

Our ref: SSD-71368959

Mr Guy Smith  
Head of Planning  
Goofmand Property Services Pty Ltd  
1-11 Hayes Road  
ROSEBERY NSW 2018

Email: [Guy.Smith@goodman.com](mailto:Guy.Smith@goodman.com)

10 June 2025

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Subject: Request to waive requirement to prepare a Biodiversity Development Assessment Report

Dear Mr Smith

I refer to your correspondence dated 14 April 2025, which relates to the State significant development (SSD) application for the Project Duke Data Centre, Mascot (SSD-71368959) which is currently under consideration by the Department of Planning, Housing and Infrastructure (the Department).

I understand you are seeking a further waiver to the requirement to prepare a biodiversity development assessment report (BDAR) to support your amended SSD application to include the land inclusion of 685 Gardners Road (Lot 2 DP529177), pursuant to section 7.9(2) of the *Biodiversity Conservation Act 2016*.

### Description of the proposed development

The amended development involves the demolition of existing site buildings and the construction and operation of data centre at 2-22 Kent Road and 685 Gardeners Road, Mascot, NSW as described in the BDAR waiver application prepared by SLR Consulting Australia and dated 20 March 2025.

### BDAR waiver determination

Under section 7.9(2) of the Biodiversity Conservation Act 2016 (BC Act):

*“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 the biodiversity values”.*

The Conservation Programs, Heritage and Regulation (CPHR) Group delegate of the Secretary of the Department of Climate Change, Energy, the Environment and Water has considered the waiver request and is satisfied the proposed development is not likely to have any significant impact on biodiversity values. Accordingly, the delegate has granted a waiver in a determination dated 19 May 2025.

As delegate of the Planning Secretary within the Department, I have considered the waiver request and determination of the CPHR Group and determined the proposed development as described above, is not likely to have any significant impacts on biodiversity values (see determination attached dated 10 June 2025). Therefore, a BDAR is not required.

If there are any amendments to the proposed development, a fresh request for a BDAR waiver determination will be required or a BDAR may need to be prepared.

While a BDAR is not required for the proposed development, an assessment of the proposal's biodiversity impacts is still required and should be addressed as part of any Amendment Report submitted in support of the application.

Should you have any further enquiries, please contact Jeremy Kirchner at the Department on (02) 8275 1360 or [jeremy.kirchner@dpie.nsw.gov.au](mailto:jeremy.kirchner@dpie.nsw.gov.au).

Yours sincerely,



**Catriona Shirley**  
**Team Leader**  
**Industry Assessments**

as delegate of the Planning Secretary

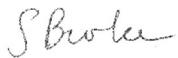
Enclosed:

Attachment	Title
1	Determination, DCCEEW
2	Determination, Department

## Recommendation

It is recommended that the delegated officer:

- Considers the matters set out in this report; and
  - determines that the proposed development is not likely to have any significant impact on biodiversity values and therefore a BDAR is not required
  - ~~determines that, based on the information provided, it cannot be concluded that the proposed development is not likely to have any significant impact on biodiversity values and therefore a BDAR is required.~~



19/5/2025

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Sarah Burke  
Senior Team Leader  
Compliance & Regulation, Greater Sydney Branch  
Regional Delivery Conservation Programs, Heritage, and Regulation Group

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Date

## Decision

I, Louisa Clark, Director Greater Sydney, of the Department of Climate Change, Energy, the Environment and Water, having reviewed this report and the documents attached to it:

- A. **determine** under section 7.9(2) of the *Biodiversity Conservation Act 2016* that the proposed development as described in DOC25/385677 and Schedule 1 is not likely to have any significant impact on biodiversity values and therefore a BDAR is not required
- B. ~~**determine** that, based on the information provided, it cannot be concluded that the proposed development as described in DOC25/385677 and Schedule 1 is not likely to have any significant impact on biodiversity values and therefore a BDAR is required.~~



23/05/2025

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Louisa Clark  
Director Greater Sydney Branch  
Regional Delivery Conservation Programs, Heritage, and Regulation Group

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Date

***Determination under section 7.9(2) of the Biodiversity Conservation Act 2016***

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I, Catriona Shirley, A/Team Leader, Industry Assessments, of the Department of Planning, Housing and Infrastructure, under section 7.9(2) of the *Biodiversity Conservation Act 2016*, determine the amended development is not likely to have any significant impact on biodiversity values and therefore a Biodiversity Development Assessment Report is not required.

**Amended development** proposal means the demolition of existing site buildings and the construction and operation of the proposed data centre at 2-22 Kent Road and 685 Gardeners Road, Mascot, NSW as described in the updated BDAR waiver application prepared by SLR Consulting Australia and dated 20 March 2025.

If the proposed development changes so that it is no longer consistent with this description, a further waiver request, or preparation of a BDAR, is required.



10 June 2025

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**Catriona Shirley**  
**A/Team Leader**  
**Industry Assessments**  
**Department of Planning, Housing and Infrastructure**  
(as delegate of the Planning Secretary)

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**Date**



# BDAR Waiver Request

**Project Duke -  
Proposed Data Centre at 2-22 Kent Road and 685  
Gardeners Road, Mascot**

## **Goodman Property Services (Aust) Pty Ltd**

The Hayesbery  
1-11 Hayes Road, Rosebery  
Sydney NSW, 2018

Prepared by:

### **SLR Consulting Australia**

Tenancy 202 Submarine School, Sub Base  
Platypus, 120 High Street, North Sydney NSW  
2060, Australia

SLR Project No: 630.031653.00001

20 March 2025

Revision: 3.0

## Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
V3.0	20 March 2025	Vander Bertoldo	Fiona Iolini	Jeremy Pepper
V2.0	18 June 2024	Vander Bertoldo	Fiona Iolini	Jeremy Pepper
V1.0	3 June 2024	Vander Bertoldo	Fiona Iolini	Jeremy Pepper

## Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, taking account of the timescale and resources allocated to it by agreement with Goodman Property Services (Aust) Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.



## Table of Contents

<b>Basis of Report .....</b>	<b>i</b>
<b>1.0 Introduction .....</b>	<b>3</b>
<b>2.0 Information Requirements .....</b>	<b>4</b>
<b>3.0 Assessment of Impacts on Biodiversity Values.....</b>	<b>8</b>
<b>4.0 Conclusion.....</b>	<b>12</b>
<b>5.0 References.....</b>	<b>13</b>

## Tables in Text

Table 1	BDAR waiver request information requirements .....	4
Table 2:	Impacts of the proposed development on biodiversity values .....	8

## Figures in Text

Figure 1: Location Map .....	6
Figure 2: Site Map.....	7

## Appendices

<b>Appendix A</b>	<b>Historic Aerial Imagery</b>
<b>Appendix B</b>	<b>Site Plans</b>
<b>Appendix C</b>	<b>Arborist Report</b>
<b>Appendix D</b>	<b>BMAT Report</b>
<b>Appendix E</b>	<b>BioNet Atlas Search Results</b>
<b>Appendix F</b>	<b>Site Photos</b>



## 1.0 Introduction

In June 2024, SLR prepared a Biodiversity Development Assessment Report (BDAR) waiver request in relation to a proposed data centre (SSD-71368959) at 2-22 Kent Road, Mascot, NSW. Goodman Property Services (Aust) Pty Ltd (Goodman) is now preparing a design revision which will involve expanding the proposed data centre facility at 2-22 Kent Road to also include 685 Gardeners Road, Mascot, NSW.

The proposed State Significant Development (SSD) will involve demolition of existing site buildings and landscaping. Goodman are once again seeking to waive the requirements for the preparation of a BDAR.

The subject land is approximately 2.4ha and includes Lot 1 in DP1009083, Lot 1 DP529177 and Lot 2 DP529177. Street frontages include Kent Road to the east, Ricketty Street to the south and Gardeners Road to the north. The subject land is located wholly within the Bayside Council, Local Government Area (LGA). Existing land use comprises commercial warehouse units and site zoning is E3 Productivity Support.

The subject land is not mapped by the Biodiversity Values Map and Threshold Tool (NSW DCCEEW 2025b), as containing land with high biodiversity value and according to regional state vegetation type mapping (NSW DCCEEW 2020) there is no native vegetation mapped on or near the subject land.

The descriptions of the site's biodiversity outlined in this BDAR waiver request are supported by two site surveys conducted by a suitably qualified ecologist on 1 May 2024 (covering 2-22 Kent Road only) and 26 February 2025 (including 685 Gardeners Road).

The following sections specifically address the information requirements of the DPIE (2019) *"How to apply for a Biodiversity Development Assessment Report Waiver for a Major Project Application"* guidelines (the 'BDAR waiver guidelines') and the latest web advice provided by the NSW Government (NSW DCCEEW 2025a). The report has been structured to respond to the Departments request for:

- Table 1 BDAR waiver request information requirements
- Table 2 Impacts of the proposed development on biodiversity values
- Attachments including additional supporting documentation where appropriate





## 2.0 Information Requirements

The BDAR waiver request information requirements are addressed in Table 1 below.

**Table 1 BDAR waiver request information requirements**

Type	Information Requirement	Project Information
Administration	<i>Proponent name and contact details</i>	The proponent is Goodman Property Services (Aust) Pty Ltd. The project contact is Athena Vercoe (0406 780 961, 11 Hayes Road, Rosebery NSW 2018).
	<i>Project ID (Information to identify which SSD or SSI project the request relates to and where the project is up to in the assessment process).</i>	The Project ID is SSD-71368959. SEARs have been received and an EIS is in preparation.
	<i>Name and ecological qualifications of person completing Table 2</i>	The primary author of Table 2 is Vander Bertoldo. Vander has a Bachelor's Degree in Biological Science (Honours), (UNESC University, 2013) and a Masters in Marine and Environmental Science, (SCU University, 2022).  The secondary author and reviewer of Table 2 is Fiona Iolini. Fiona has a Bachelor of Environmental Science and Management (University of Newcastle, 2007) and is a BAM Accredited Assessor (BAAS19042 2019).
Site Details	<i>Street address, Lot and DP, local government area</i>	The subject land is in the suburb of Mascot within the Bayside City Council local government area and includes the following properties: <ul style="list-style-type: none"> <li>• Lot 1 DP1009083 (10-22 Kent Road)</li> <li>• Lot 1 DP529177 (2 Kent Road)</li> <li>• Lot 2 DP529177 (685 Gardeners Road)</li> </ul>
	<i>Description of the existing development site, i.e., the area of land that is subject to the proposed development application. If any part of the land is considered 'Category 1– exempt land' information must be provided to demonstrate how the land meets the criteria that apply to Category 1 – Exempt Land.</i>	The proposed development is located within an existing longstanding commercial warehouse unit and the subject land and adjoining properties have been subject to historic clearing and development activities (see historic aerial imagery in Appendix A). Most of the land is covered by buildings, with limited vegetation in the form of planted trees and small gardens found around the site's periphery and car parks. The subject land is not 'Category 1 exempt land'.
	<i>Location map showing the development site in the context of surrounding areas and landscape features. Satellite image of the site in the context of adjoining sites.</i>	See Figure 1
	<i>Site Map (to scale, ideally as a spatial shapefile).</i>	See Figure 2
Proposed Development	<i>Project description providing enough information to enable an understanding of the nature and scale of the proposed development and any associated activities, including construction.</i>	The proposed development seeks approval for the construction and ongoing operation of a data centre facility. Demolition of buildings and vegetation will be required to facilitate construction of the proposed development.
	<i>Proposed Site Plan</i>	Refer to Appendix B for site plans and Appendix C for the preliminary arboriculture report.

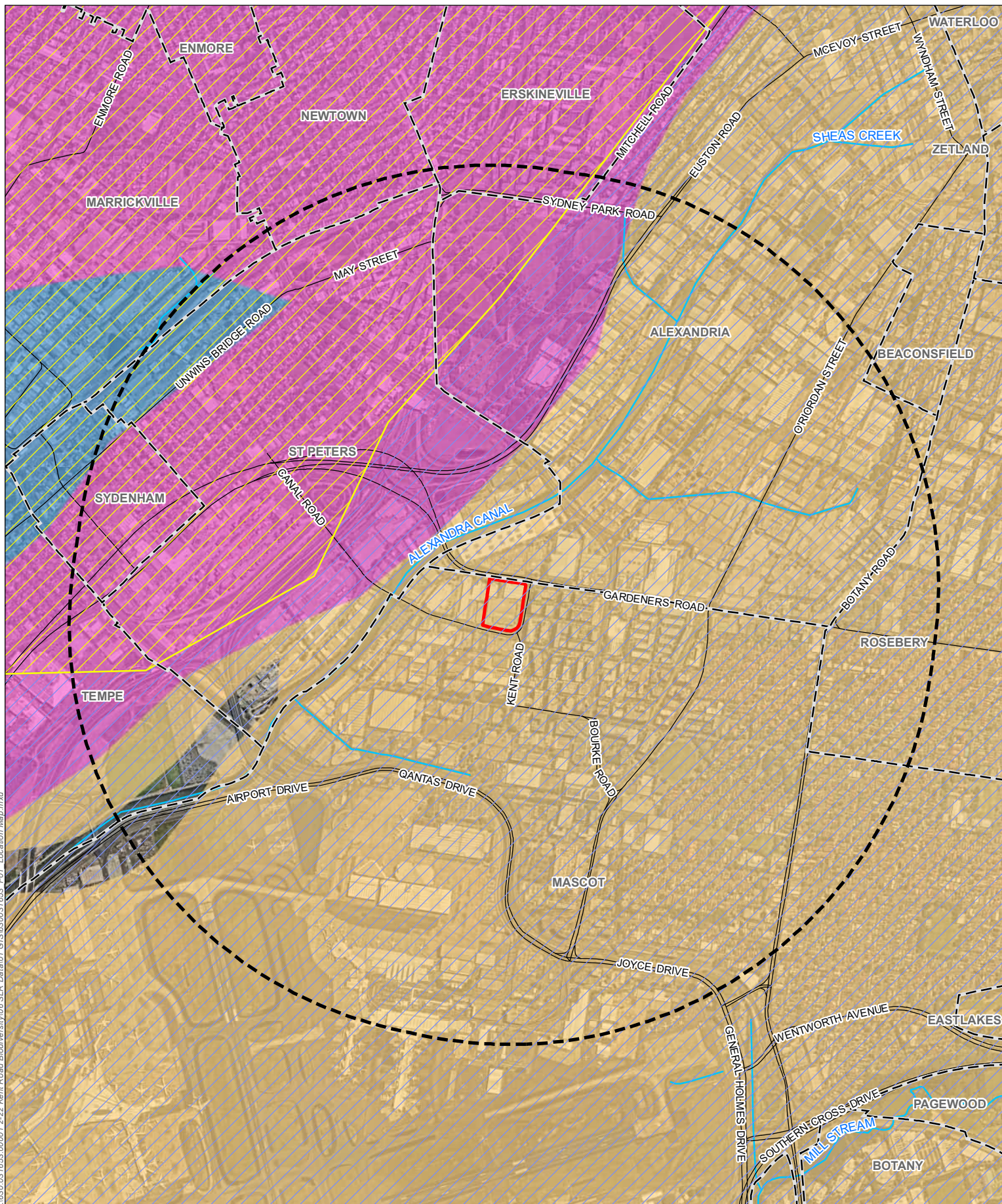


Type	Information Requirement	Project Information
Impacts on biodiversity values	<p>Complete Table 2 below on Biodiversity Values. For each biodiversity value, the proponent must either:</p> <ul style="list-style-type: none"> <li>explain why the value is not relevant to the proposed development.</li> <li>where a biodiversity value may be relevant, provide an explanation of how impacts have been avoided and identify the likelihood and extent of any remaining impacts of the proposed development, including impacts prescribed under clause 6.1 of the BC Regulation.</li> </ul> <p>A biodiversity value is not relevant to a proposed development if the value is not present on the development site and there is no potential for direct or indirect impacts on the biodiversity value if it occurs off-site.</p>	<p>The subject land is situated in a densely populated urban area with limited native vegetation.</p> <p>The site contains buildings and planted vegetation which are assessed as potential threatened species habitat in Table 2.</p>
	<p>Where one or more biodiversity values may be relevant to the proposed development, Table 2 is to be completed by a suitably qualified person with tertiary qualifications in natural sciences including subjects that relate to the observation and description of terrestrial biodiversity and landforms, and at least three years of work experience in environmental assessment including field identification of plant and animal species and habitats. The person does not need to be an accredited person under the BC Act.</p>	<p>As detailed in the administration section above, Table 2 has been completed by suitably qualified ecologists Vander and Fiona. Vander has 4 years and Fiona has 17 years of ecological consulting experience.</p>
	<p>Attach any additional information required where biodiversity values are relevant to the site. E.g. Vegetation Map (indicating plant community types), Ecology Reports, Water Quality data, BioNet Atlas, Directory of Important Wetlands (DIWA), and migratory bird flyway information.</p>	<p>The following appendices are attached:</p> <ul style="list-style-type: none"> <li>A - Historic Aerial Imagery</li> <li>B - Site Plans</li> <li>C - Arborist Report</li> <li>D - BMAT Report</li> <li>E - Bionet Atlas Search Results</li> <li>F - Site Photos</li> </ul>





\\slr.local\Corporate\Projects\SLR\630-Sydney\NTL\630-03\653-000011-2-22 Kent Road Biodiversity\06 SLR\_Data\01 GIS\630031653\_F01\_Location Map.mxd



0 250 500 m






Coordinate System: GDA2020 MGA Zone 56

Scale: 1:18,000 at A4



Project Number: 630.031653

Date: 29-May-2024

Drawn by: JG

-  Watercourses
-  Major Roads
-  Buffer 1500m (793.983 Ha)
-  Subject Land
-  Suburbs

#### IBRA Sub-region

-  Cumberland
-  Pittwater

#### Mitchell Landscapes

-  Ashfield Plains
-  Port Jackson Basin
-  Sydney - Newcastle Barriers and Beaches

## 2-22 KENT ROAD BDAR WAIVER

### Location Map







Data Sources:  
NSW Spatial Information Exchange database, Nearmap imagery WMS (March 2025)

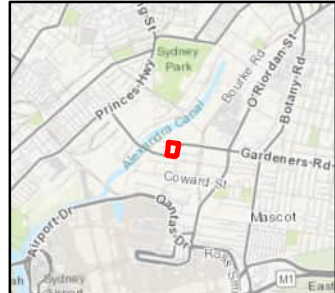
FIGURE 1





 0 25 50 m  
Coordinate System: GDA2020 MGA Zone 56  
Scale: 1:1,500 at A4  
Project Number: 630.031653  
Date: 20-Mar-2025  
Drawn by: JG

 Contours (1m)  
 Subject Land  
 Property Boundaries



**2-22 KENT ROAD  
BDAR WAIVER**

**Site Map**



Data Sources:  
NSW Spatial Information Exchange database,  
Nearmap imagery WMS (March 2025)

**FIGURE 2**



### 3.0 Assessment of Impacts on Biodiversity Values

Impacts of the proposed development on biodiversity values are addressed in Table 2 below.

