

7 April 2026

CPS Reference: G845

Hecorp Property Group  
 Level 2/67 Albert Avenue  
 Chatswood NSW 2067

## ARBORICULTURAL STATEMENT ASSOCIATED WITH PROPOSED DEVELOPMENT AT: 16-24 LORD STREET & 21-27 ROSEVILLE AVENUE, ROSEVILLE

This Arboricultural Statement relates to the State Significant Development application (SSD-78996460) for the proposed residential development with infill affordable housing at the subject site at 16-24 Lord Street & 21-27 Roseville Avenue, Roseville within the Ku-ring-gai Local Government Area (LGA).

Specifically, this statement responds to a request for information (RFI) from the Department of Planning, Housing and Infrastructure (DPHI) dated 16.02.2026 and Ku-ring-gai Council dated 27.01.2026.

Accordingly, this Arboricultural Statement provides further evaluation of the likely impact to **Trees 5, 20, 49, 85, 88 & 93** located on and adjacent to the subject site as a result of the proposed development as amended.

A summary of the one hundred and sixteen (116) trees as referenced within the Arboricultural Impact Assessment (AIA) prepared by CPS, dated 30<sup>th</sup> of October 2025 has been provided in **Table 1** below with the trees denoted on the Tree Location Plan held at **Appendix 1**.

**Table 1 - Tree Assessment Summary**

Retain / Remove	Location	Identified Retention Values			Number of Trees	Canopy Cover
		High	Medium	Low		
Retain & Protect	Subject Site	2 trees Trees 39 & 93	2 trees Trees 52 & 88	2 trees Trees 73 & 74	6 trees	1,485m <sup>2</sup>
	Council Street verge	6 trees Trees 20, 49, 53, 68, 69 & 85	7 trees Trees 1, 5, 6, 63, 64, 65 & 102	2 trees Trees 71 & 72	15 trees	963m <sup>2</sup>
	Neighbour Allotments	2 trees Trees 115 & 116	3 trees Trees 66, 67 & 110	1 tree Tree 70	6 trees	505m <sup>2</sup>
<b>Total</b>					<b>27 trees</b>	<b>2,953m<sup>2</sup></b>
Remove	Subject Site	-	6 trees Trees 12, 17, 22, 26, 76 & 82	82 trees Trees, 2-4, 7-11, 13-16, 18-19, 21, 23-25, 27-38, 40-48, 50-51, 54-62, 75, 77-81, 83-84, 87, 89-92, 94-101, 103-109 & 111-114	88 trees	1,486m <sup>2</sup>
	Council Street verge	-	-	1 tree Tree 86	1 tree	59m <sup>2</sup>
	Neighbour Allotments	-	-	-	-	-
<b>Total</b>					<b>89 trees</b>	<b>1,545m<sup>2</sup></b>

- **TREE 93**

A 3D point cloud survey of **Tree 93** (*Eucalyptus grandis* – Flooded Gum) has been modelled within the Sun Eye View drawings and Shadow Diagrams (refer to **Appendix 2**) between 9am and 3pm on 21 June. These drawings indicate that there will be direct solar access to 55%-79% of the canopy of **Tree 93** between 9am and 3pm on the 21<sup>st</sup> of June.

As the 21<sup>st</sup> of June is the shortest day of the year, solar access will only increase throughout other times of the year.

The entire canopy of **Tree 93** will also have access to indirect diffuse light (scattered by clouds, dust, or urban structures) which still allows the tree to continue photosynthesis.

Furthermore, **Tree 93** is a native forest species characterised by strong apical dominance. Reaching heights of up to 30m in urban settings, its vertical growth habit allows it to outcompete neighbouring obstructions and secure increasing levels of solar access over time. In the circumstance of the subject development, it is considered likely this tree will continue to attain increased height allowing increased levels of solar access as greater a proportion of the canopy extends above the proposed built form.

In this regard, the reduced solar access between 9am and 3pm on 21 June is unlikely to result in decline to the long-term viability or Useful Life Expectancy of **Tree 93**.

Impacts to the Notional Root Zone (NRZ) of **Tree 93** result from the proposed building/basement footprint, retaining walls, pathways, seating walls and decking.

The design has been amended to remove decking to the south and west of the tree and to remove a proposed retaining wall to the south of the tree.

The finished level of the deck, including 250mm profile depth, will be raised to ensure existing ground levels will be maintained.

Impacts from the proposed works will result in ‘moderate’ (13%) NRZ encroachment (as per AS4970-2025 *Protection of trees on development sites*).

This level of encroachment, as well as the modification of surrounding site conditions may alter ground water movement and availability of nutrients and has the potential to result in a reduction to the assigned Useful Life Expectancy (ULE) rating and health/condition of **Tree 93**. The long-term viability of **Tree 93** is contingent on root-sensitive design and construction of decking, pathways and seating walls, Project Arborist supervision and tree protection measures (protective fencing, mulch etc.) throughout construction as well as ongoing irrigation to supplement any reduced access to water.

- **TREES 5 & 49**

Root Mapping was not carried out to **Trees 5 & 49** (*Lophostemon confertus*) located within the Lord Street verge as impacts from the proposed development result in ‘moderate’ (12% & 17% respectively) NRZ encroachment (as per AS4970-2025 *Protection of trees on development sites*). Per the SEARs Item 14, root mapping is only required ‘if the proposal involves significant impacts to tree-protection zones of retained trees identified as being significant’. On the basis the impacts are considered moderate and tolerable, root mapping investigations have not been undertaken.

The anticipated impact to the health and condition of **Trees 5 & 49** from construction is considered sustainable given the species’ known tolerance to high levels of root loss and disturbance. Further, all proposed works are located outside the Structural Root Zone (SRZ) and NRZ encroachment is partly offset by contiguous areas of deep soil available for compensatory root development.

- **TREE 20**

The proposed driveway and crossover have been re-aligned and will result in ‘moderate’ (13%) NRZ encroachment (as per AS4970-2025 *Protection of trees on development sites*) to **Tree 20**.

The anticipated impact to the health and condition of **Tree 20** from construction is considered sustainable given the species’ known tolerance to high levels of root disturbance. Further proposed works are located outside the SRZ and NRZ encroachment is partly offset by contiguous areas of deep soil available for compensatory root development.

- **TREES 85 & 88**

The proposed landscape design has been amended to remove the pathway between **Trees 85 & 88**. Impacts to **Tree 85** from the proposed seating and remaining pathways will result in ‘minor’ 5% NRZ encroachment, while impacts to **Tree 88** from the proposed seating and remaining pathways will result in ‘moderate’ 19% NRZ encroachment (as per AS4970-2025 *Protection of trees on development sites*).

Impacts are not expected to significantly impact **Tree 88** health, condition or structural viability given the species’ known tolerance to moderate levels of root disturbance and the existing good health/vitality of the specimen, subject to the implementation of root-sensitive design and construction of pathways and seating walls, Project Arborist supervision and tree protection measures throughout construction.

The following documents were received and reviewed as part of this Statement:

**Table 2** – Received Documentation

Document Description	Author	Revision / Date
Architectural Plans	Fender Katsalidis	C / 19 March 2026
Civil Plans	PTC	P8 / 25 March 2026
Landscape Plans	Land and Form	3 / 30 March 2026
Survey	LTS	4 / 8 August 2024

If you have any queries in relation to the information presented above, please do not hesitate to get in contact.

