native Cover)	(Sum of Cover)
Tree	2	1
Shrub	0	0
Grass	0	0
Forb	0	0
Fern	1	0.1
Other	3	4
High Threat Exotics	3	41



BAM Biodiversity Credit Report (Like for like)

Proposal Details

Assessment Id	Proposal Name	BAM data last updated *
00035339/BAAS21009/22/00035340	RPA Hospital	16/06/2022
Assessor Name	Assessor Number	BAM Data version *
Christopher Moore	BAAS21009	54
Proponent Names	Report Created	BAM Case Status
	11/10/2022	Finalised
Assessment Revision	Assessment Type	Date Finalised
0	Part 4 Developments (Small Area)	11/10/2022
BOS entry trigger	* 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.	
BOS Threshold: Area clearing threshold		

Potential Serious and Irreversible Impacts

Name of threatened ecological community	Listing status	Name of Plant Community Type/ID
Nil		
Species		
Nil		

Additional Information for Approval

Assessment Id	Proposal Name	Page 1 of 4
00035339/BAAS21009/22/00035340	RPA Hospital	



BAM Biodiversity Credit Report (Like for like)

PCT Outside Ibra Added

None added

PCTs With Customized Benchmarks

PCT

No Changes

Predicted Threatened Species Not On Site

Name

Calyptrorhynchus lathami / Glossy Black-Cockatoo

Haliaeetus leucogaster / White-bellied Sea-Eagle

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
1778-Coastal sandstone foreshores forest	Not a TEC	0.1	0	0	0

Assessment Id

00035339/BAAS21009/22/00035340

Proposal Name

RPA Hospital

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BAM Biodiversity Credit Report (Like for like)

1778-Coastal sandstone foreshores forest	Like-for-like credit retirement options					
	Class	Trading group	Zone	HBT	Credits	IBRA region
	Sydney Coastal Dry Sclerophyll Forests This includes PCT's: 1778	Sydney Coastal Dry Sclerophyll Forests >=90%	1778_Low_Condition	No	0	Cumberland, Burragorang, Pittwater, Sydney Cataract, Wollemi and Yengo. or Any IBRA subregion that is within 100 kilometers of the outer edge of the impacted site.

Species Credit Summary

No Species Credit Data

Credit Retirement Options

Like-for-like credit retirement options

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BAM Biodiversity Credit Report (Like for like)

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Proposal Name

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