**Table 2: Impacts of the proposed development on biodiversity values**

Biodiversity Value	Explain and document potential impacts including additional impacts prescribed under the BC Regulation	Potential Impacts
<b>Vegetation abundance 1.4(b) Biodiversity Conservation Regulation</b> Meaning: Occurrence and abundance of vegetation at a particular site	<p>Where vegetation is present on the development site, provide a map on digital aerial photography or the best available imagery of the development site showing:</p> <ul style="list-style-type: none"> <li>native vegetation (including grasslands and other non-woody vegetation types) and non-native vegetation.</li> <li>the area of land that is directly impacted by the proposed development, including related infrastructure such as roads, pipelines, access tracks, temporary material stockpiles, asset protection zones and powerlines, if applicable.</li> </ul> <p>Describe how the proposed development avoids impacts on native vegetation and identify the likelihood and extent of any remaining impacts including removal of isolated or cultivated native plants.</p>	<p>The assessment of 'vegetation abundance' is relevant because the subject land contains vegetation.</p> <p>Whilst there is no native vegetation on the subject land, there are cultivated native and exotic plants. Details of existing cultivated trees present within the subject land can be found in the attached arborist report (refer to Appendix C). The report lists 65 trees within the subject land including native species such as Weeping Bottlebrush <i>Callistemon viminalis</i>, Coast Banksia <i>Banksia integrifolia</i> and Kanooka <i>Tristaniopsis laurina</i>. The SSD application proposes the removal of all trees from the site, therefore there are no avoidance measures proposed.</p>
<b>Vegetation integrity 1.5(2)(a) Biodiversity Conservation Act</b> Meaning: Degree to which the composition, structure and function of vegetation at a particular site and the surrounding landscape has been altered from a near natural state	<p>Describe the vegetation integrity and any impacts on the vegetation integrity of identified plant communities. For example, information on impacts from proposed development to vegetation cover, structure, condition, and function. This can include details on the presence of weeds, disturbance, planted native vegetation and species and growth form diversity.</p>	<p>Assessment of 'vegetation integrity' is relevant because the subject land contains planted native vegetation.</p> <p>There is no remaining native vegetation on the subject land or adjoining properties. The subject land contains planted native vegetation, being 29 cultivated native species and 36 exotic located mainly around the perimeter, but also scattered through the carparks. There is no natural undergrowth on the site, with areas under trees being occupied by either weeds or mowed lawns, with only a few scattered and isolated persistent native species.</p> <p>The proposal will require the removal of all 65 planted native and exotic trees. Due to the disturbed nature of the subject land and the nature of the plantings as landscaping in an urban landscape, the vegetation integrity of the planted native vegetation is low.</p> <p>Native plant species diversity and cover are low. There are few large trees, no hollows, with very limited fallen timber or leaf litter. It is not expected that the proposal will impact the integrity of any planted native vegetation, including vegetation cover, structure, condition, and function.</p>
<b>Habitat suitability 1.5(2)(b) Biodiversity Conservation Act</b>	<p>Identify any threatened species or ecological communities or their habitat on the development site. Describe how the proposed development avoids impacts on habitat suitability and identify the likelihood and extent of any remaining impacts including the</p>	<p>'Habitat suitability' is relevant with respect to assessing impacts on threatened species with potential to use human-made structures, non-native vegetation and planted native vegetation.</p>



Biodiversity Value	Explain and document potential impacts including additional impacts prescribed under the BC Regulation	Potential Impacts
<p>Meaning: Degree to which the habitat needs of threatened species are present at a particular site</p>	<p><i>impacts of development on the following habitat of threatened species or ecological communities:</i></p> <ol style="list-style-type: none"> <li>1. karst, caves, crevices, cliffs, and other geological features of significance</li> <li>2. rocks</li> <li>3. human-made structures</li> <li>4. non-native vegetation (prescribed under clause 6.1(1)(a) of the BC Regulation).</li> </ol> <p><i>Impacts may include the removal or modification (e.g. noise, light, etc.) of the habitat of threatened species or ecological communities.</i></p>	<p>The ecology surveys carried out on 1 May 2024 and on 26 February 2025 involved using a torch and bat detector to search for roosts, as well as searching for hollows, nests, and other signs of animal activity. Buildings and vegetation were checked for potential microbat roosts following the DPIE 2019 BDAR waiver guidelines and web advice (NSW DCCEEW 2025a). No evidence of microbats was found, and no nests or hollows were detected. Additionally, the site does not contain any significant geological features such as natural rocks, karst, caves, crevices, or cliffs.</p> <p>The potential for microbat habitat within most of the buildings and structures on site is marginal. The buildings and structures are composed of concrete or metal and there are a lack of suitable open cracks and crevices. In addition, preventative measures such as mesh installed behind vents and ongoing disturbances due to active use further reduced the potential for microbat habitat (see photos in Appendix F).</p> <p>The site's native vegetation is not likely to provide important habitat for any threatened species of fauna potentially using the site.</p> <p>The subject land does not contain any native vegetation, threatened flora habitats, or threatened ecological communities and the prescribed impact features of the site, including human-made structures and non-native vegetation, are unlikely to provide any important habitat for any threatened species of fauna potentially using the site.</p>
<p><b>Threatened species abundance 1.4(a) Biodiversity Conservation Regulation</b></p> <p>Meaning: Occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site</p>	<p><i>Describe how the proposed development avoids impacts on threatened species abundance and identify the likelihood and extent of any remaining impacts including:</i></p> <ul style="list-style-type: none"> <li>• Impacts of vehicle strikes on threatened species of animals or on animals that are part of a threatened ecological community (prescribed under clause 6.1(1)(f) of the Regulation).</li> <li>• Impacts on threatened species, for example, microbats, associated with the demolition of human-made structures (prescribed by 6.1 (1) a (iii) of the Regulation).</li> <li>• Impacts on threatened species habitat associated with non-native vegetation (prescribed by 6.1 (1) a (iv) of the Regulation).</li> <li>• Impacts on threatened species habitat associated with non-natural water bodies (prescribed by 6.1 (1) a (iii) of the Regulation). For example, threatened frogs such as the green and golden bell</li> </ul>	<p>'Threatened species abundance' is relevant with respect to assessing impacts on threatened species with potential to use human-made structures, non-native vegetation and planted native vegetation.</p> <p>The proposed SSD avoids impacts on threatened species abundance as the proposed development site is largely devoid of any important biodiversity values (native vegetation, threatened ecological communities and known threatened species habitats). However, all human-made structures, non-native vegetation and planted native vegetation will require removal from the site to facilitate the proposed development.</p> <p>In relation to remaining impacts:</p> <ul style="list-style-type: none"> <li>• Due to the slow speeds of vehicles travelling across the site and the very low likelihood of threatened fauna utilising the site, the risk of vehicle strikes on threatened fauna is negligible and equivalent to existing vehicle traffic conditions.</li> </ul>



Biodiversity Value	Explain and document potential impacts including additional impacts prescribed under the BC Regulation	Potential Impacts
	<i>frogs in landfill areas, drains and brick pits.</i>	<ul style="list-style-type: none"> <li>No evidence of bats were recorded during site surveys and the potential for microbats to utilise the existing buildings and structures for roosting is low. Impacts on threatened species associated with the demolition of human-made structures are therefore likely to be negligible.</li> <li>There was no evidence of threatened species using planted native and non-native vegetation during the survey and based on the nature and condition of the vegetation and surrounding areas it is unlikely that locally occurring threatened fauna species will use the landscaped areas on site. As a result, removing planted non-native vegetation from garden beds and landscaped areas is unlikely to adversely affect threatened species.</li> <li>There are no ponds, dams, or other non-natural water bodies within the site. Hence, the proposed development will not impact threatened species habitat associated with non-natural water bodies.</li> </ul>
<b>Habitat connectivity 1.4(c) Biodiversity Conservation Regulation</b> Meaning: Degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range	<i>Identify whether the development site contributes to habitat connectivity. Describe how the proposed development avoids impacts on habitat connectivity and identify the likelihood and extent of any remaining impacts of development on the connectivity of different areas of habitat of threatened species that facilitates the movement of those species across their range (prescribed under clause 6.1(1)(b) of the BC Regulation).</i>	‘Habitat connectivity’ is relevant with respect to assessing impacts on threatened species with potential to use human-made structures, non-native vegetation and planted native vegetation.  The removal of the planted trees from the site will slightly reduce the available tree canopy in the locality, although, there is no canopy connection to adjoining areas of land and minimal tree canopy in the surrounding locality. The trees on site are unlikely to provide important habitat connectivity for threatened species and it is unlikely that the proposed development will impact the connectivity of different areas of habitat of threatened species that facilitates the movement of those species across their range.
<b>Threatened species movement 1.4(d) Biodiversity Conservation Regulation</b> Meaning: Degree to which a particular site contributes to the movement of threatened	<i>Describe how the proposed development avoids impacts on threatened species movement and identify the likelihood and extent of any remaining impacts of development on the movement of threatened species that maintains their lifecycle (prescribed under clause 6.1(1)(c) BC Regulation).</i>	‘Threatened species movement’ is relevant with respect to assessing impacts on threatened species with potential to use human-made structures, non-native vegetation and planted native vegetation.  While mobile threatened species, like the Grey-headed Flying-fox and Powerful Owl, may occasionally forage over the site and use native tree canopies, the trees on site are unlikely to support important lifecycle movements for these species. The proposed development is not expected to impact the movements of threatened species.



Biodiversity Value	Explain and document potential impacts including additional impacts prescribed under the BC Regulation	Potential Impacts
<i>species to maintain their lifecycle</i>		
<b>Flight path integrity 1.4(e) Biodiversity Conservation Regulation</b> Meaning: Degree to which the flight paths of protected animals over a particular site are free from interference	<i>Identify whether flight paths of protected animals occur over the development site. Protected animals are animals of a species listed or referred to in Schedule 5 of the BC Act. They include any species of birds, mammals, amphibians or reptiles that are native to Australia or that periodically or occasionally migrate to Australia. Describe how the proposed development avoids impacts on flight path integrity and identify the likelihood and extent of any remaining impacts. Note: The impacts of wind turbine strikes on protected animals are prescribed under clause 6.1(1)(e) of the BC Regulation. It is, therefore, unlikely that a BDAR waiver would be issued for a proposed wind farm.</i>	<p>Assessment of 'flight path integrity' is not relevant.</p> <p>Based on the surrounding landscape including tall buildings and highly developed areas it is unlikely that the subject land is in the direct flight path of protected animals such as migratory species. The proposed development would not have any conceivable impacts on the flight path integrity of any protected.</p>
<b>Water sustainability 1.4(f) Biodiversity Conservation Regulation</b> Meaning: Degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site	<i>Describe how the proposed development avoids impacts on water sustainability and identify the likelihood and extent of any remaining impacts of development on water quality, water bodies and hydrological processes that sustain threatened species and threatened ecological communities (including from subsidence or upsidence resulting from underground mining or other development) (prescribed under clause 6.1(1)(d) of the BC Regulation).</i>	<p>Assessment of 'water sustainability' is not relevant.</p> <p>There are no water bodies in proximity to the subject land. The proposed development will avoid impacts on water sustainability through the implementation of standard erosion and sediment control measures during construction and through suitable stormwater design.</p> <p>The proposed development is not likely to have any adverse effects on water sustainability.</p>





## 4.0 Conclusion

The subject land was inspected and assessed by SLR ecologist Vander Bertoldo on 1 May 2024 and subsequently on 26 February 2025. The field assessment included searching for microbat roosts, inspecting trees for hollows and nests, and looking for other signs of fauna usage. The field assessment did not detect any threatened species or habitats within the subject land.

The historical images of the site (refer to Appendix A) show that the land has been cleared of its original native vegetation over the decades. The trees and vegetation on the land have been cultivated for landscaping purposes and do not represent a native vegetation community or PCT.

Based on the results of the ecological site inspection, the areas of vegetation and the buildings to be removed provide marginal artificial habitats for threatened species and removal of these features is not likely to result in a significant impact on threatened species.

Furthermore, the site does not contain any areas of high biodiversity value and the project impacts will not result in a significant impact on any biodiversity values.

In conclusion, the proposed development is not likely to have a significant impact on biodiversity values. Accordingly, we request that the requirements for a BDAR are waived for the project.



## 5.0 References

DFSI 2024, “*SixMaps, Spatial Services, Spatial Information Exchange*”, Department of Finance, Services and Innovation (NSW), Sydney, NSW. Retrieved from: <https://maps.six.nsw.gov.au/> (Accessed 30 May 2024).

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# Appendix A    Historic Aerial Imagery

## **Kent Road and Gardeners Road - Mascot**

**Project Duke -  
Proposed Data Centre at 2-22 Kent Road and 685 Gardeners Road, Mascot**

**Goodman Property Services (Aust) Pty Ltd**

SLR Project No: 630.031653.00001

20 March 2025

DP 529177

DP 1009083

DP 1028185

DP 1084808

DP 1098547

DP 361852

SP 36878

SP 72964

DP 220569

SP 81045

DP 348478

DP 660482

SP 32468

DP 1137430

DP 1049139

DP 718390

DP 1238487

SP 103385

SP 94596

DP 1226835

SP 94685

SP 68103

SP 99270

DP 1254585

SP 97290

SP 97291

DP 1219678

SP 97178

SP 93096

SP 94589

DP 1242893

SP 8695

SP 67895

DP 121

DP 12

SP 36878

SP 72964

DP 220569

SP 81045

DP 348478

DP 660482

SP 32468

DP 1137430

DP 1049139

DP 718390

DP 1238487

SP 103385

SP 94596

DP 1226835

SP 94685

SP 68103

SP 99270

DP 1254585

SP 97290

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DP 1219678

SP 97178

SP 93096

SP 94589

DP 1242893

SP 8695

SP 67895

DP 121

DP 12

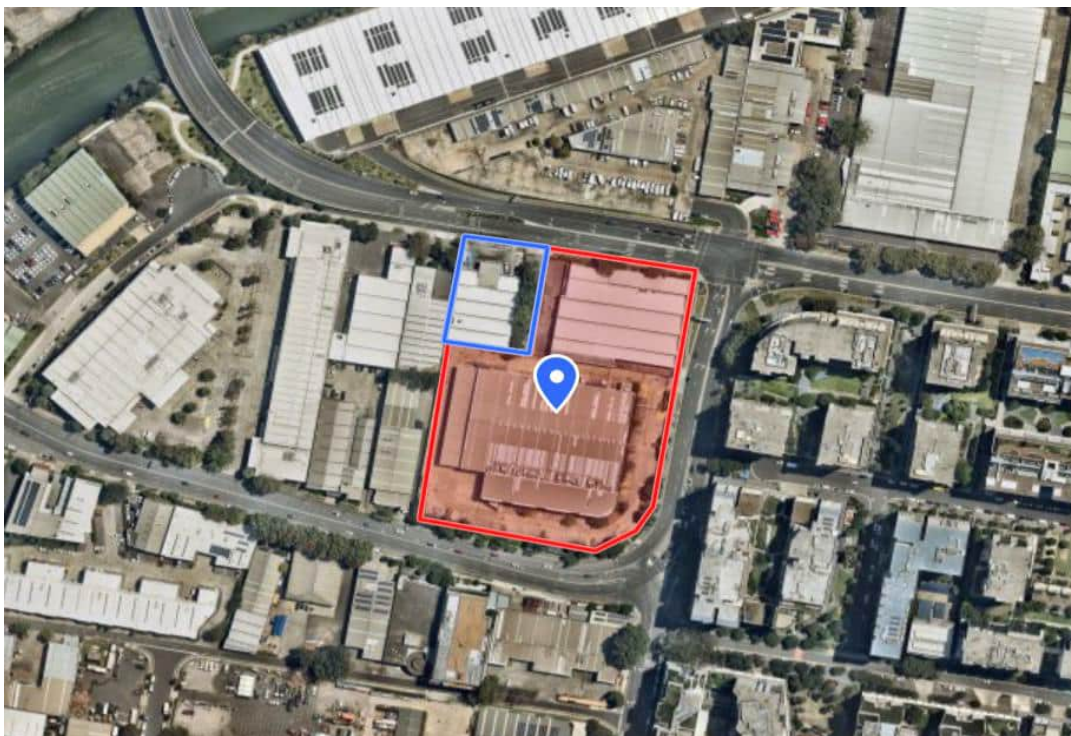
SP 36878



**Figure A3: Extract Of 2018 Historic Aerial Imagery, Showing Indicative Site Boundary in Red for Kent Road and Blue for 685 Gardeners Road (NearMap 2025)**



**Figure A4: Extract Of 2025 Historic Aerial Imagery, Showing Indicative Site Boundary in Red for Kent Road and Blue for 685 Gardeners Road (NearMap 2025)**





# Appendix B    Site Plans

## **Kent Road and Gardeners Road - Mascot**

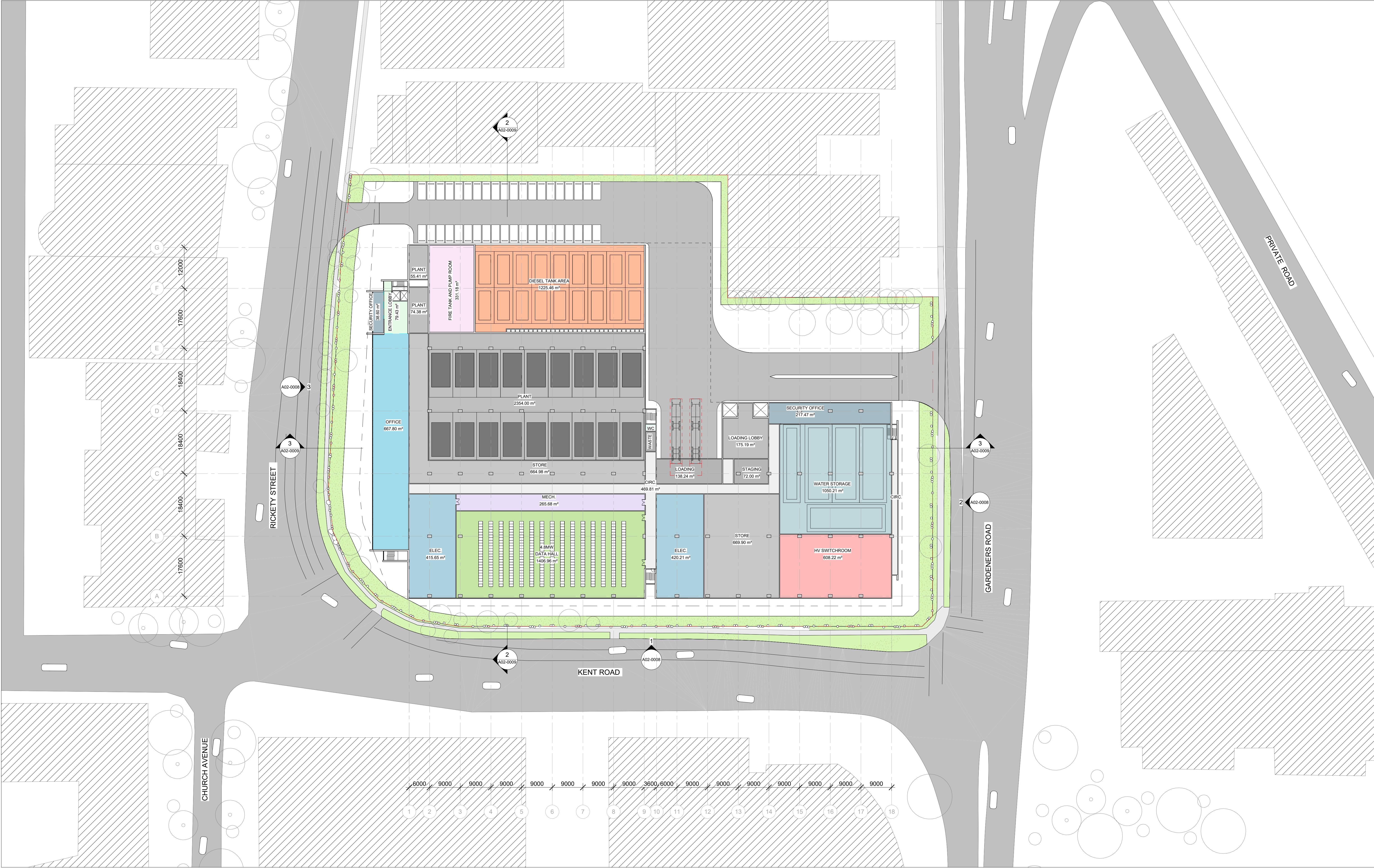
**Project Duke -  
Proposed Data Centre at 2-22 Kent Road and 685 Gardeners Road, Mascot**

**Goodman Property Services (Aust) Pty Ltd**

SLR Project No: 630.031653.00001

20 March 2025





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DRAWING NOTICES

Do not scale - all dimensions to be checked on site. Grimshaw drawings to be read in conjunction with grimshaw and specialist specifications. Drawings to be read in conjunction with m&e, structural, fire and acoustic information.

CLIENT

**GOODMAN**

CONSULTANTS

PROJECT NAME

**DUKE DC**

MAIN

PROJECT NO.