Sincerely,

**Creative Planning Solutions Pty Ltd**



**James Hume-Grimm**  
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 Dip. Arboriculture - AQF Level 5  
 IACA Accredited Member No. 083  
 QTRA No. 9605





**LEGEND**

- T1 EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- NOTIONAL ROOT ZONE (NRZ)
- STRUCTURAL ROOT ZONE (SRZ)
- OUTLINE OF BASEMENT LEVEL
- ▨ NRZ ENCROACHMENT ZONE
- SITE BOUNDARY
- STORMWATER INFRASTRUCTURE

Issue Code	Issue Description	By	Chk	Date
E	PRE UPDATED	JHG	GT	07.04.26
D	PRE UPDATED	SZ	GT	28.10.25
C	PRE UPDATED	SZ	GT	03.04.25
B	PRE UPDATED	NZ	GT	11.03.25
A	PRE FOR INFORMATION	JZ	GT	06.03.25

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

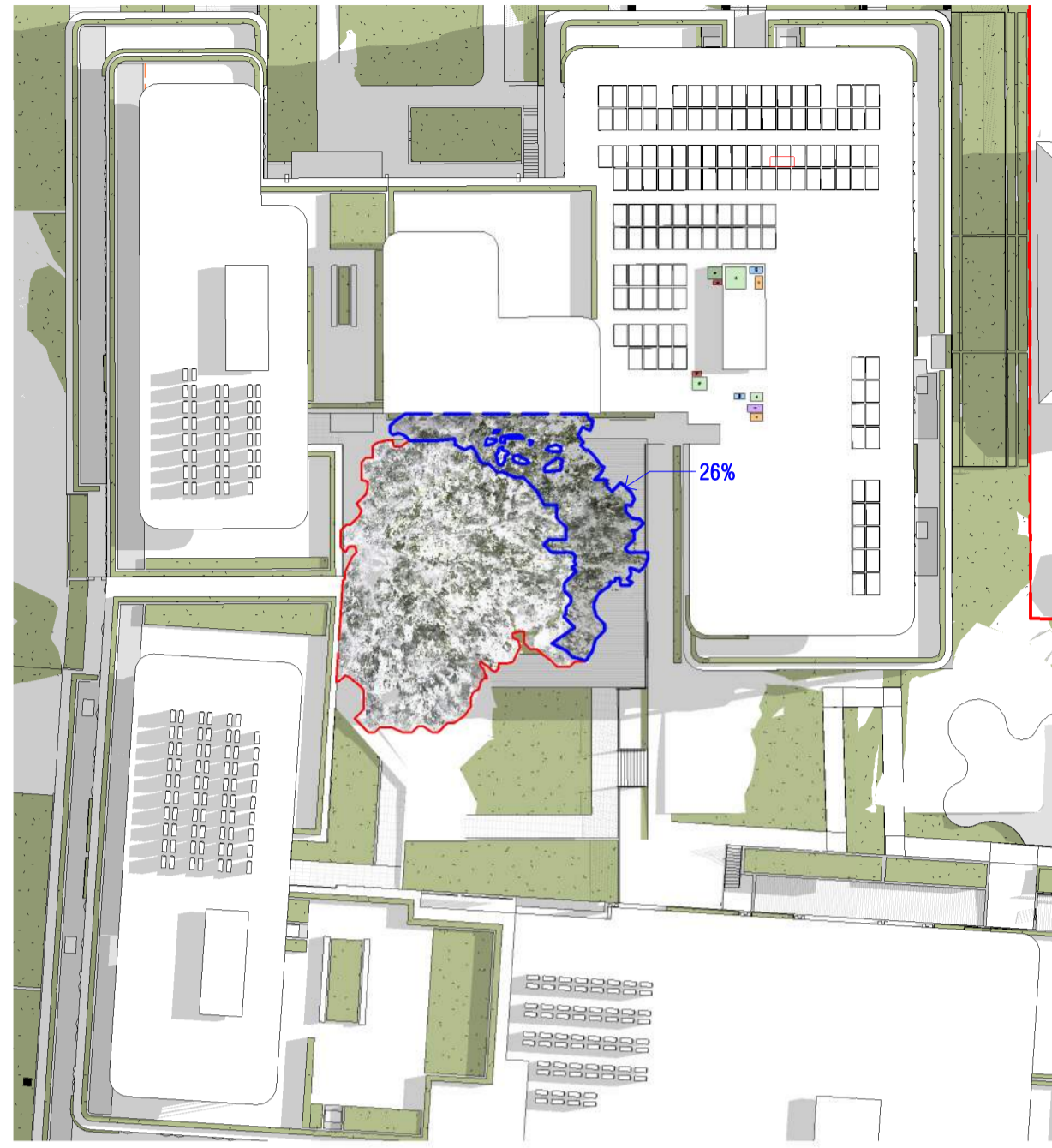
**PROJECT**  
**16-24 LORD ST & 21-27 ROSEVILLE AVE, ROSEVILLE**

DRAWING TITLE  
**TREE LOCATION PLAN**

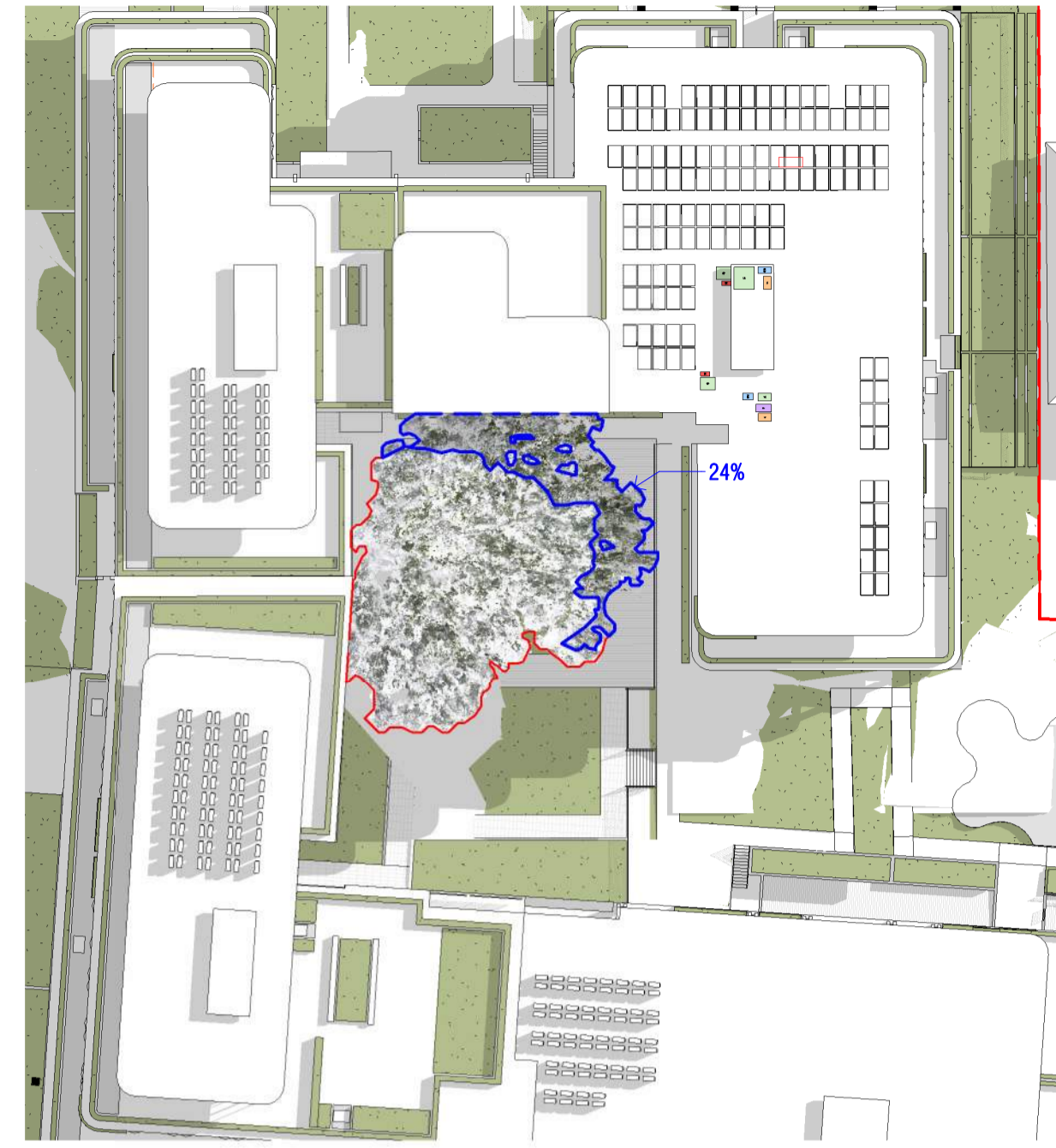
CLIENT  
**HYECORP PROPERTY GROUP**

Drawn : SZ  
Designed : SZ  
Project No. : G845  
Bar Scale  
1:500 @ A3  
SHEET NUMBER G845\_TLP\_01A  
REVISION E

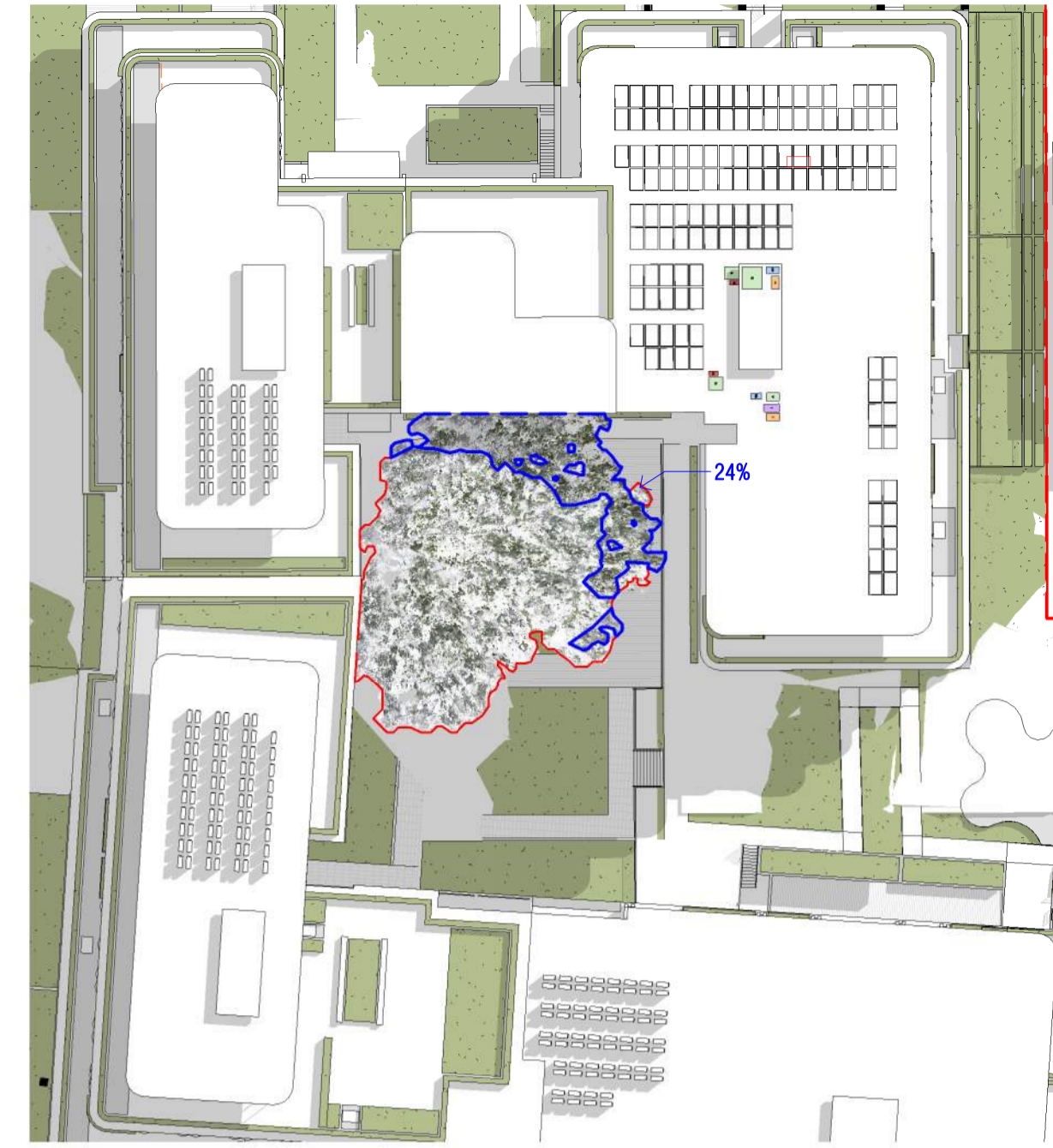
APPENDIX 2: SHADOW DIAGRAMS + SUN EYE VIEW DRAWINGS



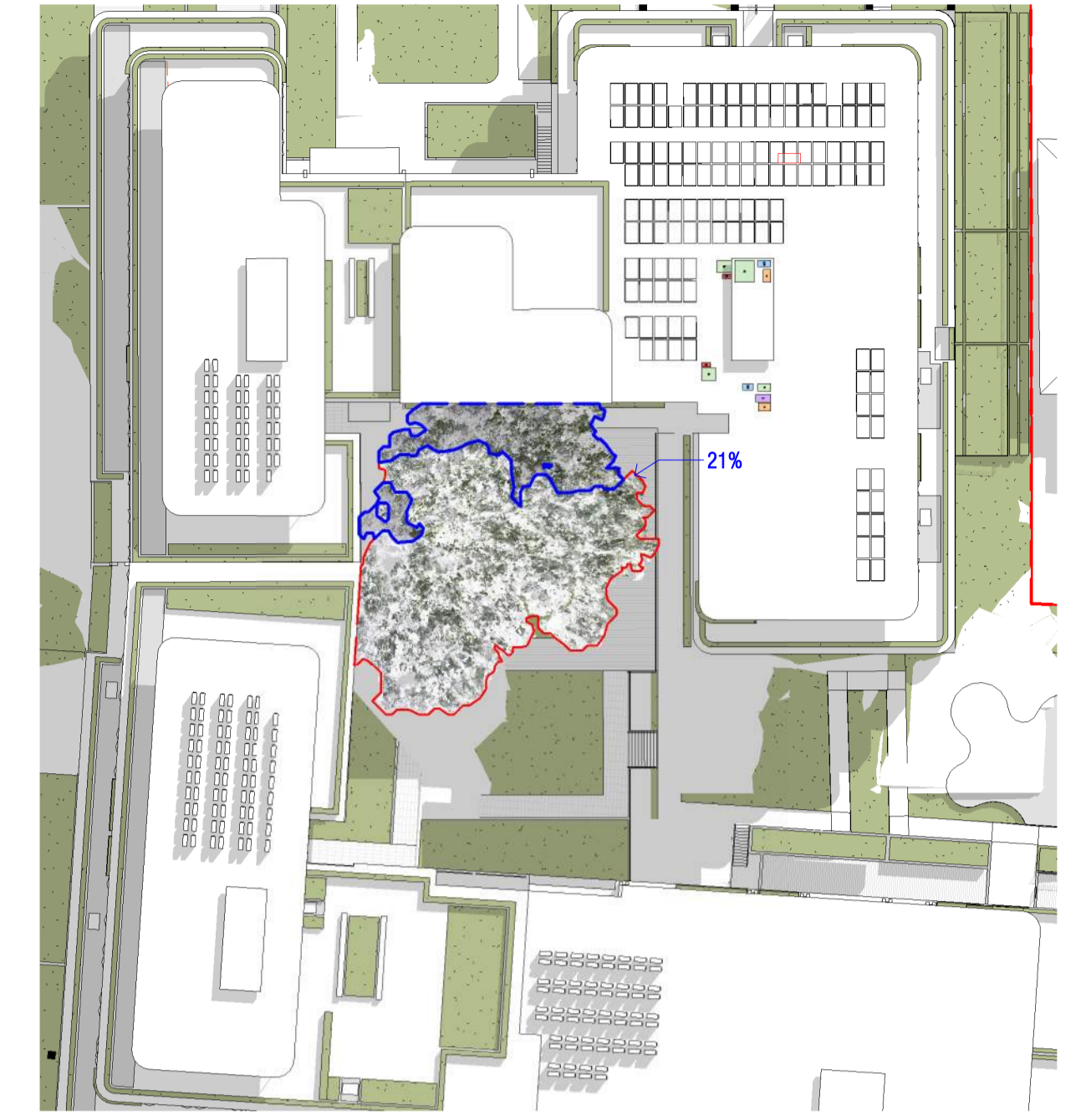
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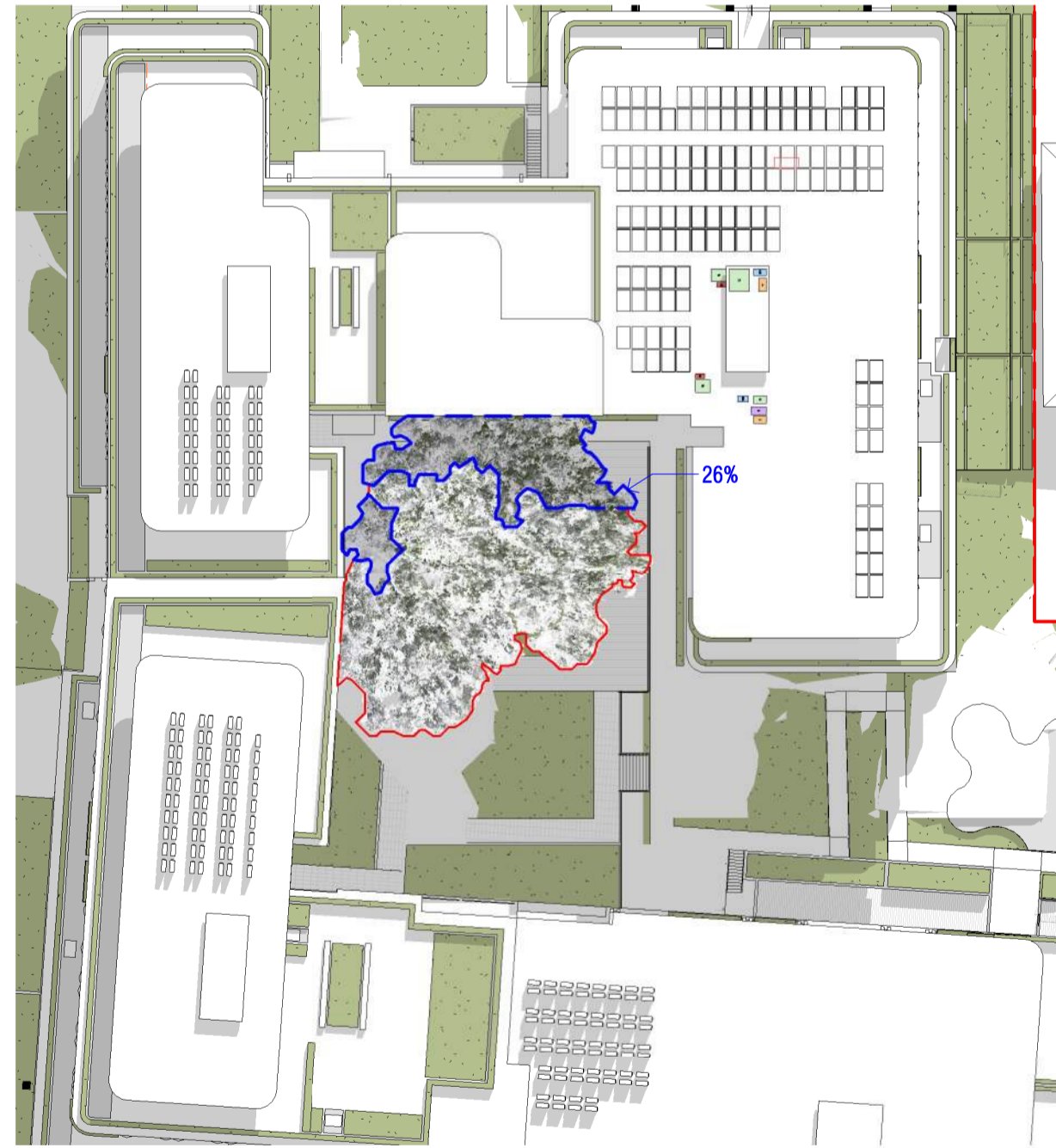