**23187**

ADDRESS  
2-22 KENT ROAD,  
MASCOT, NSW,  
AUSTRALIA

REV

BY

DATE

DESCRIPTION

1

EE

24.03.25

Interim Update

2

EE

04.04.25

Interim Update

3

EE

12.04.25

Interim Update

4

EE

15.04.25

Traffic studies

5

EE

23.04.25

Interim Update

KEY PLAN

NORTH

DRAWING TITLE

**GROUND LEVEL**

**PROPOSED**

SCALE

**1 : 500 @A1**

STATUS

**DRAFT - EARLY STAGE**

REVIEW ONLY

DRW

CH

APPR

DRW DATE

REV

**WG**

**EE**

**MJ**

**23.04.25**

**5**

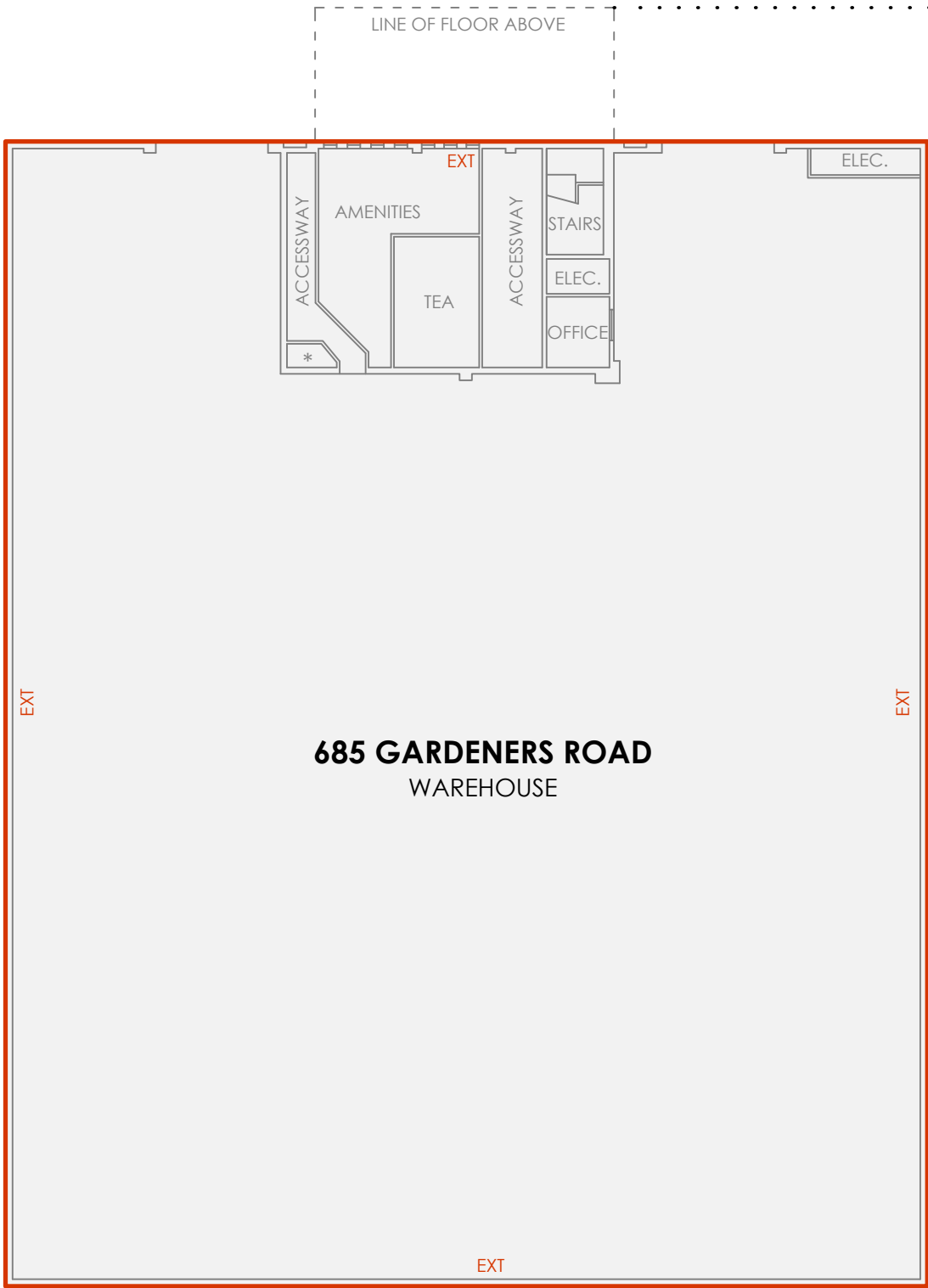
DRAWING NO.

**A02-0000**

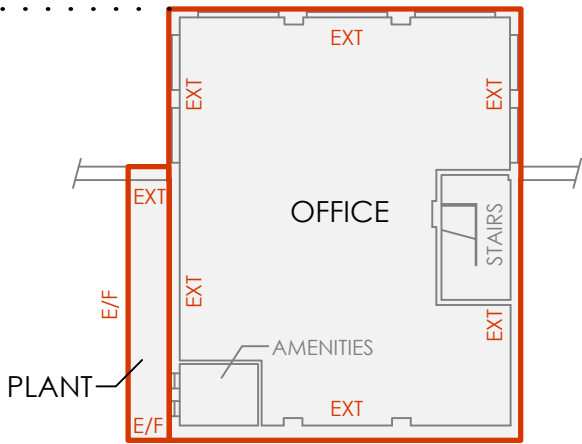
NOTES:  
1. AREAS MARKED AS \* INDICATE INACCESSIBLE AT TIME OF SURVEY.



GARDENERS ROAD



GROUND FLOOR



WAREHOUSE BELOW

FIRST FLOOR

SCHEDULE OF AREAS

685 GARDENERS ROAD	
GROUND FLOOR	
WAREHOUSE	1,600.8 m <sup>2</sup>
FIRST FLOOR	
OFFICE	165.9 m <sup>2</sup>
PLANT	12.3 m <sup>2</sup>
TOTAL AREA	1,779.0 m <sup>2</sup>

LETTABLE AREA



THE LETTABLE AREA IS SHOWN ENCLOSED BY CONTINUOUS LINES

METHOD OF MEASUREMENT

AREAS HAVE BEEN CALCULATED IN ACCORDANCE AND UNDER INTERPRETATION OF THE PROPERTY COUNCIL OF AUSTRALIA (PCA) METHOD OF MEASUREMENT FOR LETTABLE AREA (2008)

(SURVEY DATE 13/11/2024)

GUIDELINES USED  
GROSS LETTABLE AREA

ALL PARTIES USING THE AREAS EXPRESSED HEREIN, SHOULD AGREE WITH THE BOUNDARY DEFINITIONS, THIS PLAN WAS PRODUCED FOR THE CALCULATION OF FLOOR AREAS ONLY

LEGEND  
EXT - EXTERNAL FACE  
E/F - EDGE OF FLOOR



CLIENT:

GOODMAN

LETTABLE AREA PLAN  
685 GARDENERS ROAD,  
MASCOT, NSW

DATE:	18/11/2024	REV:	0
REF:	91215	DRAWN:	JW
SURVEYED:	JW	CHECKED:	AS
SCALE:	1:250 @ A3	SHEET:	1 OF 1

Australia | New Zealand

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# Appendix C    Arborist Report

## **Kent Road and Gardeners Road - Mascot**

**Project Duke -  
Proposed Data Centre at 2-22 Kent Road and 685 Gardeners Road, Mascot**

**Goodman Property Services (Aust) Pty Ltd**

SLR Project No: 630.031653.00001

20 March 2025



## Preliminary Arboricultural Report

Goodman  
AU409 and AU410  
2-22 Kent Road  
Mascot, NSW

21 May 2024

Assessment and report by:

Sita Bresnihan  
Ian Consalvey

Dip. Arb., AQF Level 5  
Dip. Hort. (Arb.), AQF Level 5

21 May 2024

Athena Vercoe  
Project Administrator  
Goodman  
The Hayesbery  
Rosebery NSW 2018

**Preliminary Arboricultural Report relating to 65 trees located within 2-22 Kent Road, Mascot, NSW**

Dear Athena,

We are pleased to provide the following Preliminary Arboricultural Report of 65 trees within the property of 2-22 Kent Road, Mascot.

Complete use of this report is authorised under the conditions limiting its use as stated in Appendix A Item 7 of "Arboricultural Reporting Assumptions and Limiting Conditions".

Should you have any queries relating to this report, its recommendations, or the options considered, please do not hesitate to contact us on 1300 272 671.

Regards,



**Sita Bresnihan**

Consulting Arborist  
Dip. Arb., AQF Level 5

# Table of Contents

1	Executive summary .....	1
2	Introduction .....	2
3	Scope .....	2
4	Methodology .....	2
4.1	Data collection .....	2
4.2	Retention Values .....	3
5	Observations .....	3
5.1	Aerial image .....	3
5.2	Site details .....	4
5.3	Origin(s) of the subject trees .....	4
5.4	The subject trees .....	4
5.5	Heritage status .....	6
5.6	Botanic and environmental status .....	6
6	Tree Retention Values .....	6
6.1	Determining tree retention values .....	6
6.2	Category A Trees (High Retention Value) .....	6
6.3	Category B Trees (Moderate Retention Value) .....	7
6.4	Category C Trees (Low Retention Value) .....	8
6.5	Category U Trees (unsuitable for retention) .....	10
7	Discussion .....	11
7.1	Project timelines .....	11
7.2	Project design .....	11
7.3	Tree Protection and Structural Root Zones .....	12
7.4	Existing building/infrastructure .....	12
7.5	Demolition .....	12
7.6	Root location .....	12
8	Recommendations .....	13
8.1	Site Survey .....	13
8.2	Demolition .....	13
8.3	Tree protection fencing .....	14
8.4	Trunk and ground protection .....	15
8.5	Exploratory root investigation .....	15
8.6	Underground services .....	16
8.7	Building design .....	16
8.8	Prepare an Arboricultural Impact Assessment .....	16
9	References .....	16
	Appendix A. Arboricultural reporting assumptions and limiting conditions .....	17
	Appendix B. Explanation of tree assessment terms .....	18
	Appendix C. Tree retention values .....	21
	Appendix D. Preliminary tree assessment data .....	23



## 1 Executive summary

- 1.1 The following Preliminary Arboricultural Report (PAR) regards 65 trees located within the grounds of 2-22 Kent Road, Mascot. The subject site was identified by Goodman (hereinafter referred to as the client) as possessing trees that may be impacted upon by proposed development works.
- 1.2 In part, the project scope was to provide detailed information on relevant site trees to better inform the project planners around potential development constraints, the area required for tree retention and methods/techniques suitable for tree protection during construction.
- 1.3 Tree retention values have been determined based upon a modified version of the British Standard BS 5837–2012: *Trees in Relation to Design, Demolition and Construction* and which have been prescribed into one of the following four categories, A, B, C and U. Refer to Appendix C for further detail., In relation to development applications, relevant consent authorities will generally consider:
- **Category A** Retention Value trees as significant and alterations to the design proposal and/or specific protection measures are generally recommended to facilitate successful tree retention post project completion
  - **Category B** Retention Value trees as a site constraint consideration. Trees in this retention category warrant proportional design consideration and amendment to ensure their viable retention post project completion.
  - **Category C** Retention Value trees are not considered a site constraint and do not generally warrant design consideration or amendment
  - **Category U** Retention Value trees are considered a site opportunity, as such trees are generally of poor arboricultural quality and normally recommended for removal irrespective of proposed development
- 1.4 A summary of tree retention values and the number of subject trees ascribed to each category are listed below:

Category	Description	Total
A	High Retention Value trees	0
B	Moderate Retention Value trees	11
C	Low Retention Value trees	53
U	Trees generally recommended to be removed irrespective of proposed development	1

## 2 Introduction

- 2.1 Civica ArborSafe was engaged by Athena Vercoe of Goodman in relation to completion of a Preliminary Arboricultural Report on 65 trees located at 2-22 Kent Road, Mascot.
- 2.2 This report was requested to assist in the planning and design that is proposed for construction within the site that may adversely affect the subject trees.
- 2.3 The report was intended to provide detailed information on relevant site trees to better inform the project planners around potential development constraints, the area required for tree retention and methods/techniques suitable for tree protection during construction.
- 2.4 Report findings and information provided are based upon guidance provided within the Australian Standard AS 4970–2009: *Protection of Trees on Development Sites*.
- 2.5 Observations and recommendations provided within this report are based upon information provided by the client, review of Bayside Council tree management policy documents and an arborist site visit.

## 3 Scope

- 3.1 Carry out a visual assessment of trees nominated trees located within the site.
- 3.2 Inspect the nominated trees and their growing environment in the context of the existing site usage.
- 3.3 Provide base data on the subject trees in relation to their species, estimated age, health, structural condition, and useful life expectancy (ULE).
- 3.4 Based on the findings of the previous assessments, provide independent objective appraisal on the Retention Value (RV) of the trees.
- 3.5 Identify and reduce potential conflicts between tree protection and site development by providing accurate information on the area required for tree protection and the restricted activities within the area for each tree prior to any proposed construction.

## 4 Methodology

### 4.1 Data collection

- 4.1.1 Ian Consalvey of Civica ArborSafe carried out a site inspection of the subject trees on 13 May 2024.
- 4.1.2 Trees that are the subject of this report (Figure 2-3) were identified during discussions with the client, reviewing relevant Bayside Council tree management documentation, and a site visit. A prescribed tree within the Bayside Council is described as having a height of 3m or more with a trunk diameter in excess of 300mm at a height of 1m above ground level (Bayside Council, 2023).
- 4.1.3 Trees can be identified on site using tree tags which are typically located at approximately 2.0m from ground level on the southern side of the trunk.
- 4.1.4 The subject trees were inspected from the ground using the initial component of Visual Tree Assessment (VTA) (Mattheck, C. and Breloer, H., 1994). No foliage or soil samples were taken and no aerial, underground or internal investigations were undertaken.
- 4.1.5 Tree height and crown width were estimated and have been provided in a variety of ranges with 5m increments. Trunk diameter at breast height (DBH) and trunk diameter at the root crown (DRC) were measured with a diameter tape and provided to the nearest centimetre.
- 4.1.6 Data collected on site was analysed by Sita Bresnihan, following which the information was collated into report format and relevant recommendations were formulated.

## 4.2 Retention Values

- 4.2.1 Retention values are determined based upon the British Standard BS 5837–2012: *Trees in Relation to Design, Demolition and Construction*. This standard categorises tree retention value based upon assessment of the tree's quality (health and structure), and life expectancy. Other criteria such as a tree's physical dimensions, age class, location and its amenity, heritage and/or environmental significance are also considered. A breakdown of attributes required for each category can be obtained from Appendix C – Tree Retention Values.

## 5 Observations

### 5.1 Aerial image



Figure 1. The red line indicates approximate site boundary. All trees within this area may be impacted upon by the proposed development. Nearthmap, 2024.

## **5.2 Site details**

- 5.2.1 The subject site was located within the grounds of the 2-22 Kent Road, Mascot (Figure 1).
- 5.2.2 The site is largely covered by an existing warehouse complex with the concrete driveways at the western end. The site has had large buildings on it from as early as 1943 (NSW Government, n.d.).
- 5.2.3 The soil profile for the site is likely to be disturbed which is typical of an urban site. Soil type is therefore expected to deviate from its natural state due to extensive previous site development and its location within an urban area.
- 5.2.4 Modified soil profiles may present harsh growing conditions for establishing new trees and should be a consideration when removing established trees and during the design phase. A number of design variables exist which allow desired building outcomes whilst providing adequate and improved soil conditions for trees.
- 5.2.5 The site was located within the Bayside Council Local Government Area (LGA)

## **5.3 Origin(s) of the subject trees**

- 5.3.1 Zero of the subject trees were species endemic to the local area, with 29 being native to Australia and the remaining 36 being exotic species.
- 5.3.2 All trees are planted stock, with no remnant trees identified.
- 5.3.3 Seventeen (17) species were identified across the site with the most prevalent being 15 *Alnus* sp. (Alder), four *Platanus x hybrida* (London Plane), five *Lophostemon confertus* (Queensland Box), and four *Robinia pseudoacacia* (Golden Robinia).
- 5.3.4 Twenty one trees were identified as Australian Natives the most prevalent being six *Syzygium leuhmannii* (Small-leaved Lilly Pilly), four *Tristanopsis laurina* (Kanooka) and five *Lophostemon confertus* (Queensland Box).

## **5.4 The subject trees**

- 5.4.1 The subject trees (Figure 2-3) have been numbered in line with the existing ArborSite tree numbering system. Trees can be identified on site using white tree tags which are typically located approximately 2.0m from ground level on the south side of the trunk.
- 5.4.2 As the subject trees form part of a previous survey undertaken for both sites, trees were numbered between Tree 1 and 21 at 2-8 Kent Road, and Tree 1-65 at 10-22 Kent Road, however may not necessarily be sequential.
- 5.4.3 The treescape is relatively young with 26 (40.0%) of the existing surveyed trees rated as semi-mature and a further eight trees (12.3%) being in the Young/Juvenile category. Thirty-one trees (47.7%) were rated as Mature specimens.
- 5.4.4 All subject trees are located within the 2-22 Kent Road, Mascot property boundary, with no additional relevant neighbouring property or street trees identified.





Figure 2. Trees subject to this report as represented in the ArborSafe software – AU409, 2-8 Kent Road, Mascot.  
Note tree icon colour represents existing risk status (not Retention Value). ArborSafe, May 2024.



Figure 3. Trees subject to this report as represented in the ArborSafe software – AU410, 10-22 Kent Road, Mascot.  
Note tree icon colour represents existing risk status (not Retention Value). ArborSafe, May 2024.

## 5.5 Heritage status

- 5.5.1 The proposed development site had no trees identified as being of national, state or local heritage significance. (NSW Government, n.d.)

## 5.6 Botanic and environmental status

- 5.6.1 The subject trees were considered to be common species within the local area and as such held limited botanical significance.
- 5.6.2 A review of SEED for the subject site returned no mapped overlay areas regarding tree protection and/or significant plant communities (NSW Government, n.d.).
- 5.6.3 The site does not incorporate any area designated as a Coastal Environment Area under the Coastal Management SEPP 2018.

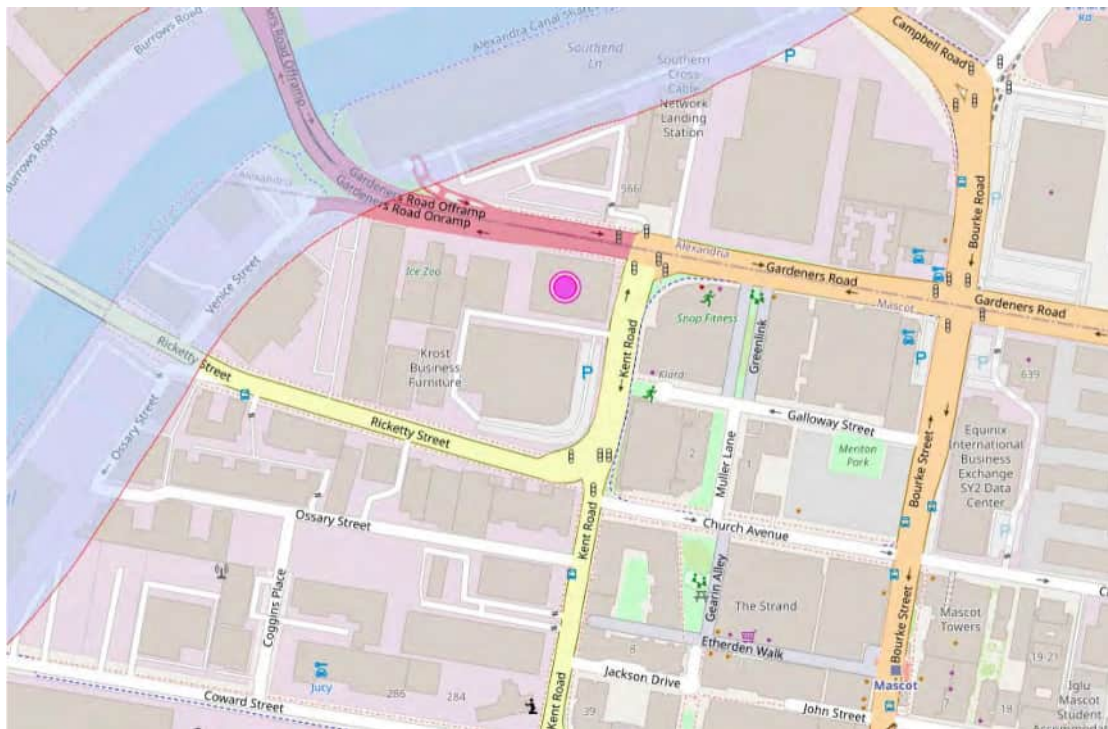


Figure 4. Image of EEC/SEED map. SEED, May 2024.