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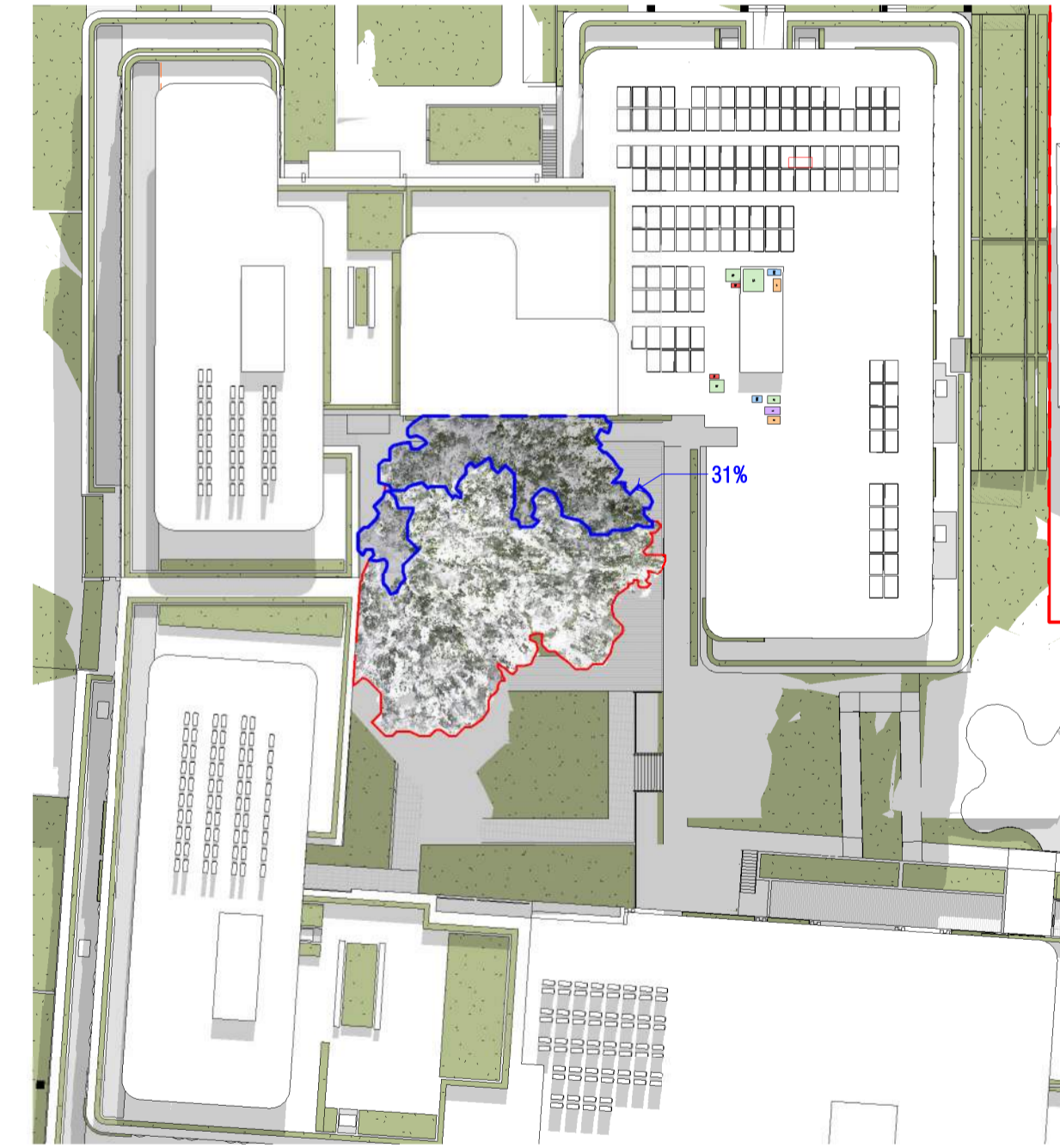
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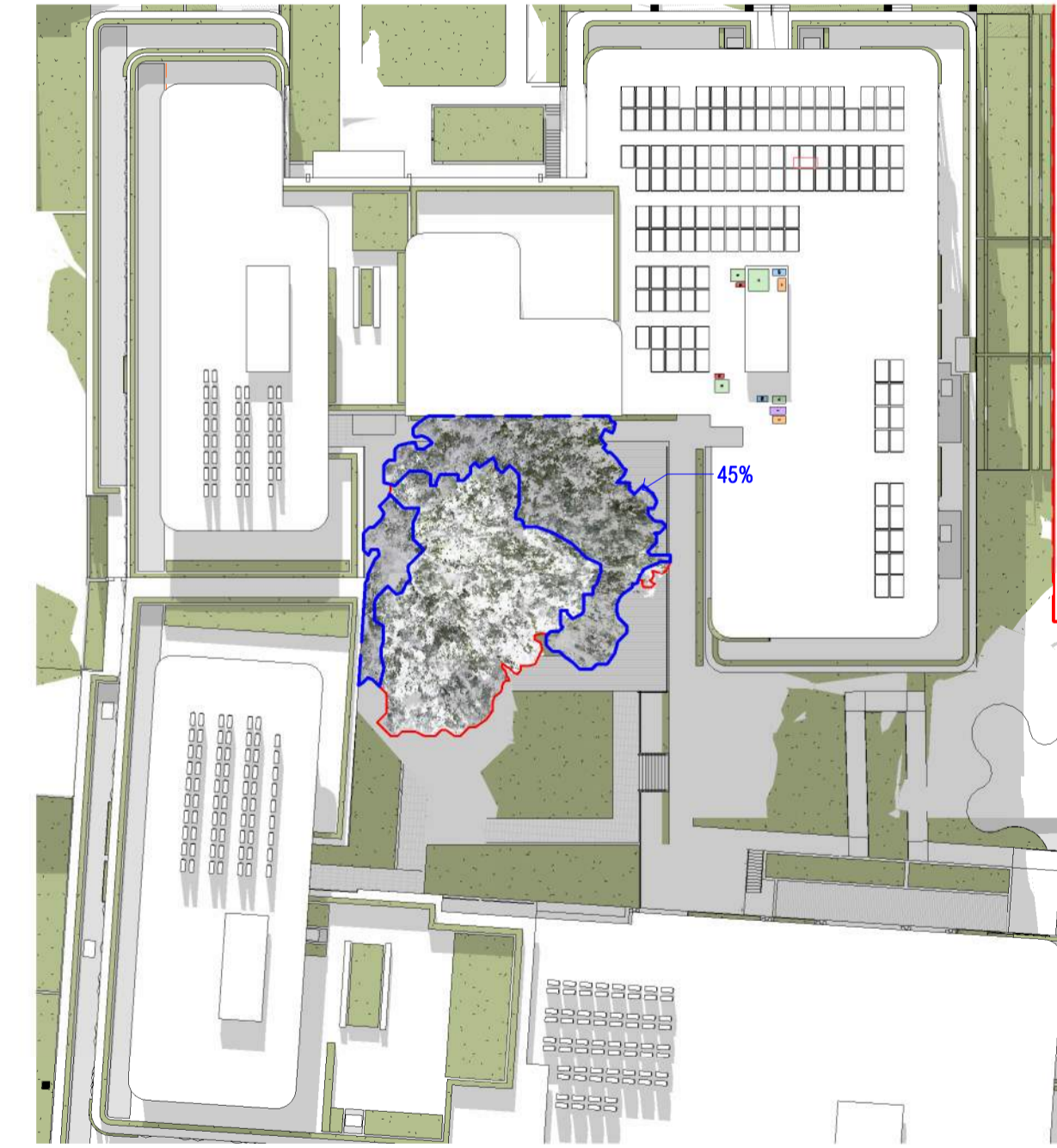
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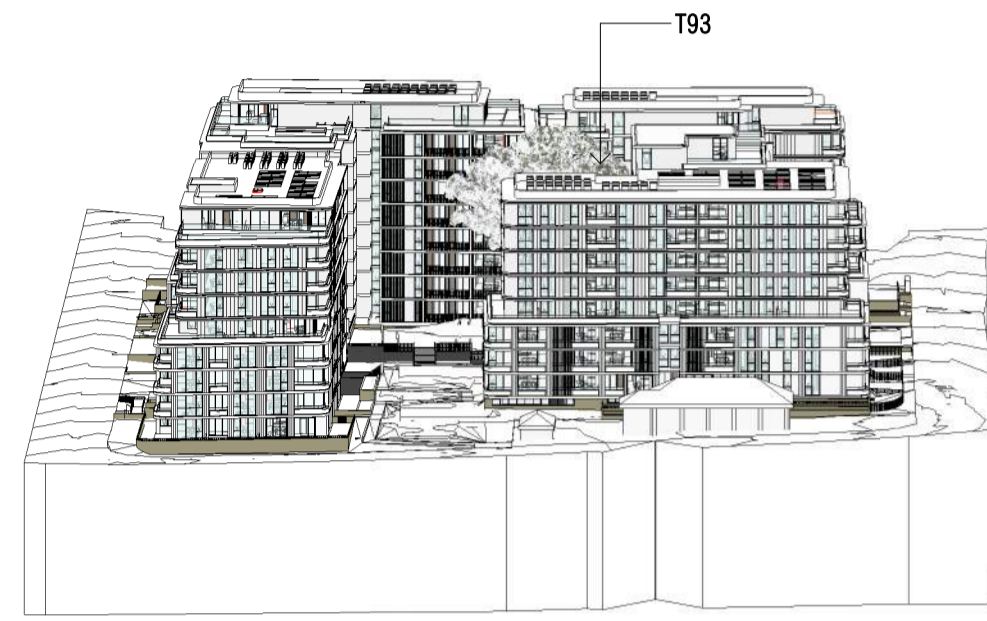
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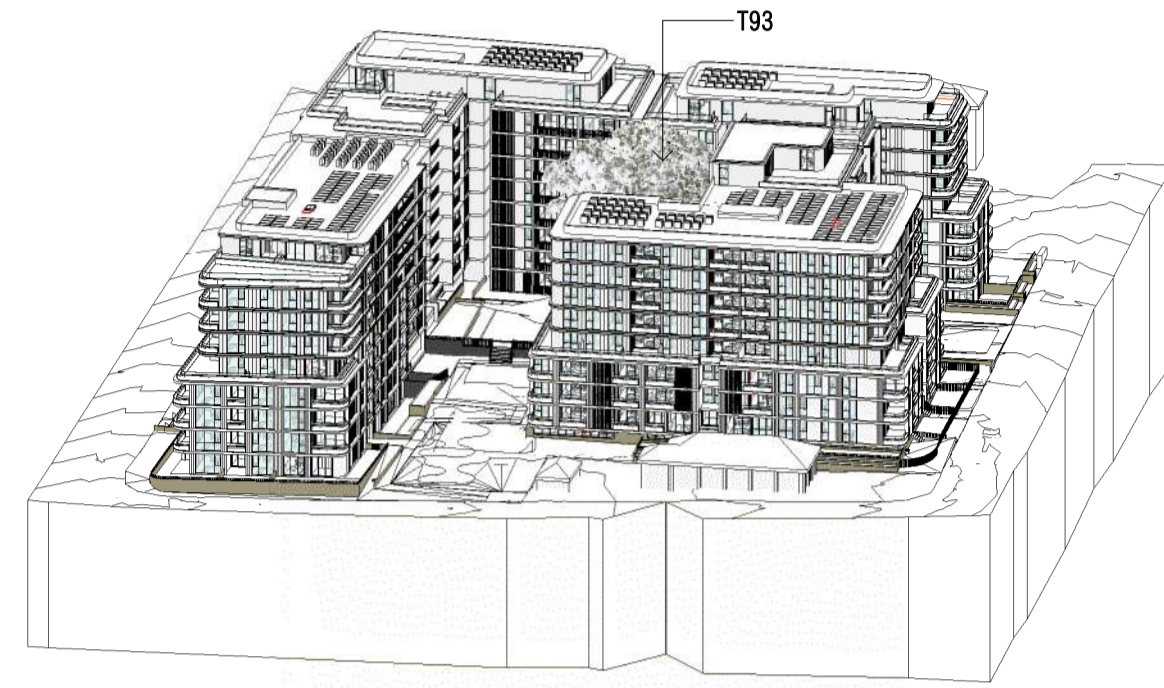
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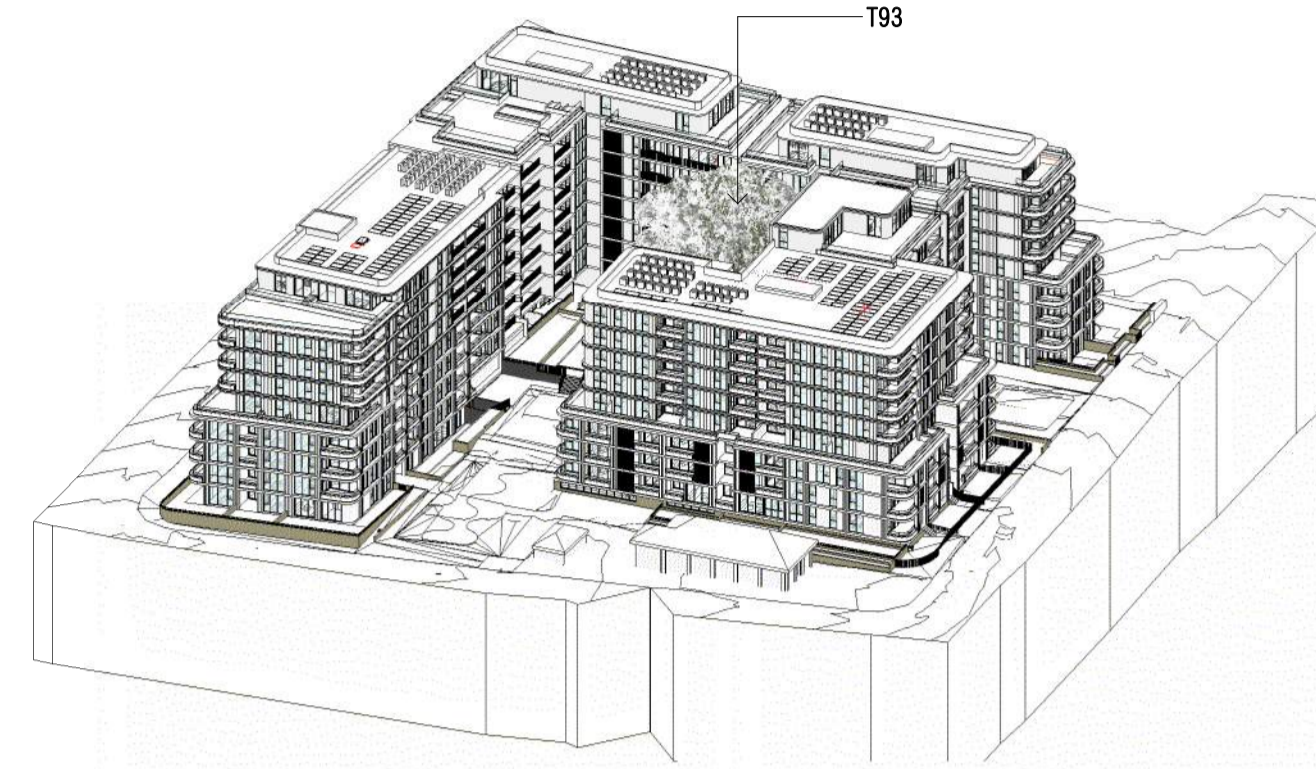
7 3PM - 21 JUNE (WINTER SOLSTICE) - T93