## 6 Tree Retention Values

### 6.1 Determining tree retention values

- 6.1.1 Collectively tree attributes were reviewed and used to categorise tree value in a development context.

### 6.2 Category A Trees (High Retention Value)

- 6.2.1 Zero trees were determined to be Category A Retention Value trees. Typically trees in this category are of high quality with an estimated useful life expectancy of at least 25 years and of dimensions and prominence that it cannot be readily replaced in less than 20 years. Category A trees typically make significant amenity contributions to the landscape and may make high environmental contributions. In some cases, trees within this category may not meet the above criteria, but do however possess significant heritage and/or ecological value(s). Trees in this retention category warrant design consideration and amendment to ensure their viable retention post project completion.



### 6.3 Category B Trees (Moderate Retention Value)

6.3.1 Eleven trees were determined to be Category B Retention Value trees. Typically trees in this category were of moderate quality with an estimated useful life expectancy of 15–25 years and of size dimensions that could not be readily replaced within ten years. Category B trees typically make moderate amenity and/or environmental contributions to the landscape. In some cases, trees within this category may not meet the above criteria, but do however possess heritage and/or ecological value(s). Trees in this retention category warrant proportional design consideration and amendment to ensure their viable retention post project completion.

6.3.2 Category B trees are numbered:

- 2-8 Kent Road – 16, 17, 18, 19, 20 and 21 (Figure 5)
- 10-22 Kent Road – 10, 18, 24, 28 and 29 (Figure 6)



Figure 5. Aerial image showing location of Category B Retention Value Trees – AU409, 2-8 Kent Road, Mascot. Note that icon colour may indicate a tree's current risk rating (not Retention Value). ArborSafe, May 2024.



Figure 6. Aerial image showing location of Category B Retention Value Trees – AU410, 10-22 Kent Road, Mascot. Note that icon colour may indicate a tree's current risk rating (not Retention Value). ArborSafe, May 2024.

#### 6.4 Category C Trees (Low Retention Value)

6.4.1 Fifty-three trees were determined to be Category C Retention Value trees. Trees in this category were of low quality with an estimated useful life expectancy of between 5 and 15 years and/or young or juvenile trees were considered readily replaceable. Category C Retention Value trees may also have been of poor health and/or structure, or of an undesirable species and do not warrant design consideration.

6.4.2 Category C trees are numbered:

- 2-8 Kent Road – 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 15 (Figure 7)
- 10-22 Kent Road – 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 25, 26, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44 and 45 (Figure 8)





Figure 7. Aerial image showing location of Category C Retention Value Trees – AU409, 2-8 Kent Road, Mascot. Note that icon colour may indicate a tree's current risk rating (not Retention Value). ArborSafe, May 2024.

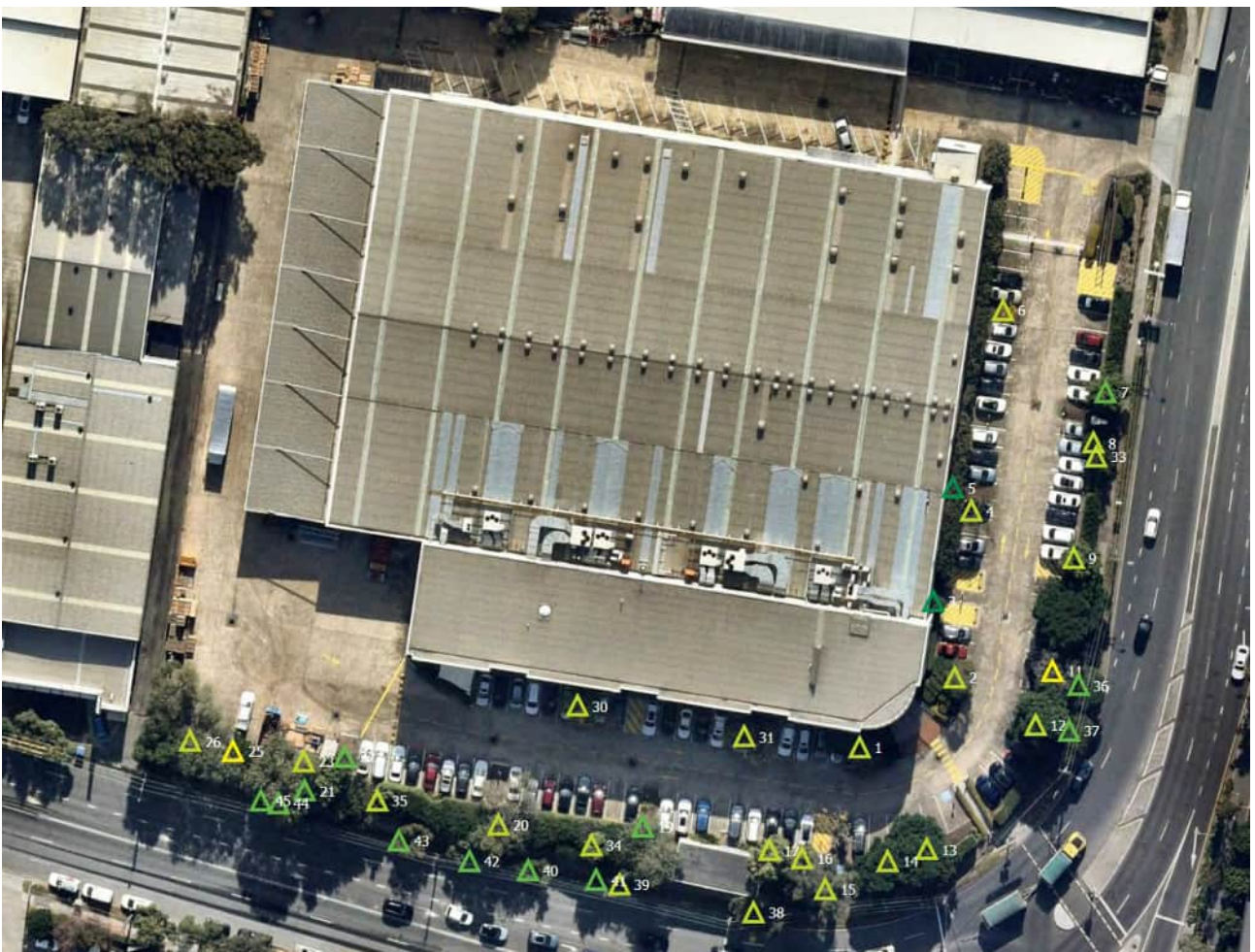


Figure 8. Aerial image showing location of Category C Retention Value Trees – AU410, 10-22 Kent Road, Mascot. Note that icon colour may indicate a tree's current risk rating (not Retention Value). ArborSafe, May 2024.



## 6.5 Category U Trees (unsuitable for retention)

6.5.1 One tree was determined to be a Category U Retention Value tree. Trees in this category were not considered viable in the context of the current land use for a period greater than five (5) years. Category U trees may have been dead and/or of a species recognised as a weed with the subject locality . Category U trees are typically recommended for removal irrespective of any future development within the subject site.

6.5.2 Category U Tree was numbered 27 is shown in Figure 9.

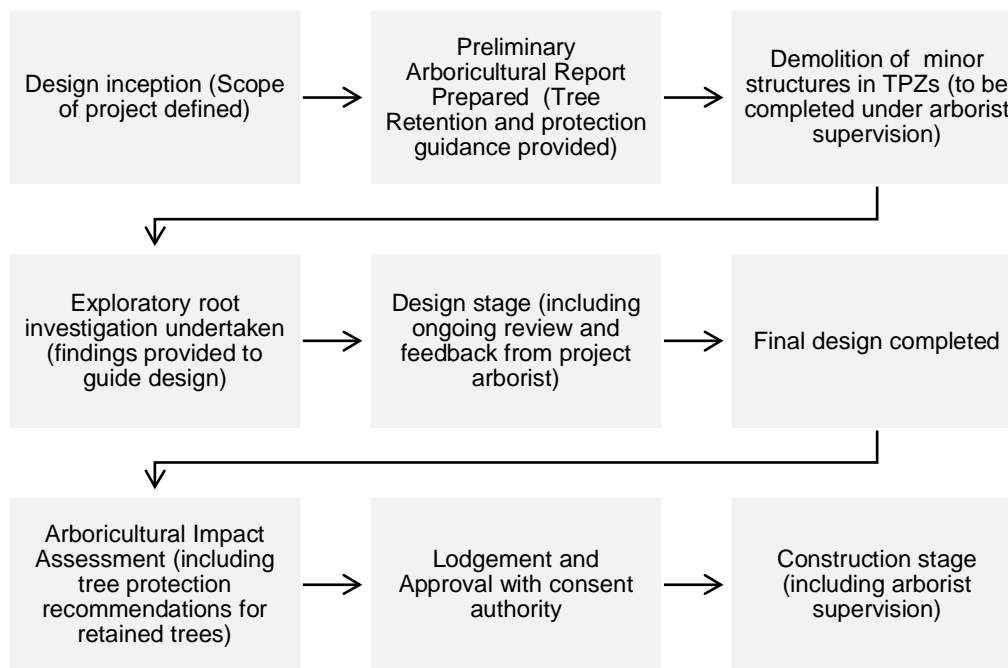


Figure 9. Aerial image showing location of Category U Retention Value trees (Nil/No Retention Value) – AU410, 10-22 Kent Road, Mascot. Note icon colour may indicate a tree's current risk rating (not Retention Value). ArborSafe, May 2024.

## 7 Discussion

### 7.1 Project timelines

- 7.1.1 It is important to ensure that trees worthy of retention/preservation (i.e. Category A and B Retention Value) are identified and accommodated throughout the design and construction stage. The following timeline is based upon guidance provided within the Australian Standard AS 4970–2009: *Protection of Trees on Development Sites* with specific consideration to this project to identify appropriate involvement from the project arborist.



### 7.2 Project design

- 7.2.1 Due to the space available for proposed demolition and/or construction and the size of TPZ's for Category A and B Retention Value trees, it is anticipated that works may be required within these TPZ's.
- 7.2.2 Where it is not practicable to exclude all works from the TPZ of a retained tree at the design stage, it is important to attain arborist guidance as to the permissible extent of encroachment that would still allow for viable tree retention.
- 7.2.3 An encroachment of up to 10% of the TPZ by area is deemed a minor encroachment by the Australian Standard AS 4970–2009 *Protection of Trees on Development Sites*. If the proposed encroachment is less than 10% of the area of the TPZ and is outside the Structural Root Zone (SRZ), detailed root investigations are generally not required.
- 7.2.4 An encroachment of more than 10% of the TPZ by area is deemed a major encroachment by the AS 4970–2009 *Protection of Trees on Development Sites*. If the proposed encroachment is greater than 10% of the TPZ, or inside the SRZ, it must be demonstrated that the tree(s) would remain viable post project completion.
- 7.2.5 Arborist consultation during the design stage will allow effective, constructive guidance to be provided throughout the process. This will ensure that the final design has fully considered all aspects of the potential impact(s) to subject trees designated for retention prior to commencement of the Arboricultural Impact Assessment (AIA).

### 7.3 Tree Protection and Structural Root Zones

- 7.3.1 The TPZ is defined as a specified area above and below ground and at a given distance measured radially away from the centre of the tree's trunk and which is set aside for the protection of its roots and crown. It is the area required to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development. The radius of the TPZ is calculated by multiplying its DBH by 12 (Note DBH is nominally measured as 1.4m from ground level).

$$\text{TPZ radius} = \text{DBH} \times 12$$

- 7.3.2 The SRZ is the area around the base of a tree required for the tree's stability in the ground. The woody root growth and soil cohesion in this area are necessary to hold the tree upright. The SRZ is nominally circular with the trunk at its centre and is expressed by its radius in metres.

$$\text{SRZ radius} = (D \times 50)^{0.42 \times 0.64}$$

### 7.4 Existing building/infrastructure

- 7.4.1 The existing buildings were located across much of the site, with a concrete driveway area situated on the western side of the building in 2-8 Kent Road, and a concrete driveway flanked by parking sites around the entire perimeter of the 10-22 Kent Road site. Considering that impermeable surfacing is covering much of the remaining open ground, it is anticipated that minimal roots would have penetrated beneath the existing footprint due to the size and construction type. Footpaths and driveway areas adjacent garden areas are likely to have root development below, which should be considered at the design stage and during any site demolition.
- 7.4.2 Generally, TPZ and SRZ are calculated as a theoretic circle of soil around the trunk of an existing tree. This is the area/volume of soil, as stated within Australian Standard AS 4973–2007: *Pruning of Amenity Trees*, as required by the tree to maintain good health and/or stability. Existing infrastructure or natural areas within these zones can have a bearing on the actual shape as pre-existing compacted areas (roads, carparks), retaining walls or natural barriers (waterways) may be acting as effective root barriers. In these situations the previously calculated area, in the circular TPZ, would need to be shaped into the actual available soil area potentially leading to an asymmetrical or oddly shaped TPZ. This can have the benefit of allowing trees which appear to have major TPZ encroachment to be retained following detailed analysis during later stages of planning or during the final AIA Report analysis.

### 7.5 Demolition

- 7.5.1 Demolition of existing structures within the site may be required to facilitate the project design. Demolition at an early stage in the development can also allow for root investigation to be undertaken, where required, which could be used to further guide the design process.
- 7.5.2 The relevant generic protection controls e.g. tree protection fencing and/or signage may be required in advance of demolition works.

### 7.6 Root location

- 7.6.1 Determining root location is important in evaluating how and where demolition and/or construction works may occur relative to tree retention/removal status. If works are to proceed that would be considered a major encroachment (>10% of TPZ area) under the Australian Standard AS 4970–2009 then identification and recording of these roots may be required to prove the ongoing health of these trees post works completion and their validity for retention.



- 7.6.2 Where required exploratory root investigation should be carried out in a manner conducive to root retention and protection. This may include the use of air excavation (air spade) and or hydro excavation (water jet and hydro vac etc.). Root investigation should be undertaken at pre-agreed locations that will most effectively guide future design. These locations may be at set offsets from the trunk of the tree in a radial pattern.
- 7.6.3 Findings from the root investigation should be compiled into a comprehensive report which identifies significant roots that should be retained and less significant roots that may be appropriate for severance. This information is important to qualify the developable area during the design process.

## **8 Recommendations**

### **8.1 Site Survey**

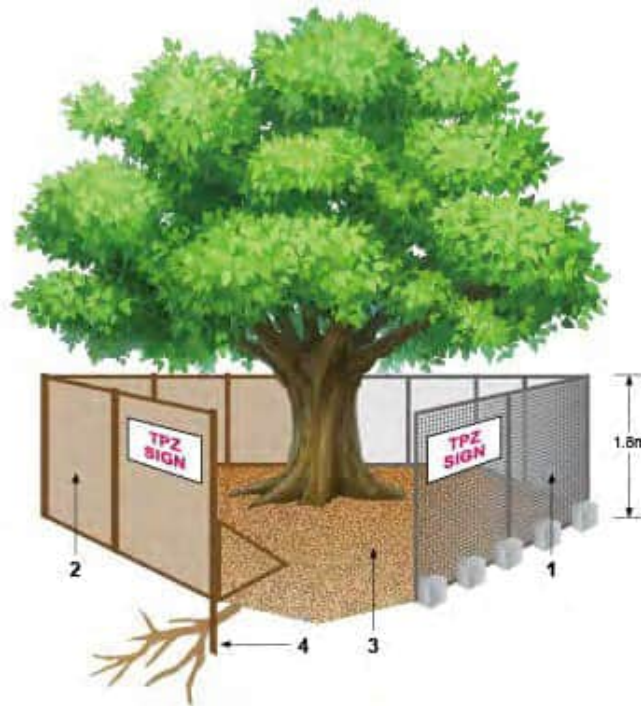
- 8.1.1 Where a site survey has not already been completed it is recommended that one be completed using a registered surveyor. Tree numbers contained within this report, and located on the individual tree tags onsite, should be used in the survey (and subsequent plans) to identify each subject tree.
- 8.1.2 The TPZ, SRZ and Retention Value of all retainable trees (Category A, B and C) should be displayed accurately on the site survey and subsequent plans, using appropriate colour coding where possible, for the development using the information contained in the attached Tree Data Sheet.
- 8.1.3 It is preferable that trunk location and size, crown spread in a north, south, east and west orientation should be clearly depicted on the site survey.

### **8.2 Demolition**

- 8.2.1 If demolition of existing site structures is to be undertaken prior to the finalisation of the design stage, it should be carried out with care under Arborist supervision. The use of machinery should be undertaken from areas of hardstand to avoid potential root compaction. Given the works may take place within the TPZ of a number of trees, protective fencing should be installed to avoid unnecessary damage to tree roots.

### 8.3 Tree protection fencing

- 8.3.1 If directed by the site arborist during demolition protective fencing is to be installed at the designated TPZ for each tree requiring protection or as far away as practicable from the trunk. Fencing should be installed as per the image below before any machinery or materials are brought to site and before commencement of works (including demolition).
- 8.3.2 Once installed, protective fencing must not be removed or altered without approval from the project arborist and/or the responsible authority. The TPZ fencing must be secured to restrict access as depicted in the image below. Tree Protection Zone fencing is to be a minimum of 1.8m high and mesh or wire between posts must be highly visible. Fence posts and supports should have a diameter greater than 20mm and should ideally be freestanding, otherwise be located clear of the roots.



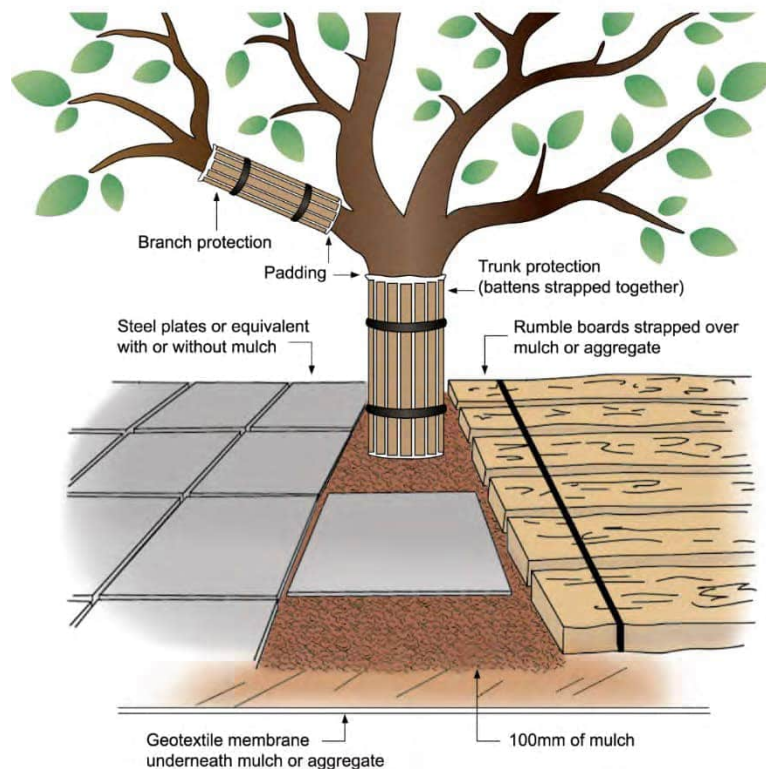
Legend:

1. Chain wire mesh panels with shade cloth attached (if required), held in place with concrete feet
2. Alternative plywood or wooden paling fence panels. This fencing material also prevents building materials or soil entering the TPZ
3. Mulch installation across surface of TPZ (at discretion of the project arborist). No excavation, construction activity, grade changes, surface treatment or storage materials of any kind are permitted within the TPZ
4. Bracing is permissible within the TPZ. Installation of supports should avoid damaging roots.