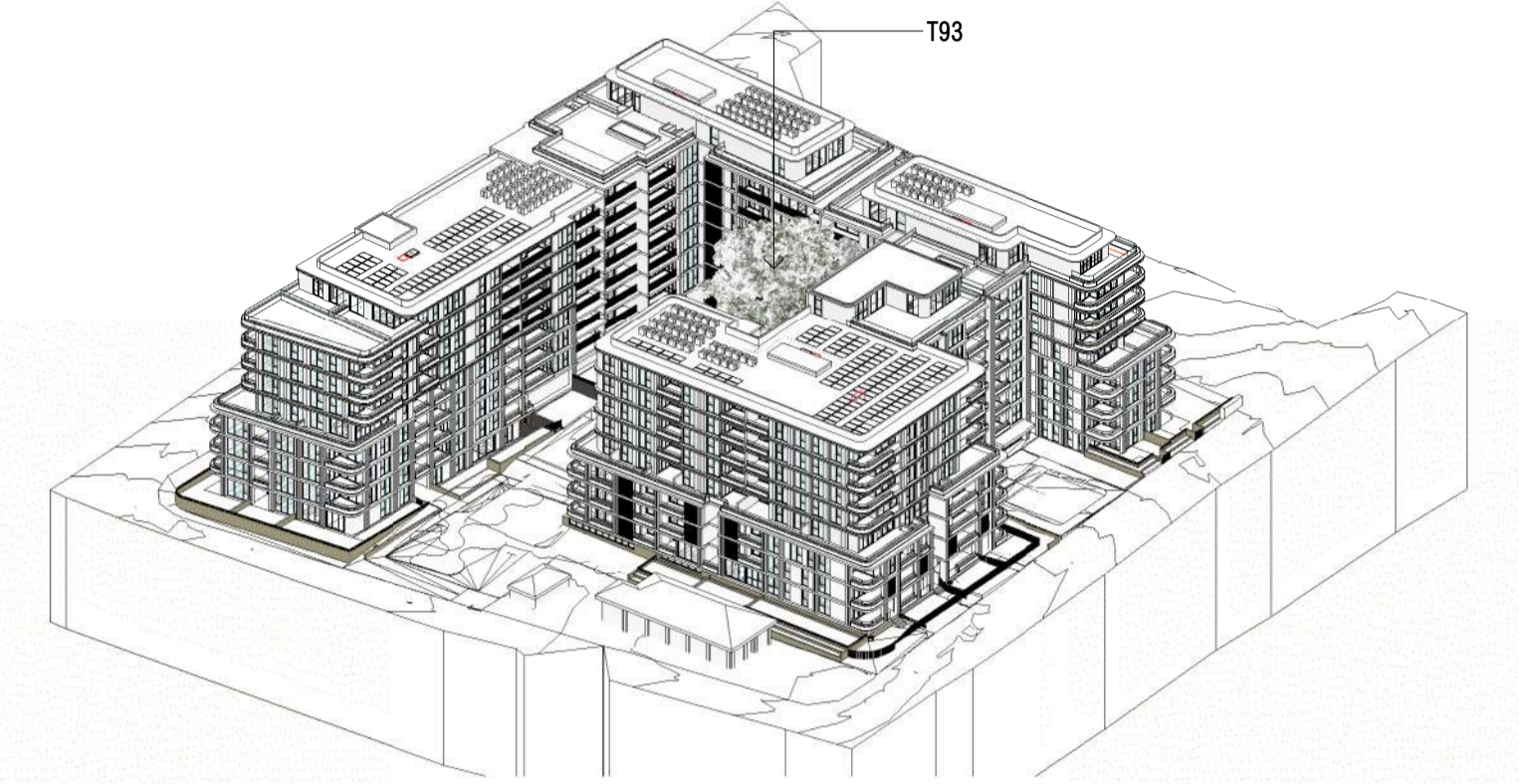
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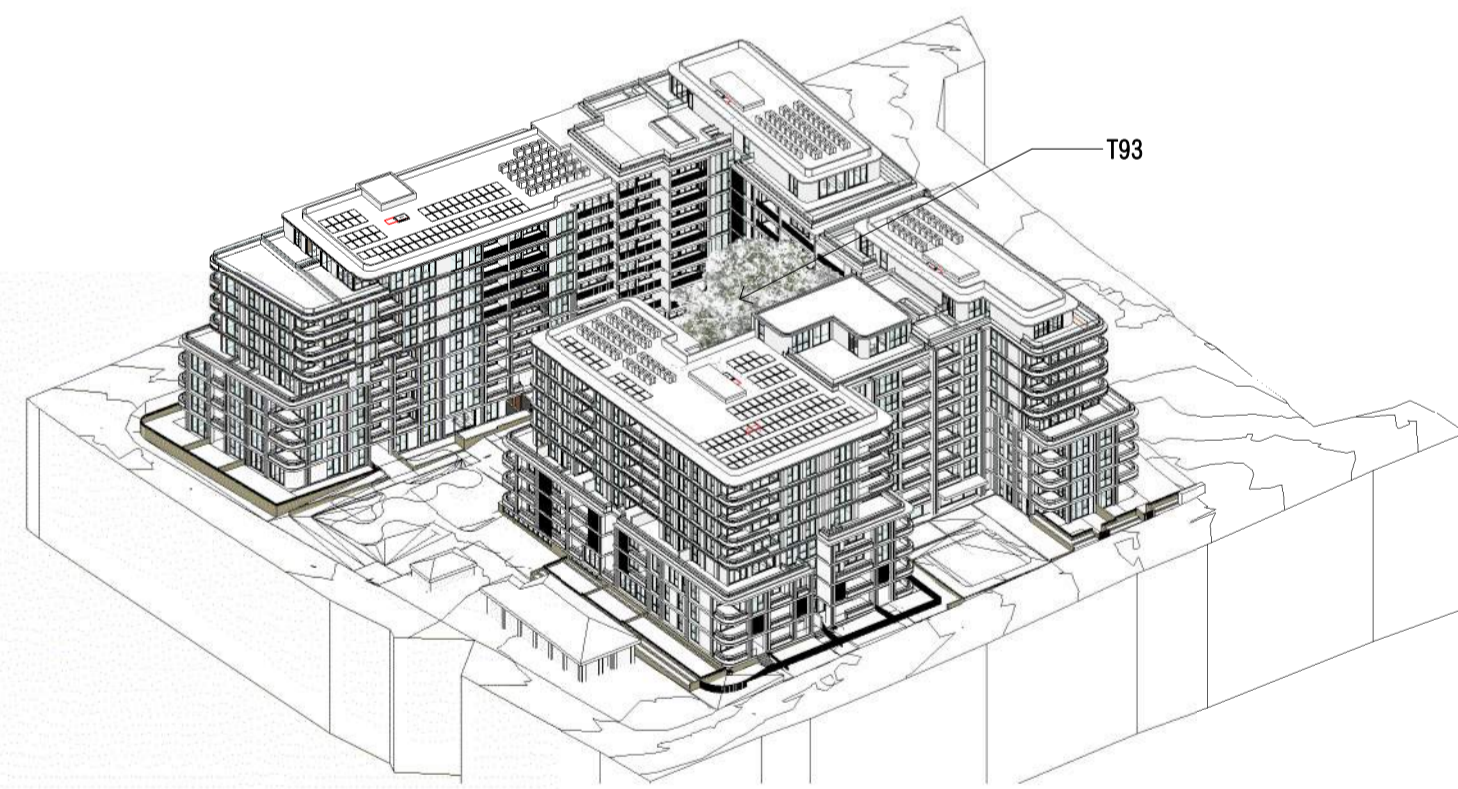
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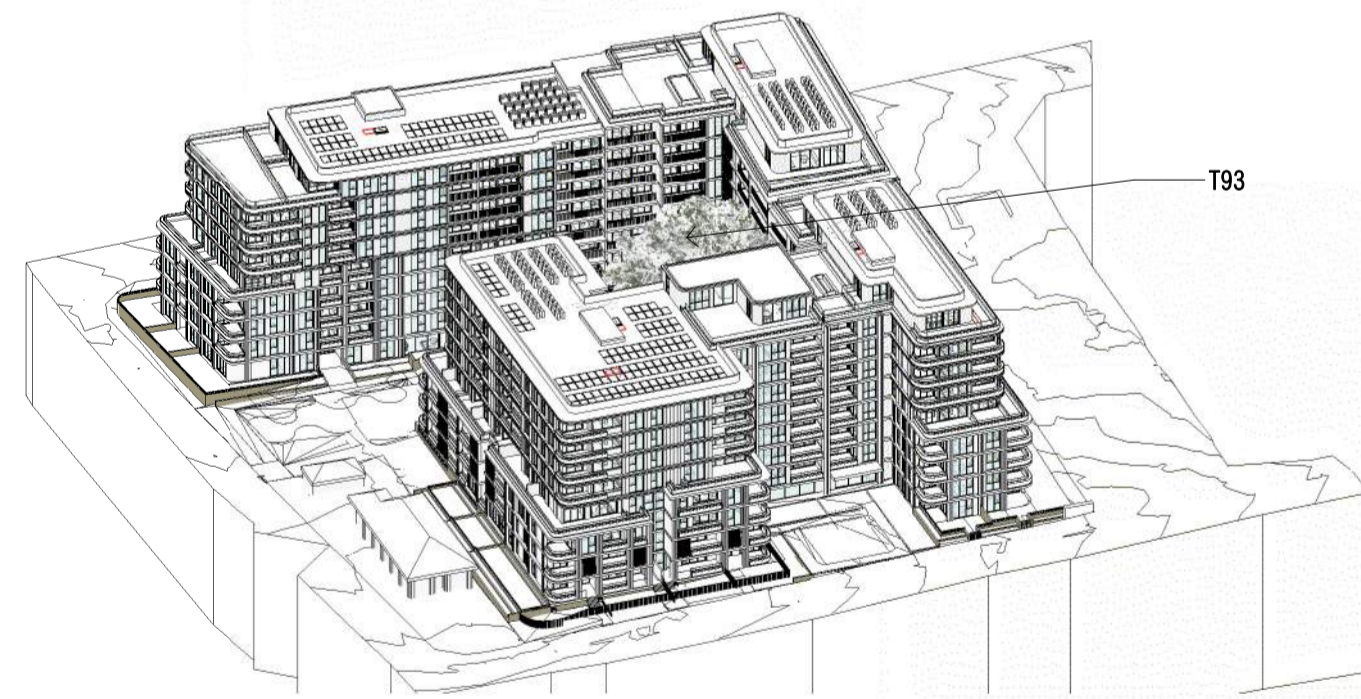
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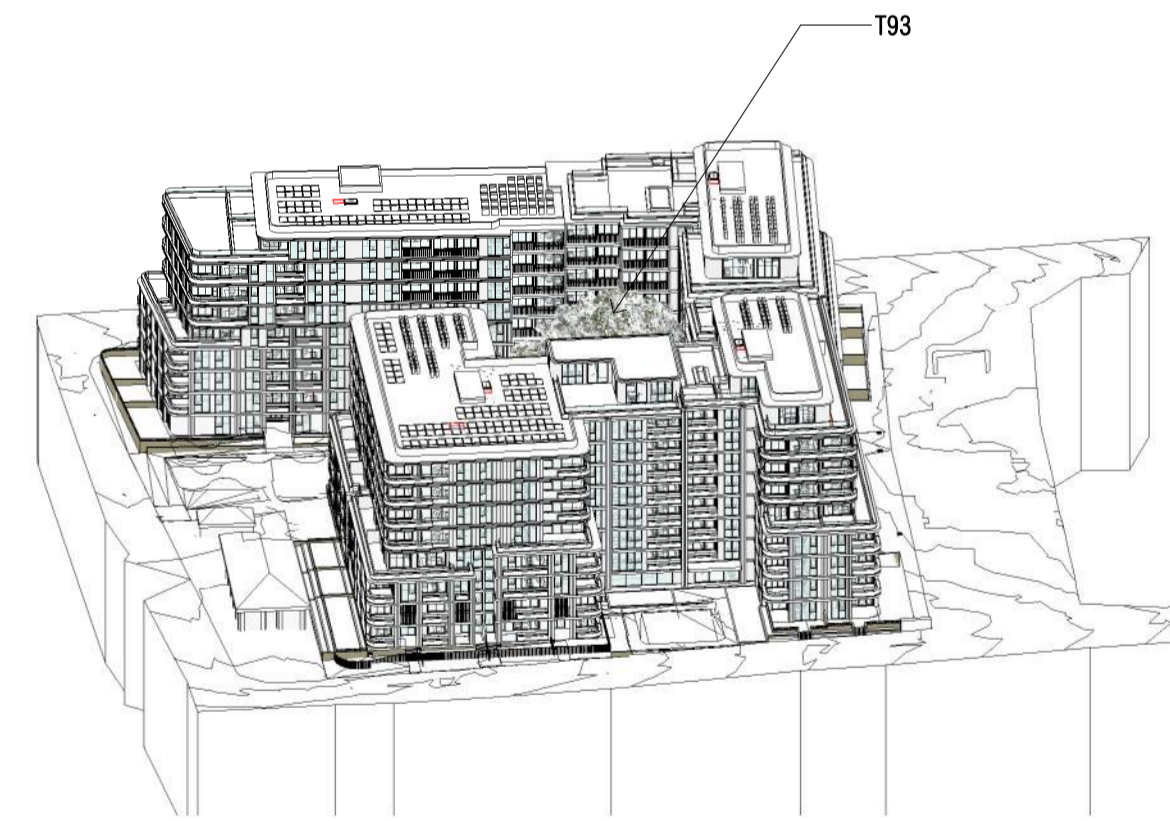
4 SUN VIEW - 11AM - JUNE 21 - T93