Figure 10. Depicts standard fencing techniques. (AS 4970-2009)

## 8.4 Trunk and ground protection

- 8.4.1 Where site access/egress points within TPZ of retained trees cannot be avoided, the root zone of affected trees must be protected using steel plates and/or rumble boards strapped over mulch/aggregate until such a time as the proposed works are complete or permanent above ground surfacing (cellular confinement system or similar) is to be installed.
- 8.4.2 Trunk protection must be installed as per the image below where required. Trunk and ground protection should be undertaken in accordance with the Australian Standard AS 4970–2009: *Protection of Trees on Development Sites* and installed prior to the commencement of works and remain in place until all proposed works have been completed.



### Notes:

1. For trunk and branch protection use boards and padding that will prevent damage to bark. Boards are to be strapped to trees, not nailed or screwed.
2. Rumble boards should be of a suitable thickness to prevent soil compaction and root damage.

Figure 11. Depicts trunk and ground protection techniques. (AS 4970–2009).

## 8.5 Exploratory root investigation

- 8.5.1 If during the design stage TPZ encroachment of High to Medium Retention Value trees, or trees which are valued to retain as part of the project, is anticipated to occur, exploratory root investigation is recommended to determine the size and location of tree roots. Root investigation should be undertaken using one of two options: 1: air-spade; 2. Hydro-excavation using hydro-vac.
- 8.5.2 Roots discovered should be measured and their diameter, depth and distance from trunk recorded and collated into a root map.

## 8.6 Underground services

- 8.6.1 An investigation as to the location, condition and size of underground services is recommended to be undertaken and plotted on all design drawings. Any underground service that needs replacement or upgrading, which is located within the TPZ of a tree designated for retention should be identified at the design stage.

## 8.7 Building design

- 8.7.1 The design stage is recommended to allow for consultation with the project arborist. The project arborist should be used to provide feedback and guidance as to the effects of the proposed design upon the subject trees designated for retention.
- 8.7.2 Sensitive construction methods may be permissible within the TPZ of trees designated for retention. Tree sensitive construction measures such as pier and beam, suspended slabs, cantilevered building sections, screw piles and contiguous piling can minimise the impact on the root zones of trees designated for retention. The project arborist will be able to provide feedback upon these approaches and advise as to their viability in relation to successful tree retention.

## 8.8 Prepare an Arboricultural Impact Assessment

- 8.8.1 Once designs are finalised, an Arboricultural Impact Assessment (AIA) is recommended to be prepared to detail the potential impacts of the proposed works upon the subject trees designated for retention on an individual tree basis. The AIA should provide information on proposed tree retention and removal as well as specific guidance on an individual trees basis as to required protection and management measures.

# 9 References

- Bayside Council, 2023. Bayside Development Control Plan 2022. [Online] Available at: [https://www.bayside.nsw.gov.au/sites/default/files/2023-04/bayside\\_development\\_control\\_plan\\_2022.PDF](https://www.bayside.nsw.gov.au/sites/default/files/2023-04/bayside_development_control_plan_2022.PDF) [Accessed May 2024].
- Mattheck, C. and Breloer, H., 1994. The Body Language of Trees: A Handbook for Failure Analysis. University of Michigan: H. M. Stationery Office.
- NSW Government, n.d. SEED - Sharing and Enabling Environmental Data. [Online] Available at: [https://geo.seed.nsw.gov.au/Public\\_Viewer/index.html?viewer=Public\\_Viewer&locale=en-AU](https://geo.seed.nsw.gov.au/Public_Viewer/index.html?viewer=Public_Viewer&locale=en-AU)
- NSW Government, n.d. SIX Maps. [Online] Available at: <https://maps.six.nsw.gov.au/> [Accessed May 2024].
- Standards Australia, 2009. AS 4970–2009: Protection of Trees on Development Sites, GPO Box 476 Sydney NSW 2001: Standards Australia.
- The British Standards Institution, 2012. *BS5837–2012: Trees in relation to design, demolition and construction*, London: BSI Standards Limited.

## Appendix A. Arboricultural reporting assumptions and limiting conditions

1. Any legal description provided to the consultant is assumed to be correct. Any titles and ownership of any property are assumed to be good. No responsibility is assumed for matters legal in character.
2. It is assumed that any property/project is not in violation of any applicable codes, ordinances, statutes or other government regulations.
3. Care has been taken to obtain all information from reliable sources. All data has been verified in so far as possible, however, the consultant can neither guarantee nor be responsible for the accuracy of the information provided by others.
4. The consultant shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.
5. Loss or alteration of any part of this report invalidates the entire report.
6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by anyone but the person to whom it is addressed, without the prior written consent of the consultant.
7. Neither all nor any part of the contents of this report, nor any copy thereof, shall be used for any purpose by anyone but the person to whom it is addressed, without the written consent of the consultant. Nor shall it be conveyed by anyone, including the Client, to the public through advertising, public relations, news, sales or other media, without the written consent of the consultant.
8. This report and any values expressed herein represent the opinion of the consultant and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
9. Sketches, diagrams, graphs and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys unless expressed otherwise.
10. Information contained in this report covers only those items that were examined and reflect the condition of those items at the time of inspection.
11. Inspection is limited to visual examination of accessible components without dissection, excavation or probing. There is no warranty or guarantee expressed or implied that the problems or deficiencies of the plants or property in question may not arise in the future.

## Appendix B. Explanation of tree assessment terms

**Tree number:** Refers to the individual identification number assigned within the ArborSafe software to each assessed tree on the site and the number which appears on the tree's tag.

**Tree location:** Refers to the easting and northing coordinates assigned to the location of the tree as obtained from the geo-referenced aerial image within the ArborSafe software.

**Tree species:** Provides the botanic name (genus, species, sub-species, variety and cultivar where applicable) in accordance with the International Code of Botanical Nomenclature (ICBN), and the accepted common name.

**Trees in group:** The number of trees encompassing a collective assessment of more than one tree. Typically grouped trees have similar attributes that can be encompassed within one data record.

**Height:** The estimated range in metres attributed to the tree from its base to the highest point of the canopy. Where required height will be estimated to the nearest metre.

**Diameter at Breast Height (DBH):** Refers to the tree's estimated trunk diameter measured 1.4m from ground level for a single trunked tree. These estimates increase in 50mm increments. Where required DBH will be measured to give an accurate measurement for single trunked trees, trees with multiple trunks, significant root buttressing, bifurcating close to ground level or trunk defects and will be measured as per the Australian Standard AS 4970–2009: *Protection of Trees on Development Sites*.

**Tree Protection Zone (TPZ):** A specified area above and below ground and at a given distance measured radially away from the centre of the tree's trunk and which is set aside for the protection of its roots and crown. It is the area required to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development. The radius of the TPZ is calculated by multiplying its DBH by 12. TPZ radius = DBH × 12. (Note "Breast Height" is nominally measured as 1.4m from ground level). TPZ is a theoretical calculation and can be influenced by existing physical constraints such as buildings, drainage channels, retaining walls, etc. (Standards Australia, 2009).

**Structural Root Zone (SRZ):** The area close to the base of a tree required for the tree's anchorage and stability in the ground. The woody root growth and soil cohesion in this area are necessary to hold the tree upright. The SRZ is nominally circular with the trunk at its centre and is expressed by its radius in metres. SRZ radius =  $(D \times 50)0.42 \times 0.64$  (Standards Australia, 2009).

**Canopy spread:** The estimated range in metres attributed to the spread of the tree's canopy on its widest axis. Where required crown spread will be estimated to the nearest metre.

**Origin:** Refers to the origin of the species and its type.

Category	Description
Indigenous	Occurs naturally in the local area and is native to a given region or ecosystem.
State Native	Occurs naturally within State but is not indigenous.
Australian Native	Occurs naturally within Australia and its territories but is not a State native or indigenous.
Exotic Evergreen	Occurs naturally outside of Australia and its territories and typically retains its leaves throughout the year.
Exotic Deciduous	Occurs naturally outside of Australia and its territories and typically loses its leaves at least once a year.



**Health:** Refers to the health and vigour of the tree.

Category	Description
<b>Excellent</b>	Canopy full with even foliage density throughout, leaves are entire and are of an excellent size and colour for the species with no visible pathogen damage. Excellent growth indicators, e.g. seasonal extension growth. Exceptional specimen.
<b>Good</b>	Canopy full with minor variations in foliage density throughout, leaves are entire and are of good size and colour for the species with minimal or no visible pathogen damage. Good growth indicators, none or minimal deadwood.
<b>Fair</b>	Canopy with moderate variations in foliage density throughout, leaves not entire with reduced size and/or atypical in colour, moderate pathogen damage. Reduced growth indicators, visible amounts of deadwood, may contain epicormic growth.
<b>Poor</b>	Canopy density significantly reduced throughout, leaves are not entire, are significantly reduced in size and/or are discoloured, significant pathogen damage. Significant amounts of deadwood and/or epicormic growth, noticeable dieback of branch tips, possibly extensive.
<b>Dead</b>	No live plant material observed throughout the canopy, bark may be visibly delaminating from the trunk and/or branches.

**Age:** Refers to the life cycle of the tree.

Category	Description
<b>Young</b>	Newly planted small tree not fully established may be capable of being transplanted or easily replaced.
<b>Juvenile</b>	Tree is small in terms of its potential physical size and has not reached its full reproductive ability.
<b>Semi-mature</b>	Tree in active growth phase of life cycle and has not yet attained an expected maximum physical size for its species and/or its location.
<b>Mature</b>	Tree has reached an expected maximum physical size for the species and/or location and is showing a reduction in the rate of seasonal extension growth.
<b>Senescent</b>	Tree is approaching the end of its life cycle and is exhibiting a reduction in vigour often evidenced by natural deterioration in health and structure.

**Structure:** Refers to the structure of the tree from roots to crown.

Category	Description
<b>Good</b>	Sound branch attachments with no visible structural defects, e.g. included bark or acute angled unions. No visible wounds to the trunk and/or root plate. No fungal pathogens present.
<b>Fair</b>	Minor structural defects present, e.g. apical leaders sharing common union(s). Minor damage to structural roots. Small wounds present where decay could begin. No fungal pathogens present.
<b>Poor</b>	Moderate structural defects present, including bifurcations with included bark with union failure likely within 0–5 years. Wounding evident with cavities and/or decay present. Damage to structural roots.
<b>Hazardous</b>	Significant structural defects with failure imminent (3–6 months). Defects may include active splits and/or partial branch or root plate failures. Tree requires immediate arboricultural works to alleviate the associated risk.

**Useful Life Expectancy (ULE):** Useful life expectancy refers to an expected period of time the tree can be retained within the landscape before its amenity value declines to a point where it may detract from the appearance of the landscape and/or presents a greater risk and/or more hazards to people and/or property. ULE values consider tree species, current age, health, structure and location. ULE values are based on the tree at the time of assessment and do not consider future changes within the tree's location and environment which may influence the ULE value.

Category
0 Years
<5 Years
5–10 Years
10–15 Years
15–25 Years
25–50 Years
>50 Years

**Defects:** Visual observations made of the presenting defects of the tree and its growing environment that are, or have the capacity to impact upon, the health, structural condition and/or the useful life expectancy of the tree. Defects may include adverse physical traits or conditions, signs of structural weaknesses, plant disease and/or pest damage, tree impacts to assets or soil related issues.

**Tree significance:** Includes environmental, social or historical reasons why the tree is significant to the site. The tree may also be rare under cultivation or have a rare or localised natural distribution.

**Arborist actions:** A list of arboricultural and/or plant health care works that are aimed at maintaining or improving the tree's health, structural condition or form. Actions may also directly or indirectly reduce the risk potential of the tree such as via the removal of a particular branch or the moving of infrastructure from under its canopy.

## Appendix C. Tree retention values

Based upon a modified version of the British Standard BS 5837–2012: Trees in relation to design, demolition and construction – recommendations.

Category and definition	Criteria (including sub-categories where appropriate)		
	1. Arboricultural qualities	2. Landscape qualities	3. Cultural and environmental values
<b>Category A</b>			
Trees of High Quality with an estimated remaining life expectancy of at least 25 years and of dimensions and prominence that it cannot be readily replaced in <20 years.	Trees that are particularly good examples of their species, especially if rare or unusual (in the wild or under cultivation); or those that are important components of groups or avenues.	Trees or groups of significant visual importance as arboricultural and/or landscape features. (e.g. feature and landmark trees).	Trees, groups or plant communities of significant conservation, historical, commemorative or other value (e.g. remnant trees, aboriginal scar trees, critically endangered plant communities, trees listed specifically within a Heritage statement of significance).
<b>Category B</b>			
Trees of Moderate Quality with an estimated remaining life expectancy of 15–25 years and of dimensions and prominence that cannot be readily replaced within 10 years.	Trees that might be included within Category A but are downgraded because of diminished condition such that they are unlikely to be suitable for retention beyond 25 years.	Trees that are visible from surrounding properties and/or the street but make little visual contribution to the wider locality.	Trees with conservation or other cultural value (trees within conservation areas or landscapes described within a statement of significance, locally indigenous species).
<b>Category C</b>			
Trees of Low Quality with an estimated remaining life expectancy of 5–15 years, or young trees that are easily replaceable.	Trees of very limited value or such impaired condition that they do not qualify in higher categories.	Trees offering low or only temporary/transient landscape benefits.	Trees with no material conservation or other cultural value.
<b>Category U</b>			
Trees in such a condition that they cannot realistically be retained as viable trees in the context of the current land use for longer than 5 years.	<p>Trees that have a severe structural defect that are not remediable such that their failure is expected within 12 months.</p> <p>Trees that will become unviable after removal of other Category U trees (e.g. where for whatever reason the loss of companion shelter cannot be mitigated by pruning).</p> <p>Trees that are dead or are showing signs of significant, immediate and irreversible overall decline.</p> <p>Trees infected with pathogens of significance to the health and or safety of other trees nearby</p> <p>Low quality trees suppressing adjacent trees of better quality.</p> <p>Noxious weeds or species categorised as weeds within the local area.</p> <p>Note: Category U trees can have existing or potential conservation value* which might make it desirable to preserve.</p>		

\* Where trees would otherwise be categorised as U, B or C but have significant identifiable conservation, heritage or landscape value even though only for the short term, they may be upgraded, although they might be suitable for retention only.

## Tree quality

		Health**			
		Excellent/ Good	Fair	Poor	Dead
Structure	Good	A	B	C	U
	Fair	B	B	C	U
	Poor	C	C	U	U
	Hazard *	U	U	U	U

\* Structural hazard that cannot be remediated through mitigation works to enable safe retention.

\*\* Trees of short term reduced health that can be remediated via basic, low cost plant health care works (e.g. mulching, irrigation etc.) may be designated in a higher health rating to ensure correct retention value nomination.

<b>Category A</b>	Typically trees in this category are of high quality with an estimated remaining life expectancy of at least 25 years and of dimensions and prominence that it cannot be readily replaced in <20 years. The tree may make significant amenity contributions to the landscape and may make high environmental contributions. In some cases, trees within this category may not meet the above criteria, however possess significant heritage or ecological value. Trees of this retention value warrant design consideration and amendment to ensure their viable retention.
<b>Category B</b>	Typically trees in this category are of moderate quality with an estimated remaining life expectancy of 15–25 years and prominence of size dimensions that cannot be readily replaced within 10 years. They may make moderate amenity contributions to the landscape and make low/moderate environmental contributions. Trees with this retention value warrant lesser design consideration in an attempt to allow for their retention.
<b>Category C</b>	Trees in this category are of low quality with an estimated remaining life expectancy of 5–15 years, or young trees that are easily replaceable, may have poor health and/or structure, are easily replaceable, or are of undesirable species and do not warrant design consideration.
<b>Category U</b>	Trees in this category are found to be in such a condition that they cannot realistically be retained as viable trees in the context of the current land use for longer than five years. These trees may be dead and/or of a species recognised as a weed that resulted in them being unretainable.



Appendix D. Preliminary tree assessment data

Tree no.	Site	Eastings (GDA94)	Northing (GDA94)	Botanical Name	Common Name	Origin	Trees in group	DBH Total (mm)	DRB (mm)	Radial TPZ (m)	TPZ area (m2)	Radial BRZ (m)	Tree Height (m)	Cavity (m)	Health	Structure	Age	TLE (Tm)	Defects	Significance	Action (in respect of development)	Tree Quality Score	Tree Retention value (suburb/200)
1	2/8 Kent Rd	332087.4	6245245.83	Ailrus sp.	Alder	Exotic Deciduous	1	14	19	2.0	12.57	1.6	<5	<5	Fair	Poor	Juvenile	5-10	Decay, Epicormic growth, Poor pruning, Wounds;	Amenity value/shade; Avenue tree; Strong vigour	Remove - poor specimen;	C	2
2	2/8 Kent Rd	332086.92	6245241.48	Ailrus sp.	Alder	Exotic Deciduous	1	24	25	2.9	36.06	1.8	<5	<5	Fair	Fair	Semi-Mature	5-10	Deadwood stubs < 30mm; Decay, Dieback, Epicormic growth, Poor pruning, Wounds;	Amenity value/shade; Avenue tree; Screen value;	Remove - poor specimen;	C	2
3	2/8 Kent Rd	332086.6	6245240.79	Ailrus sp.	Alder	Exotic Deciduous	1	14	16	2.0	12.57	1.5	5-10	<5	Good	Fair	Juvenile	10-15	Deadwood stubs < 30mm; Decay, Dieback, Epicormic growth, Poor pruning, Wounds;	Amenity value/shade; Screen value;	Remove - poor specimen; Shape from infrastructure;	C	2
4	2/8 Kent Rd	332086.36	6245238.04	Ailrus sp.	Alder	Exotic Deciduous	1	25	26	3.0	27.73	1.9	5-10	<5	Good	Fair	Semi-Mature	10-15	Co-dominant stems; Deadwood stubs < 30mm; Decay, Dieback, Epicormic growth, Poor pruning, Wounds;	Amenity value/shade; Screen value;	Shape from infrastructure;	C	2
5	2/8 Kent Rd	332085.88	6245235.14	Ailrus sp.	Alder	Exotic Deciduous	1	20	22	2.4	16.10	1.8	5-10	<5	Good	Poor	Semi-Mature	10-15	Deadwood stubs < 30mm; Decay, Dieback, Epicormic growth, Poor pruning, Previous failure(s); Wounds;	Amenity value/shade; Screen value;	Remove - poor specimen;	C	2
6	2/8 Kent Rd	332085.25	6245231.17	Ailrus sp.	Alder	Exotic Deciduous	1	20	23	2.4	16.10	1.8	5-10	<5	Good	Poor	Semi-Mature	10-15	Deadwood stubs < 30mm; Decay, Dieback, Epicormic growth, Poor pruning, Previous failure(s); Wounds;	Amenity value/shade; Screen value;	Remove - poor specimen;	C	2
7	2/8 Kent Rd	332084.39	6245226.13	Ailrus sp.	Alder	Exotic Deciduous	1	14	15	2.0	12.57	1.5	5-10	<5	Good	Poor	Juvenile	10-15	Deadwood stubs < 30mm; Epicormic growth, Poor pruning, Previous failure(s); Wounds;	Amenity value/shade; Screen value;	Remove - poor specimen;	C	2
8	2/8 Kent Rd	332083.18	6245218.81	Ailrus sp.	Alder	Exotic Deciduous	1	23	25	2.9	23.93	1.8	5-10	<5	Good	Poor	Semi-Mature	10-15	Deadwood stubs < 30mm; Epicormic growth, Poor pruning, Previous failure(s);	Amenity value/shade; Screen value;	Shape from infrastructure;	C	2
9	2/8 Kent Rd	332082.54	6245213.3	Ailrus sp.	Alder	Exotic Deciduous	1	20	22	2.4	16.10	1.8	5-10	<5	Good	Poor	Juvenile	5-10	Deadwood stubs < 30mm; Epicormic growth, Poor pruning, Previous failure(s); Wounds;	Amenity value/shade; Screen value;	Remove - poor specimen;	C	2
10	2/8 Kent Rd	332081.67	6245207.57	Ailrus sp.	Alder	Exotic Deciduous	1	30	32	3.6	40.72	2.1	5-10	<5	Good	Poor	Semi-Mature	10-15	Deadwood stubs < 30mm; Epicormic growth, Poor pruning, Previous failure(s); Weak structure; Wounds;	Amenity value/shade; Screen value;	Remove - poor specimen;	C	2
11	2/8 Kent Rd	332081.19	6245204.05	Ailrus sp.	Alder	Exotic Deciduous	1	17	18	2.0	13.07	1.6	5-10	<5	Good	Fair	Juvenile	10-15	Deadwood stubs < 30mm; Epicormic growth, Poor pruning, Previous failure(s); Suppressed; Wounds;	Amenity value/shade; Screen value;	Shape from infrastructure;	C	2
12	2/8 Kent Rd	332080.8	6245200.06	Ailrus sp.	Alder	Exotic Deciduous	1	20	30	3.4	16.10	2.0	5-10	<5	Good	Fair	Semi-Mature	10-15	Deadwood stubs < 30mm; Epicormic growth, Poor pruning, Previous failure(s); Suppressed; Wounds;	Amenity value/shade; Screen value;	Remove - poor specimen;	C	2
13	2/8 Kent Rd	332080.5	6245196.28	Ailrus sp.	Alder	Exotic Deciduous	1	30	40	3.6	40.72	2.3	5-10	5-10	Good	Fair	Semi-Mature	10-15	Deadwood stubs < 30mm; Epicormic growth, Poor pruning, Previous failure(s);	Amenity value/shade; Screen value;	Shape from infrastructure;	C	2
14	2/8 Kent Rd	332080.1	6245196.28	Ailrus sp.	Alder	Exotic Deciduous	1	20	24	2.4	16.10	1.8	5-10	<5	Good	Poor	Juvenile	5-10	Deadwood stubs < 30mm; Epicormic growth, Previous failure(s); Suppressed; Uncharacteristic form;	Amenity value/shade; Screen value;	Remove - poor specimen;	C	2
15	2/8 Kent Rd	332079.47	6245194.36	Ailrus sp.	Alder	Exotic Deciduous	1	36	40	4.3	56.63	2.3	5-10	<5	Good	Fair	Semi-Mature	10-15	Crossing/hanging branches; Deadwood stubs < 30mm; Epicormic growth, Poor pruning, Previous failure(s); Weak structure;	Amenity value/shade; Screen value;	Shape from infrastructure;	C	2
16	2/8 Kent Rd	332082.71	6245214.21	Platanus x hybrida	London Plane	Exotic Deciduous	1	72	81	8.6	234.52	3.0	10-15	10-15	Good	Good	Semi-Mature	25-50	Co-dominant stems; Damaging infrastructure; Deadwood stubs > 30mm; Epicormic growth, Exposed roots; Mechanical damage to roots;	Amenity value/shade; Attractive landscape feature; Avenue tree;	Crown Raise; Remove hanging limbs;	B	2
17	2/8 Kent Rd	332083.94	6245222.51	Platanus x hybrida	London Plane	Exotic Deciduous	1	58	63	7.0	162.18	2.7	10-15	10-15	Good	Good	Semi-Mature	25-50	Co-dominant stems; Damaging infrastructure; Deadwood stubs > 30mm; Epicormic growth, Exposed roots; Mechanical damage to roots;	Amenity value/shade; Attractive landscape feature; Avenue tree;	Crown Raise;	B	2
18	2/8 Kent Rd	332086.45	6245211.12	Platanus x hybrida	London Plane	Exotic Deciduous	1	47	63	5.6	99.93	2.7	10-15	10-15	Good	Good	Semi-Mature	25-50	Co-dominant stems; Damaging infrastructure; Deadwood stubs > 30mm; Epicormic growth, Exposed roots; Mechanical damage to roots;	Amenity value/shade; Attractive landscape feature; Avenue tree;	Crown Raise;	B	2
19	2/8 Kent Rd	332086.06	6245209.71	Platanus x hybrida	London Plane	Exotic Deciduous	1	52	65	6.2	122.33	2.8	10-15	10-15	Good	Good	Semi-Mature	25-50	Co-dominant stems; Damaging infrastructure; Deadwood stubs > 30mm; Epicormic growth, Exposed roots; Hanger(s); Mechanical damage to roots;	Amenity value/shade; Attractive landscape feature; Avenue tree;	Crown Raise; Remove hanging limbs;	B	2
20	2/8 Kent Rd	332132.86	6245246.78	Jacaranda mimosifolia	Jacaranda	Exotic Deciduous	1	66	89	8.0	199.96	3.2	10-15	10-15	Good	Fair	Semi-Mature	15-25	Co-dominant stems; Damaging infrastructure; Deadwood stubs > 30mm; Epicormic growth, Poor pruning, Previous failure(s);	Amenity value/shade; Attractive landscape feature;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	B	2
21	2/8 Kent Rd	332161.03	6245242.67	Melaleuca linifolia	Snow in Summer	Australian Native	1	72	77	8.6	234.52	3.0	10-15	10-15	Good	Fair	Semi-Mature	25-50	Co-dominant stems; Damaging infrastructure; Deadwood stubs > 30mm; Epicormic growth, Included bark, Poor pruning;	Amenity value/shade; Attractive landscape feature;	Shape from infrastructure; Tim work(s);	B	2
1	10-22 Kent Rd	332131.24	6245090.32	Robinia pseudacacia	Black Locust	Exotic Deciduous	1	38	42	4.6	65.33	2.3	5-10	<5	Good	Good	Mature	15-25	Deadwood stubs > 30mm; Dieback;	Amenity value/shade; Attractive landscape feature;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
2	10-22 Kent Rd	332145.02	6245100.02	Robinia pseudacacia	Black Locust	Exotic Deciduous	1	25	32	3.6	35.27	2.1	5-10	5-10	Good	Good	Mature	25-50	Deadwood stubs < 30mm; Dieback; Epicormic growth; Included bark;	Amenity value/shade; Attractive landscape feature;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
3	10-22 Kent Rd	332141.94	6245110.68	Robinia glabra 'Rubens'	Red-leaved Robinia	Exotic Evergreen	17	8	14	2.0	12.57	1.5	<5	<5	Good	Good	Mature	25-50	Deadwood stubs < 30mm;	Amenity value/shade; Screen value;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
4	10-22 Kent Rd	332147.46	6245123.26	Robinia pseudacacia	Black Locust	Exotic Deciduous	1	19	27	2.3	16.24	1.9	5-10	5-10	Good	Poor	Mature	10-15	Co-dominant stems; Crossing/hanging branches; Deadwood stubs > 30mm; Epicormic growth, Exposed roots; Dieback; Epicormic growth; Exposed roots(s); Grinding roots(s); Poor pruning;	Amenity value/shade;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
5	10-22 Kent Rd	332144.82	6245108.52	Robinia glabra 'Rubens'	Red-leaved Robinia	Exotic Evergreen	24	8	12	2.0	12.57	1.5	<5	<5	Good	Good	Mature	25-50	Deadwood stubs < 30mm;	Amenity value/shade; Screen value;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
6	10-22 Kent Rd	332152.07	6245151.27	Robinia pseudacacia 'Frisia'	Golden Robinia	Exotic Deciduous	1	8	11	2.0	12.57	1.5	<5	<5	Good	Good	Juvenile	15-25	Co-dominant stems; Deadwood stubs < 30mm; Dieback;	Amenity value/shade; Attractive landscape feature;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
7	10-22 Kent Rd	332167.03	6245138.67	Syzygium luehmannii	Small-leaved Lilly Pilly	Australian Native	1	30	35	3.6	40.76	2.1	<5	<5	Good	Poor	Semi-Mature	15-25	Co-dominant stems; Epicormic growth; Poor pruning;	Amenity value/shade;	Consider removing;	C	2
8	10-22 Kent Rd	332165.25	6245132.76	Cupressus anacardioidea	Tuckeroo	Australian Native	1	16	19	2.0	12.57	1.6	<5	<5	Good	Fair	Semi-Mature	10-25	Epicormic growth; Poor pruning;	Amenity value/shade;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
9	10-22 Kent Rd	332162.36	6245116.68	Syzygium luehmannii	Small-leaved Lilly Pilly	Australian Native	1	41	47	5.0	77.18	2.4	5-10	<5	Good	Fair	Mature	15-25	Co-dominant stems; Epicormic growth; Exposed roots; Included bark;	Amenity value/shade; Attractive landscape feature;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
10	10-22 Kent Rd	332162.02	6245110.4	Cupressus anacardioidea	Tuckeroo	Australian Native	1	47	54	5.6	99.30	2.6	5-10	5-10	Good	Good	Mature	25-50	Deadwood stubs < 30mm; Excessive and weight-included bark; Previous failure(s);	Amenity value/shade; Attractive landscape feature;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	B	2
11	10-22 Kent Rd	332159.31	6245101	Schinus molle	Peppercorn	Exotic Evergreen	1	51	56	6.1	117.67	2.6	5-10	<5	Poor	Fair	Mature	5-10	Deadwood stubs > 30mm; Excessive thinning; Exposed roots; Previous failure(s);	Amenity value/shade;	Remove;	C	2
12	10-22 Kent Rd	332156.83	6245093.41	Cupressus anacardioidea	Tuckeroo	Australian Native	1	43	43	5.2	83.65	2.3	5-10	5-10	Good	Good	Mature	25-50	Deadwood stubs < 30mm; Excessive and weight-included bark;	Amenity value/shade; Attractive landscape feature;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
13	10-22 Kent Rd	332141.01	6245076.06	Cupressus anacardioidea	Tuckeroo	Australian Native	1	63	60	7.6	179.37	2.7	5-10	5-10	Good	Good	Mature	25-50	Crossing/hanging branches; Deadwood stubs > 30mm; Excessive and weight; Previous failure(s);	Amenity value/shade; Attractive landscape feature; Screen value;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
14	10-22 Kent Rd	332135.36	6245074.46	Cupressus anacardioidea	Tuckeroo	Australian Native	1	39	43	4.7	68.81	2.3	5-10	5-10	Good	Good	Mature	25-50	Co-dominant stems; Crossing/hanging branches; Deadwood stubs < 30mm; Epicormic growth; Poor pruning;	Amenity value/shade; Attractive landscape feature; Screen value;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
15	10-22 Kent Rd	332126.3	6245070.58	Albizia leonensis	Black Olive	Australian Native	1	37	49	4.4	61.83	2.5	10-15	5-10	Good	Poor	Mature	15-25	Co-dominant stems; Deadwood stubs < 30mm; Epicormic growth; Poor pruning;	Amenity value/shade;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
16	10-22 Kent Rd	332122.92	6245074.84	Syzygium luehmannii	Small-leaved Lilly Pilly	Australian Native	1	24	30	2.9	26.83	2.0	5-10	<5	Good	Fair	Mature	15-25	Co-dominant stems; Epicormic growth; Included bark; Poor pruning;	Amenity value/shade; Attractive landscape feature;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
17	10-22 Kent Rd	332118.1	6245075.91	Lophospermum confertum	Queensland Box	Australian Native	1	40	50	4.8	73.51	2.5	5-10	5-10	Good	Fair	Mature	10-25	Co-dominant stems; Epicormic growth; Included bark; Poor pruning;	Amenity value/shade;	Remove deadwood stubs > 30mm; Remove selective branches; Shape from infrastructure; Tim work(s);	C	2
18	10-22 Kent Rd	332101.06	6245077.47	Schinus molle	Peppercorn	Exotic Evergreen	1	56	76	6.7	141.91	3.0	5-10	10-15	Good	Fair	Mature	25-50	Co-dominant stems; Crossing/hanging branches; Epicormic growth; Exposed roots; Poor pruning;	Amenity value/shade;	Other action;	B	2
19	10-22 Kent Rd	332089.79	6245079.27	Robinia pseudacacia	Black Locust	Exotic Deciduous	1	12	12	1.6	5-10	<5	5-10	<5	Good	Fair	Mature	15-25	Co-dominant stems; Deadwood stubs < 30mm;	Amenity value/shade;	Remove; Remove prior to excavation;	C	2
20	10-22 Kent Rd	332078.72	6245079.52	Schinus molle	Peppercorn	Exotic Evergreen	1	47	55	5.7	101.74	2.6	5-10	5-10	Fair	Fair	Mature	10-15	Deadwood stubs > 30mm; Dieback; Excessive thinning; Poor pruning;	Amenity value/shade;	Remove;	C	2

Tree no.	Site	Easting (ODAH)	Northing (ODAH)	Botanical Name	Common Name	Origin	Trees in group	DBH Total (cm)	DBH (cm)	Radial TPZ (m)	TPZ area (m2)	Radial BRZ (m)	Tree Height (m)	Cavity (m)	Health	Structure	Age	TLE (Yrs.)	Defects	Significance	Action (if respective of development)	Tree Quality Score	Tree Retention value subcategory
21	10-22 Kent Rd	332050.01	6245094.24	<i>Callistemon viminalis</i>	Weeping Bottlebrush	Australian Native	1	39	42	4.6	67.36	2.3	5-10	5-10	Good	Good	Mature	25-50	Co-dominant stems; Crossing/rubbing branches; Deadwood/stubs < 30mm; Epicormic growth;	Amenity value/shade; Screen value;	Remove selective branches;	C	2
22	10-22 Kent Rd	332056.39	6245098.96	<i>Banksia integrifolia</i>	Coast Banksia	Australian Native	1	22	27	2.6	21.90	1.9	5-10	<5	Good	Good	Semi-Mature	25-50	Co-dominant stems; Epicormic growth; Included bark;	Amenity value/shade; Screen value;	Remove selective branches;	C	2
23	10-22 Kent Rd	332050.46	6245098.33	<i>Syzygium luehmannii</i>	Small leaved Lilly Pilly	Australian Native	1	32	36	3.8	46.01	2.2	5-10	5-10	Good	Fair	Mature	15-25	Co-dominant stems; Deadwood/stubs < 30mm; Exposed roots; Included bark; Suppression;	Amenity value/shade;		C	2
24	10-22 Kent Rd	332045.64	6245097.84	<i>Banksia integrifolia</i>	Coast Banksia	Australian Native	1	55	69	6.6	136.85	2.8	10-15	10-15	Good	Fair	Mature	15-25	Co-dominant stems; Deadwood/stubs < 30mm; Poor pruning (lean, weak/dormant);	Amenity value/shade; Screen value;		B	2
25	10-22 Kent Rd	332040.22	6245093.74	<i>Cupressopsis acuticostata</i>	Tuckeroo	Australian Native	1	29	29	3.0	28.27	2.0	5-10	5-10	Good	Fair	Semi-Mature	15-25	Co-dominant stems; Crack(s)/split(s); Epicormic growth; Hanger(s); Mechanical damage;	Amenity value/shade;	Remove hanging limb(s);	C	2
26	10-22 Kent Rd	332033.95	6245091.15	<i>Schinus molle</i>	Peppercorn	Exotic/European	1	50	69	6.0	112.79	2.8	5-10	<5	Good	Good	Mature	25-50	Co-dominant stems; Dieback; Poor pruning;	Amenity value/shade;		C	2
27	10-22 Kent Rd	332028.4	6245091.01	<i>Olea europaea</i>	European Olive	Exotic/European	1	30	35	3.6	40.58	2.1	5-10	5-10	Good	Poor	Semi-Mature	15-25	Damaging infestation; Unstable species;	Amenity value/shade; Wind;	Remove;	A	
28	10-22 Kent Rd	332029.77	6245097.97	<i>Schinus molle</i>	Peppercorn	Exotic/European	1	72	72	8.6	234.52	2.9	5-10	10-15	Good	Fair	Mature	15-25	Co-dominant stems; Crossing/rubbing branches; Deadwood/stubs < 30mm; Epicormic growth; Exposed roots(s); Poor pruning (Wounds);	Amenity value/shade;		B	2
29	10-22 Kent Rd	332035.21	6245173.35	<i>Allocasuarina littoralis</i>	Black She-oak	Australian Native	1	45	52	5.4	91.61	2.5	15-20	5-10	Good	Fair	Mature	15-25	Deadwood/stubs < 30mm; Parasitic plant/Mistletoe;	Amenity value/shade;		B	2
30	10-22 Kent Rd	332080.21	6245096.08	<i>Robinia pseudacacia</i> 'Frisch'	Golden Robinia	Exotic/European	1	26	28	3.1	30.58	1.9	5-10	5-10	Good	Fair	Mature	15-25	Deadwood/stubs < 30mm; Epicormic growth; Poor pruning (Wounds);	Amenity value/shade;		C	2
31	10-22 Kent Rd	332114.46	6245091.79	<i>Robinia pseudacacia</i> 'Frisch'	Golden Robinia	Exotic/European	1	34	41	4.1	52.30	2.3	5-10	5-10	Good	Fair	Mature	10-25	Co-dominant stems; Deadwood/stubs > 30mm; Epicormic growth;	Amenity value/shade;	Remove selective branches;	C	2
32	10-22 Kent Rd	332165.62	6245130.90	<i>Ceanothus cuneatus</i>	Campden Laurel	Exotic/European	1	10	14	2.0	12.57	1.5	<5	<5	Good	Good	Juvenile	10-15	Undersize species;	Amenity value/shade; Wind;		C	
34	10-22 Kent Rd	332082.25	6245076.65	<i>Syzygium luehmannii</i>	Small leaved Lilly Pilly	Australian Native	1	21	27	2.5	19.05	1.9	5-10	<5	Good	Poor	Semi-Mature	10-15	Co-dominant stems; Deadwood/stubs < 30mm; Epicormic growth; Included bark;	Amenity value/shade;		C	2
35	10-22 Kent Rd	332061.1	6245082.89	<i>Syzygium luehmannii</i>	Small leaved Lilly Pilly	Australian Native	1	17	23	2.0	13.07	1.8	5-10	<5	Good	Poor	Semi-Mature	10-15	Co-dominant stems; Deadwood/stubs < 30mm; Epicormic growth; Exposed roots(s); Mechanical damage (root(s));	Amenity value/shade;		C	2
36	10-22 Kent Rd	332163.04	6245098.93	<i>Tristanopsis laurina</i>	Karooka	Australian Native	1	26	36	3.3	35.24	2.2	5-10	5-10	Good	Fair	Mature	10-15	Co-dominant stems; Crossing/rubbing branches; Deadwood/stubs < 30mm; Exposed roots(s); Mechanical damage to roots(s);	Amenity value/shade;		C	2
37	10-22 Kent Rd	332161.69	6245092.59	<i>Tristanopsis laurina</i>	Karooka	Australian Native	1	28	36	3.4	35.92	2.2	5-10	5-10	Good	Fair	Mature	10-15	Co-dominant stems; Crossing/rubbing branches; Deadwood/stubs < 30mm; Epicormic growth; Poor pruning (Wounds);	Amenity value/shade;		C	2
38	10-22 Kent Rd	332115.86	6245087.23	<i>Lophospermum confertus</i>	Queensland Box	Australian Native	1	50	61	6.0	113.10	2.7	5-10	5-10	Good	Poor	Mature	15-25	Co-dominant stems; Crossing/rubbing branches; Deadwood/stubs > 30mm; Epicormic growth; Exposed roots(s); Poor pruning (Wounds);	Amenity value/shade;		C	2
39	10-22 Kent Rd	332086.29	6245071.17	<i>Callistemon viminalis</i>	Weeping Bottlebrush	Australian Native	1	36	32	4.3	58.63	2.1	<5	5-10	Good	Poor	Mature	10-15	Co-dominant stems; Deadwood/stubs < 30mm; Epicormic growth; Poor pruning (Wounds);	Amenity value/shade;		C	2
40	10-22 Kent Rd	332083.01	6245071.11	<i>Robinia pseudacacia</i>	Karooka	Australian Native	1	21	35	2.5	19.23	2.1	<5	<5	Good	Poor	Semi-Mature	10-15	Co-dominant stems; Crossing/rubbing branches; Deadwood/stubs < 30mm; Epicormic growth; Poor pruning (Wounds);	Amenity value/shade;		C	2
41	10-22 Kent Rd	332082.59	6245071.77	<i>Tristanopsis laurina</i>	Karooka	Australian Native	1	10	24	2.0	12.57	1.8	<5	<5	Good	Poor	Semi-Mature	10-15	Co-dominant stems; Crossing/rubbing branches; Deadwood/stubs < 30mm; Epicormic growth; Poor pruning (Wounds);	Amenity value/shade;		C	2
42	10-22 Kent Rd	332074.49	6245074.46	<i>Lophospermum confertus</i>	Queensland Box	Australian Native	1	49	57	5.8	106.41	2.6	<5	5-10	Good	Poor	Mature	10-15	Co-dominant stems; Deadwood/stubs < 30mm; Epicormic growth; Poor pruning (Wounds);	Amenity value/shade;		C	2
43	10-22 Kent Rd	332064.3	6245077.33	<i>Lophospermum confertus</i>	Queensland Box	Australian Native	1	33	41	4.0	50.53	2.3	<5	<5	Good	Poor	Mature	10-15	Co-dominant stems; Deadwood/stubs < 30mm; Epicormic growth; Poor pruning (Wounds);	Amenity value/shade;		C	2
44	10-22 Kent Rd	332046.77	6245082.54	<i>Tristanopsis laurina</i>	Karooka	Australian Native	1	19	27	2.3	15.97	1.9	<5	<5	Good	Poor	Semi-Mature	10-15	Co-dominant stems; Crossing/rubbing branches; Deadwood/stubs < 30mm; Epicormic growth; Poor pruning (Wounds);	Amenity value/shade;		C	2
45	10-22 Kent Rd	332044.17	6245082.91	<i>Lophospermum confertus</i>	Queensland Box	Australian Native	1	34	41	4.0	50.77	2.3	<5	5-10	Good	Poor	Semi-Mature	10-15	Co-dominant stems; Crossing/rubbing branches; Deadwood/stubs < 30mm; Epicormic growth; Poor pruning (Wounds);	Amenity value/shade;		C	2

for further information  
call 1300 272 671  
[www.arborsafe.com.au](http://www.arborsafe.com.au)

**CIVICA**



# Appendix D    BMAT Report

## **Kent Road and Gardeners Road - Mascot**

**Project Duke -  
Proposed Data Centre at 2-22 Kent Road and 685 Gardeners Road, Mascot**

**Goodman Property Services (Aust) Pty Ltd**

SLR Project No: 630.031653.00001

20 March 2025



## Biodiversity Values Map and Threshold Report

This report is generated using the Biodiversity Values Map and Threshold (BMAT) tool. The BMAT tool is used by proponents to supply evidence to your local council to determine whether or not a Biodiversity Development Assessment Report (BDAR) is required under [the Biodiversity Conservation Regulation 2017 \(Cl. 7.2 & 7.3\)](#).

The report provides results for the proposed development footprint area identified by the user and displayed within the blue boundary on the map.

There are two pathways for determining whether a BDAR is required for the proposed development:

1. Is there Biodiversity Values Mapping?
2. Is the 'clearing of native vegetation area threshold' exceeded?

### Biodiversity Values Map and Threshold Report

Date of Report Generation		11/03/2025 3:58 PM
1. Biodiversity Values (BV) Map - Results Summary (Biodiversity Conservation Regulation Section 7.3)		
1.1	<b>Does the development Footprint intersect with BV mapping?</b>	no
1.2	Was <u>ALL</u> BV Mapping within the development footprint added in the last 90 days? (dark purple mapping only, no light purple mapping present)	no
1.3	<b>Date of expiry of dark purple 90 day mapping</b>	N/A
1.4	<b>Is the Biodiversity Values Map threshold exceeded?</b>	no
2. Area Clearing Threshold - Results Summary (Biodiversity Conservation Regulation Section 7.2)		
2.1	<b>Size of the development or clearing footprint</b>	22,934.1 sqm
2.2	<b>Native Vegetation Area Clearing Estimate (NVACE)</b> (within development/clearing footprint)	1,481.1 sqm
2.3	<b>Method for determining Minimum Lot Size</b>	Lot size
2.4	<b>Minimum Lot Size</b> (10,000sqm = 1ha)	2,047 sqm
2.5	<b>Area Clearing Threshold</b> (10,000sqm = 1ha)	2,500 sqm
2.6	<b>Does the estimate exceed the Area Clearing Threshold?</b> (NVACE results are an estimate and can be reviewed using the <a href="#">Guidance</a> )	no
<b>REPORT RESULT: Is the Biodiversity Offset Scheme (BOS) Threshold exceeded for the proposed development footprint area?</b> (Your local council will determine if a BDAR is required)		<b>no</b>

## What do I do with this report?

- If the result above indicates the BOS Threshold has been exceeded, your local council may require a Biodiversity Development Assessment Report with your development application. Seek further advice from Council. An accredited assessor can apply the Biodiversity Assessment Method and prepare a BDAR for you. For a list of accredited assessors go to: <https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor>.
- If the result above indicates the BOS Threshold has not been exceeded, you may not require a Biodiversity Development Assessment Report. This BMAT report can be provided to Council to support your development application. Council can advise how the area clearing threshold results should be considered. Council will review these results and make a determination if a BDAR is required. Council may ask you to review the area clearing threshold results. You may also be required to assess whether the development is “likely to significantly affect threatened species” as determined under the test in Section 7.3 of the *Biodiversity Conservation Act 2016*.
- If a BDAR is not required by Council, you may still require a permit to clear vegetation from your local council.
- If all Biodiversity Values mapping within your development footprint was less than 90 days old, i.e. areas are displayed as dark purple on the BV map, a BDAR may not be required if your Development Application is submitted within that 90 day period. Any BV mapping less than 90 days old on this report will expire on the date provided in Line item 1.3 above.

For more detailed advice about actions required, refer to the Interpreting the evaluation report section of the [Biodiversity Values Map Threshold Tool User Guide](#) .

## Review Options:

- If you believe the Biodiversity Values mapping is incorrect please refer to our [BV Map Review webpage](#) for further information.
- If you or Council disagree with the area clearing threshold estimate results from the NVACE in Line Item 2.6 above (i.e. area of Native Vegetation within the Development footprint proposed to be cleared), review the results using the [Guide for reviewing area clearing threshold results from the BMAT Tool](#).

## Acknowledgement

I, as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development.

Signature: \_\_\_\_\_

(Typing your name in the signature field will be considered as your signature for the purposes of this form)

Date: \_\_\_\_\_

11/03/2025 03:58 PM

## Biodiversity Values Map and Threshold Tool

The Biodiversity Values (BV) Map and Threshold Tool identifies land with high biodiversity value, particularly sensitive to impacts from development and clearing.

The BV map forms part of the Biodiversity Offsets Scheme threshold, which is one of the factors for determining whether the Scheme applies to a clearing or development proposal. You have used the Threshold Tool in the map viewer to generate this BV Threshold Report for your nominated area. This report calculates results for your proposed development footprint and indicates whether Council may require you to engage an accredited assessor to prepare a Biodiversity Development Assessment Report (BDAR) for your development.

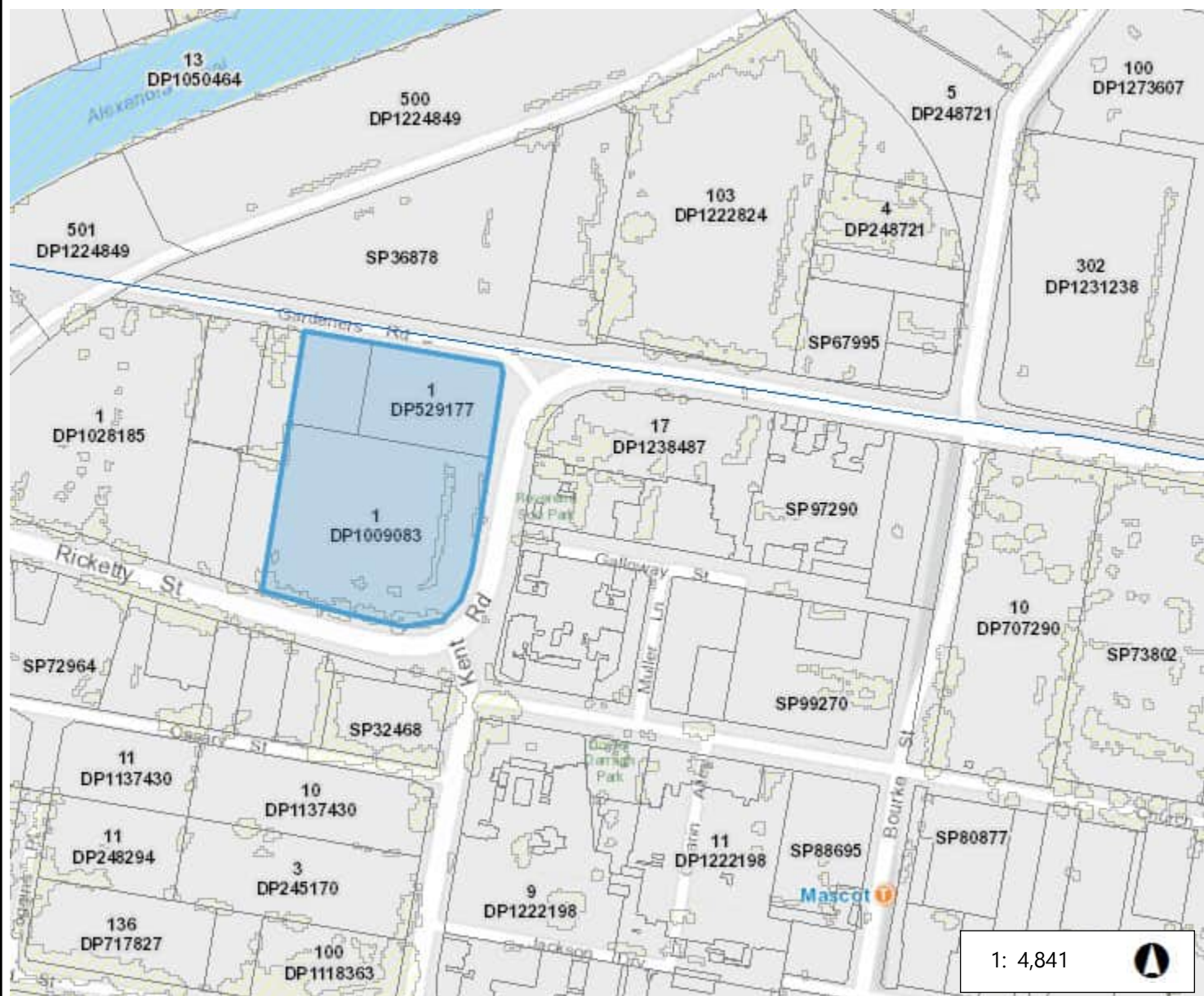
This report may be used as evidence for development applications submitted to councils. You may also use this report when considering native vegetation clearing under the State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 2 vegetation in non-rural areas.

What's new? For more information about the latest updates to the Biodiversity Values Map and Threshold Tool go to the updates section on the [Biodiversity Values Map webpage](#).

Map Review: Landholders can request a review of the BV Map where they consider there is an error in the mapping on their property. For more information about the map review process and an application form for a review go to the [Biodiversity Values Map Review webpage](#).

If you need help using this map tool see our [Biodiversity Values Map and Threshold Tool User Guide](#) or contact the Map Review Team at [map.review@environment.nsw.gov.au](mailto:map.review@environment.nsw.gov.au) or on 1800 001 490.

Biodiversity Values Map



245.9 0 122.96 245.9 Metres

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere

Legend

- Biodiversity Values that have been mapped for more than 90 days
- Biodiversity Values added within last 90 days
- Native Vegetation Area Clearing Estimate (NVACE)
- Development area selected by proponent

11/03/2025 03:58 PM

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Imagery © Airbus DS/Spot Image 2016

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The results provided in this tool are generated using the best available mapping and knowledge of species habitat requirements.

This map is valid as at the date the report was generated. Checking the [Biodiversity Values Map viewer](#) for mapping updates is recommended.





# Appendix E    BioNet Atlas Search Results

## **Kent Road Mascot**

**Project Duke -  
Proposed Data Centre at 2-22 Kent Road and 685 Gardeners Road, Mascot**

**Goodman Property Services (Aust) Pty Ltd**

SLR Project No: 630.031653.00001

20 March 2025

**Table E1: BioNet Atlas Search Results within 10km of Site**

Scientific Name	Common name	NSW status	Common-wealth status	No. of records
<i>Crinia tinnula</i>	Wallum Froglet	V,P		1
<i>Litoria aurea</i>	Green and Golden Bell Frog	E1,P	V	677
<i>Caretta caretta</i>	Loggerhead Turtle	E1,P	E	6
<i>Varanus rosenbergi</i>	Rosenberg's Goanna	V,P		1
<i>Hoplocephalus bitorquatus</i>	Pale-headed Snake	V,P		1
<i>Anseranas semipalmata</i>	Magpie Goose	V,P		9
<i>Stictonetta naevosa</i>	Freckled Duck	V,P		2
<i>Ptilinopus regina</i>	Rose-crowned Fruit-Dove	V,P		1
<i>Ptilinopus superbus</i>	Superb Fruit-Dove	V,P		5
<i>Hirundapus caudacutus</i>	White-throated Needletail	V,P	V,C,J,K	3
<i>Diomedea exulans</i>	Wandering Albatross	E1,P	V	3
<i>Botaurus poiciloptilus</i>	Australasian Bittern	E1,P	E	2
<i>Ixobrychus flavicollis</i>	Black Bittern	V,P		3
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	V,P		7
<i>Hieraaetus morphnoides</i>	Little Eagle	V,P		1
<i>Burhinus grallarius</i>	Bush Stone-curlew	E1,P		5
<i>Haematopus fuliginosus</i>	Sooty Oystercatcher	V,P		1
<i>Haematopus longirostris</i>	Pied Oystercatcher	E1,P		11
<i>Charadrius leschenaultii</i>	Greater Sand-plover	V,P	V,C,J,K	4
<i>Charadrius mongolus</i>	Lesser Sand-plover	V,P	E,C,J,K	8
<i>Calidris alba</i>	Sanderling	V,P	C,J,K	6
<i>Calidris ferruginea</i>	Curlew Sandpiper	E1,P	CE,C,J,K	200
<i>Calidris tenuirostris</i>	Great Knot	V,P	V,C,J,K	16
<i>Limicola falcinellus</i>	Broad-billed Sandpiper	V,P	C,J,K	2
<i>Limosa limosa</i>	Black-tailed Godwit	V,P	E,C,J,K	11
<i>Xenus cinereus</i>	Terek Sandpiper	V,P	V,C,J,K	7
<i>Sternula albifrons</i>	Little Tern	E1,P	C,J,K	371
<i>^Calyptorhynchus lathami lathami</i>	South-eastern Glossy Black-Cockatoo	V,P,2	V	3
<i>Glossopsitta pusilla</i>	Little Lorikeet	V,P		1
<i>Lathamus discolor</i>	Swift Parrot	E1,P	CE	2
<i>Ninox strenua</i>	Powerful Owl	V,P,3		329
<i>Tyto novaehollandiae</i>	Masked Owl	V,P,3		1
<i>^Anthochaera phrygia</i>	Regent Honeyeater	E4A,P,2	CE	1
<i>Epthianura albifrons</i>	White-fronted Chat population in the Sydney Metropolitan Catchment Management Area	E2,V,P		1
<i>Epthianura albifrons</i>	White-fronted Chat	V,P		1



Scientific Name	Common name	NSW status	Common-wealth status	No. of records
<i>Grantiella picta</i>	Painted Honeyeater	V,P	V	1
<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	V,P		2
<i>Petroica boodang</i>	Scarlet Robin	V,P		2
<i>Stagonopleura guttata</i>	Diamond Firetail	V,P	V	4
<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V,P	E	3
<i>Perameles nasuta</i>	Long-nosed Bandicoot population in inner western Sydney	E2,P		19
<i>Phascolarctos cinereus</i>	Koala	E1,P	E	9
<i>Cercartetus nanus</i>	Eastern Pygmy-possum	V,P		1
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V,P	V	1401
<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	V,P		7
<i>Micronomus norfolkensis</i>	Eastern Coastal Free-tailed Bat	V,P		1
<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	V,P	E	3
<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V,P		5
<i>Myotis macropus</i>	Southern Myotis	V,P		10
<i>Miniopterus orianae oceanensis</i>	Large Bent-winged Bat	V,P		34
<i>Dugong dugon</i>	Dugong	E1,P		2
<i>Arctocephalus pusillus doriferus</i>	Australian Fur-seal	V,P		1
<i>Senecio spathulatus</i>	Coast Groundsel	E1		1
<i>Hibbertia puberula</i>		E1		1
<i>Doryanthes palmeri</i>	Giant Spear Lily	V,P		1
<i>Tetradlea juncea</i>	Black-eyed Susan	V	V	6
<i>Acacia terminalis subsp. Eastern Sydney</i>	Sunshine wattle	E1	E	61
<i>Prostanthera marifolia</i>	Seaforth Mintbush	E4A,3	CE	3
<i>Eucalyptus pulverulenta</i>	Silver-leafed Gum	V	V	1
<i>Melaleuca deanei</i>	Deane's Paperbark	V	V	8
<i>Syzygium paniculatum</i>	Magenta Lilly Pilly	E1	V	32
<i>Caladenia tessellata</i>	Thick Lip Spider Orchid	E1,P,2	V	2
<i>Dichanthium setosum</i>	Bluegrass	V	V	1
<i>Senecio spathulatus</i>	Coast Groundsel	E1		1
<i>Persoonia hirsuta</i>	Hairy Geebung	E1,P,3	E	2
<b>Key</b> *NSW status (listed under the BC Act 2016): CE=Critically Endangered, E1=Endangered, V=Vulnerable, P=Protected, 2=Sensitive Species, 3=Sensitive Species, C=CAMBA China-Australia Migratory Bird Agreement, J=JAMBA Japan-Australia Migratory Bird Agreement, K= ROKAMBA Republic of Korea-Australia Migratory Bird Agreement <b>Source</b> Data from the BioNet Atlas website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°C; ^^ rounded to 0.01°C. Copyright the State of				



Scientific Name	Common name	NSW status	Common-wealth status	No. of records
NSW through the Department of Planning, Industry and Environment. Search criteria : Licensed Report of all Valid Records of Threatened (listed on BC Act 2016) ,CAMBA listed ,JAMBA listed or ROKAMBA listed Entities in selected area [North: -33.87 West: 151.13 East: 151.23 South: -33.97] returned a total of 4,896 records of 87 species. Report generated on 25/02/2025 11:29 AM				







# Appendix F    Site Photos

## **Kent Road and Gardeners Road - Mascot**

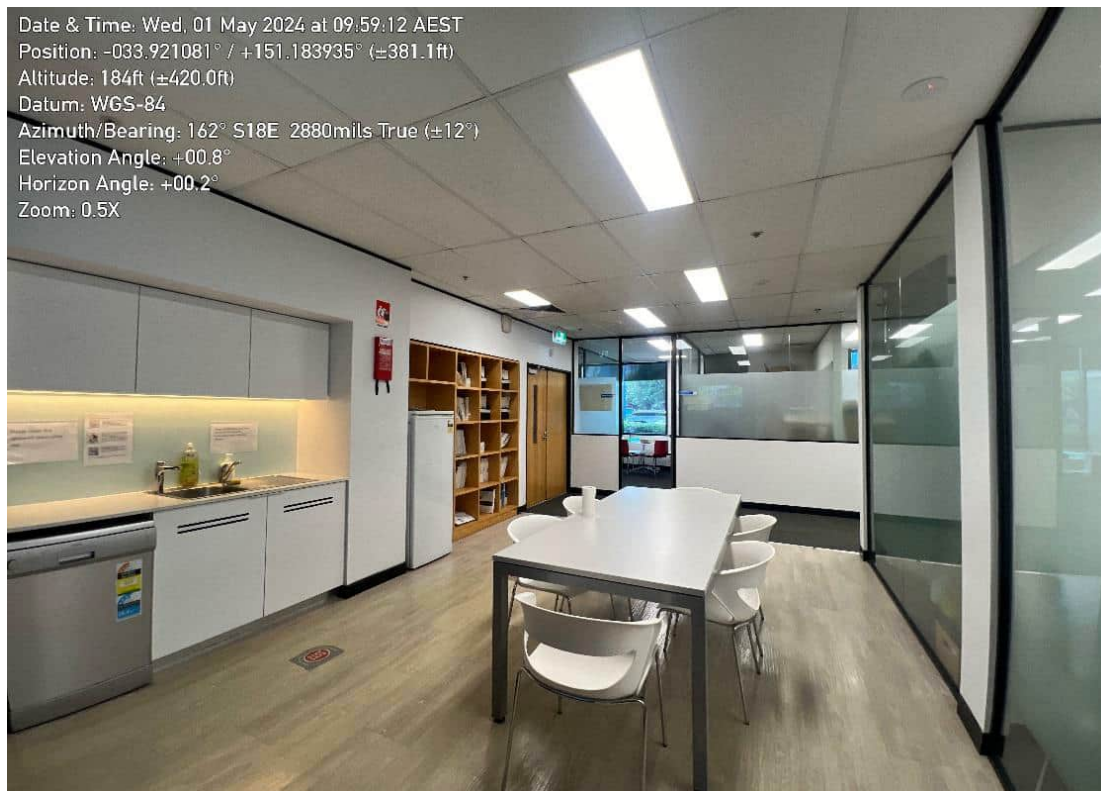
**Project Duke -  
Proposed Data Centre at 2-22 Kent Road and 685 Gardeners Road, Mascot**

**Goodman Property Services (Aust) Pty Ltd**

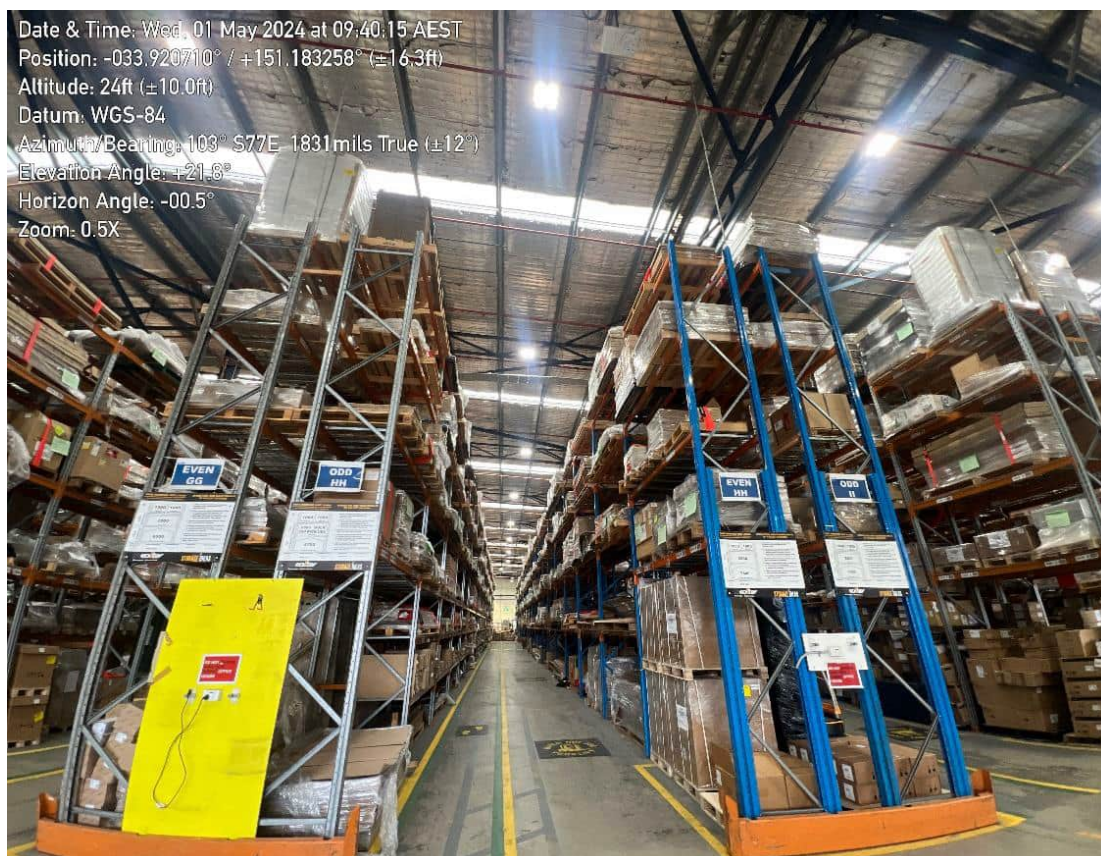
SLR Project No: 630.031653.00001

20 March 2025

**Photo F1: View from inside of one main of the buildings demonstrating its good condition**

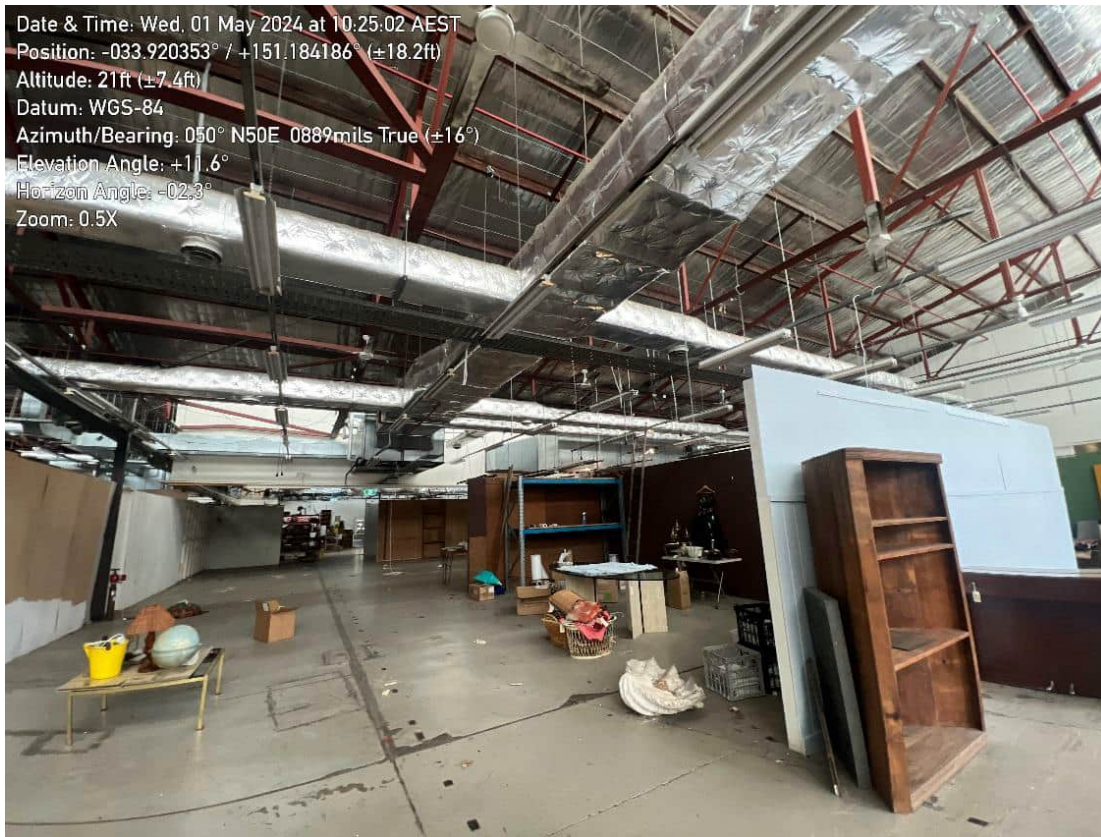


**Photo F2: View from inside of the main building that is currently occupied**

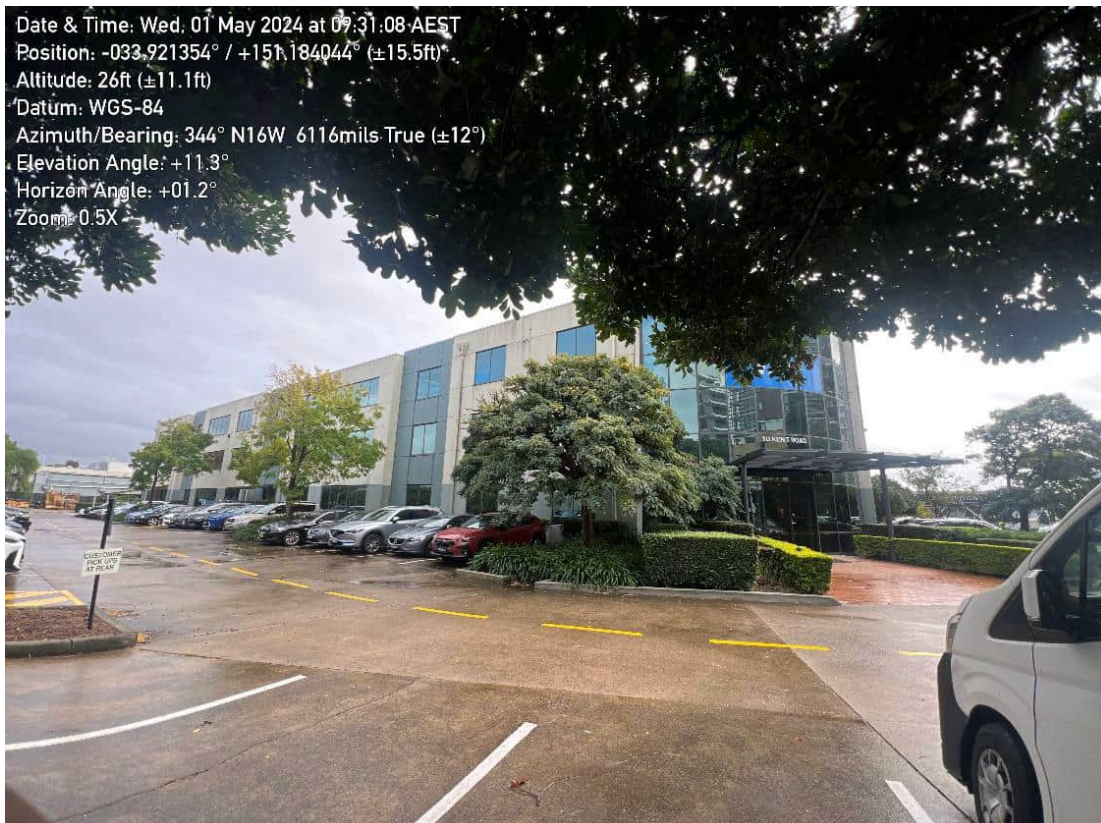




**Photo F3: View inside one of the smaller buildings located in the north of the subject land**



**Photo F4: General view outside a building showing the planted trees**

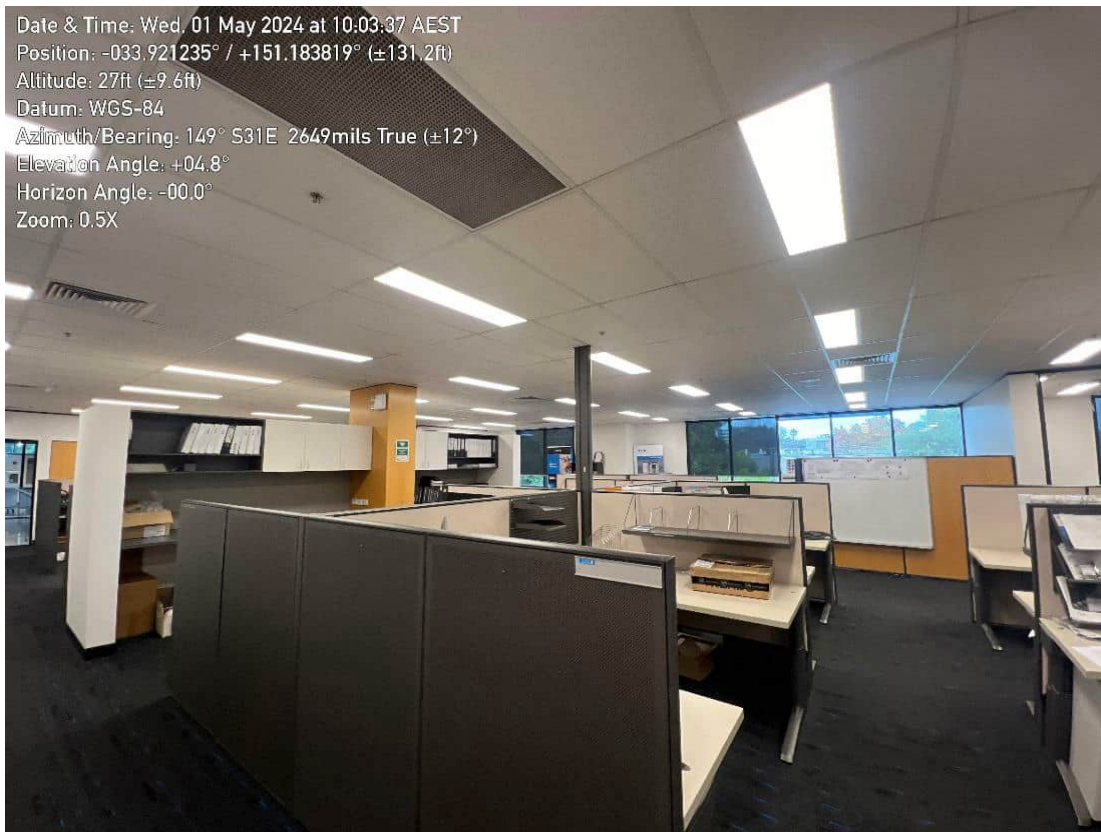




**Photo F5: Planted exotic trees in the northwest corner of the subject land  
(685 Gardeners Road)**



**Photo F6: View inside one of the main buildings currently occupied**





**Photo F7: View Inside of the Main Entry**



**Photo F8: View Inside One of the Buildings Showing a Mesh Screen which would be Preventing Bats from entering the Building**

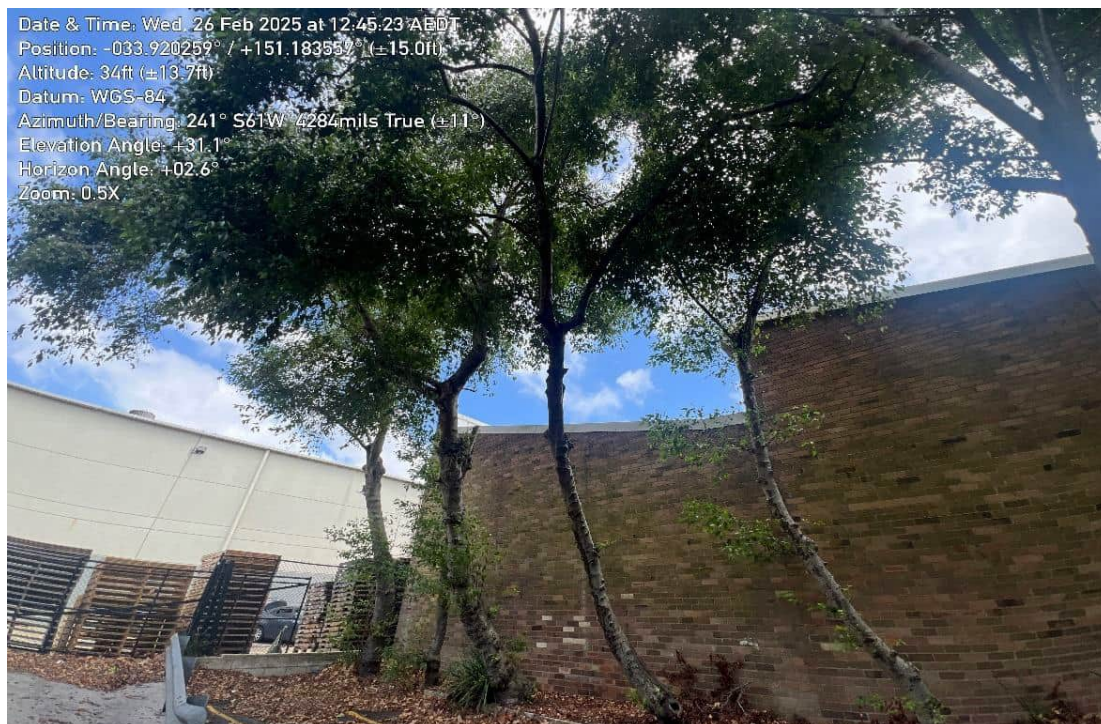


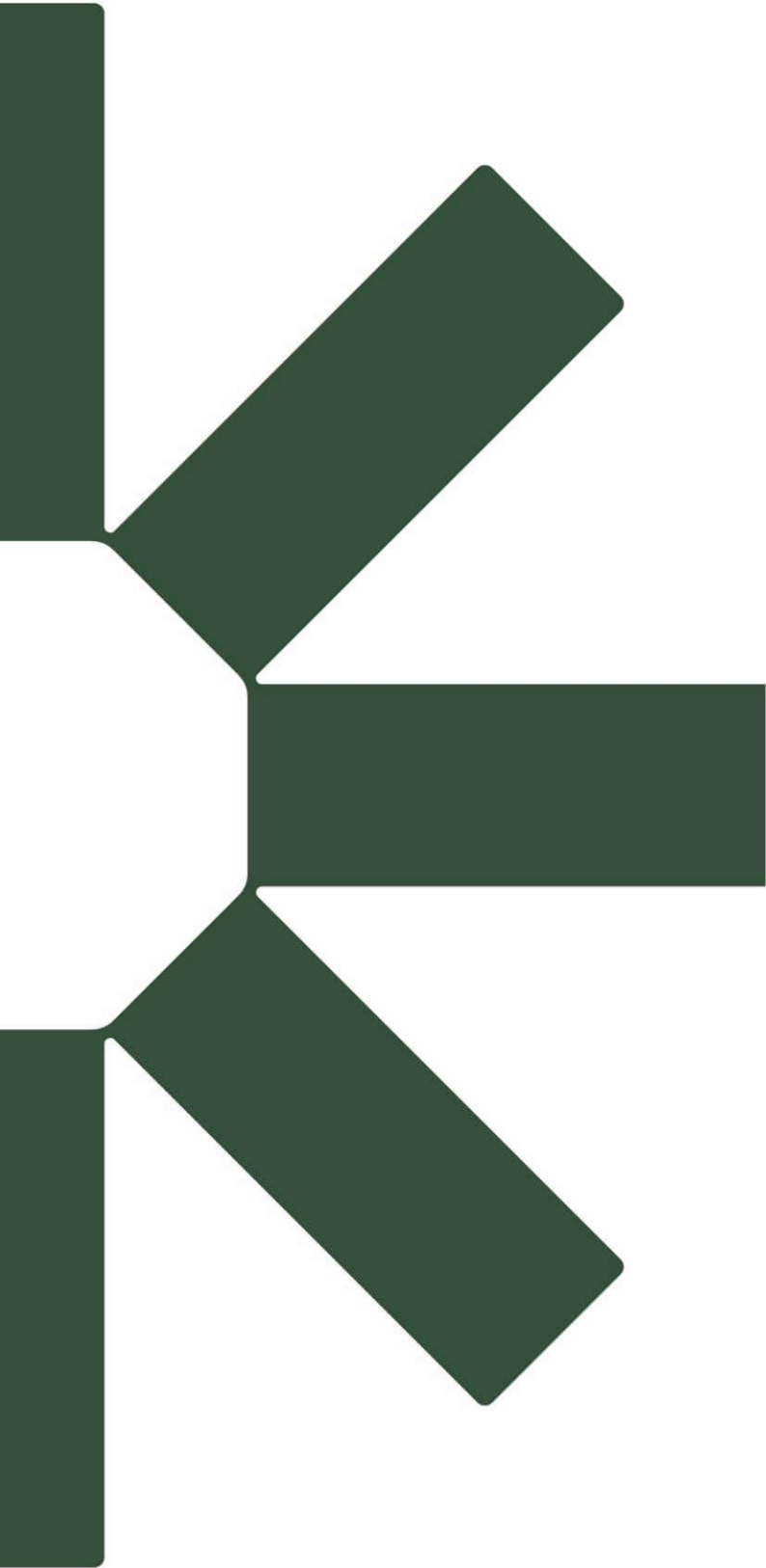


**Photo F9: Narrow-leaved Paperbark – *Melaleuca linariifolia* at 685 Gardeners Rd**



**Photo F10: Alder – *Alnus* sp at 685 Gardeners Rd**





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