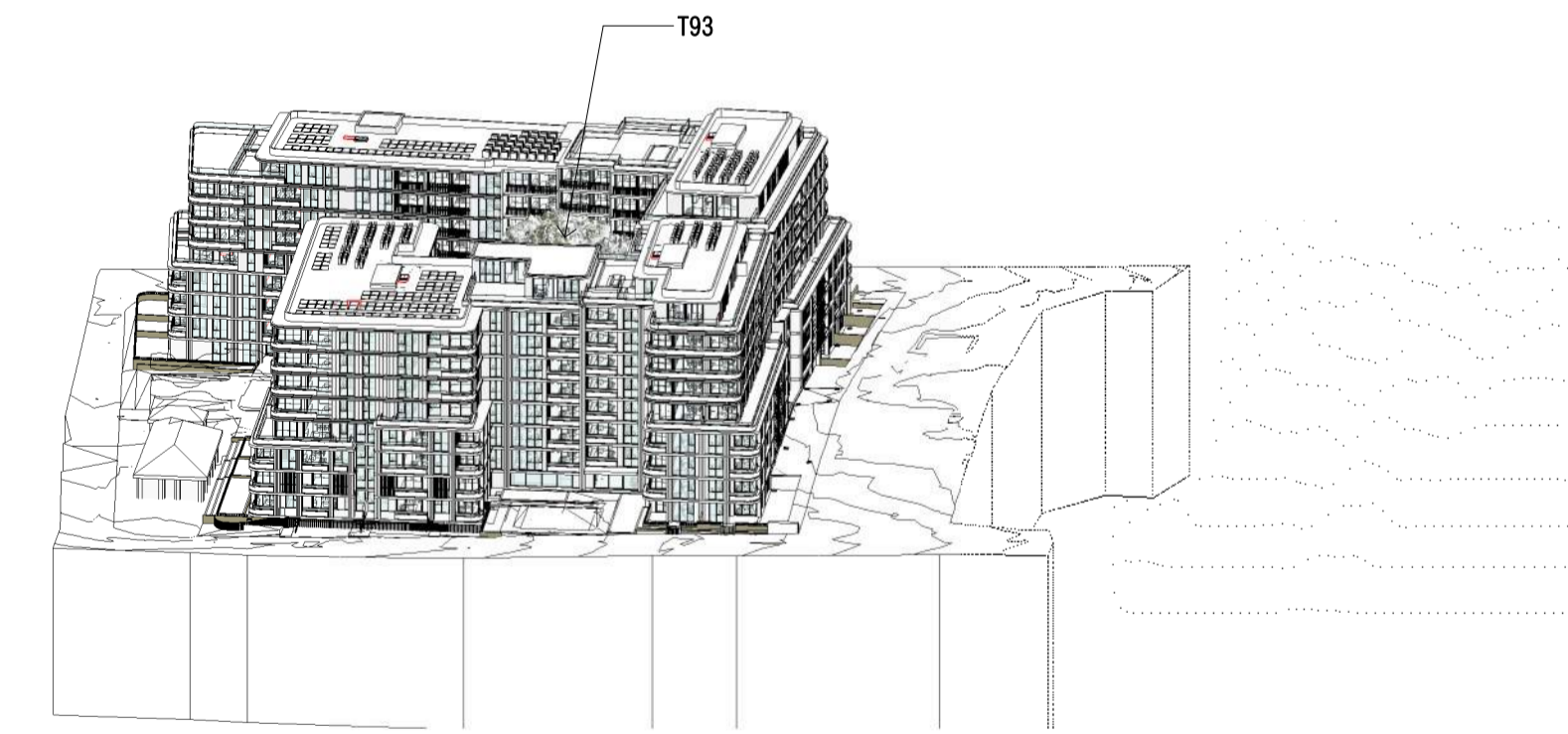
5 SUN VIEW - 12PM - 21ST OF JUNE



6 SUN VIEW - 13PM - 21ST OF JUNE



7 SUN VIEW - 14PM - 21ST OF JUNE



8 SUN VIEW - 15PM - 21ST OF JUNE

# CPS

CREATIVE **PLANNING** SOLUTIONS

## ARBORICULTURAL IMPACT ASSESSMENT

Residential Development

16-24 Lord Street & 21-27 Roseville Avenue,  
Roseville NSW 2069

**Project No:** G845

**Date:** 30 October 2025

**Revision:** B

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Revision	Date	Description
B	30 October 2025	For Approval – Revised Plans
A	3 April 2025	For Approval

## Accreditations



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The Client acknowledges this Report, and any opinions, advice or recommendations expressed or given in it, are based on the information supplied by the Client and on the data, inspections, measurements and analysis carried out or obtained by CPS and referred to in the Report. No guarantee is implied with respect to future tree safety. The Client should rely on the Report and its contents, only to that extent.

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# 1 EXECUTIVE SUMMARY

This Arboricultural Impact Assessment has been prepared by Creative Planning Solutions Pty Limited (CPS) to accompany a detailed State Significant Development Application (SSDA) for a residential development including in-fill affordable housing at 16-24 Lord Street and 21-27 Roseville Avenue, Roseville. The site consists of 9 detached dwellings and has been consolidated into an area of approximately 0.94ha. The legal description of the site is outlined in **Table 1** below.

**Table 1** - Legal Description

Property Address	Title Description
16-24 Lord Street & 21-27 Roseville Avenue, Roseville, NSW 2069	<ul style="list-style-type: none"> <li>▪ 21 Roseville Avenue – Lot 9 DP1046734</li> <li>▪ 23 Roseville Avenue – Lot 66 Section B DP3277</li> <li>▪ 25 Roseville Avenue – Lot 65 Section B DP3277</li> <li>▪ 27 Roseville Avenue – Lot 64 Section B DP3277</li> <li>▪ 16 Lord Street – Lot 14 Section B DP3277</li> <li>▪ 18 Lord Street – Lot 15 Section B DP3277</li> <li>▪ 20 Lord Street – Lot 16 Section B DP3277</li> <li>▪ 22 Lord Street – Lot 17 Section B DP3277 &amp; Lot 1 DP104781</li> <li>▪ 24 Lord Street – Lot 18 DP1173328.</li> </ul>
<b>Project Site Area</b>	0.94ha

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-78996460) following preliminary review and assessment by DPHI, and as specified in their letter dated 15 July 2025. Specifically, **Sections 1, 4.5, 5.2 & 5.3** of this report respond to **Item 14** of the SEARs requirement and **Item 18** of the DPHI request for information.

Accordingly, this Arboricultural Impact Assessment provides an evaluation of the likely impact to one-hundred and sixteen (116) trees located on and adjacent to the subject site as a result of the proposed development, inclusive of associated building and basement footprints, bulk earthworks, hard paving areas, stormwater and landscaping. A summary of those trees identified has been provided in **Table 2** below, along with a description of their retention values and nominated retention/removal status under the proposal.

Based on the plans supplied, and should the proposed works proceed in their current form, it is recommended that:

- Twenty-six (26) trees be retained and protected (**Trees 1, 5-6, 39, 49, 52-53, 63-74, 85, 88, 93, 102, 110 & 115-116**); and
- Ninety (90) trees be removed (**Trees 2-4, 7-38, 40-48, 50-51, 54-62, 75-84, 86-87, 89-92, 94-101, 103-109 & 111-114**).

**Table 2 - Tree Assessment Summary**

Retain / Remove	Location	Identified Retention Values			Number of Trees	Canopy Cover
		High	Medium	Low		
Retain & Protect	<b>Subject Site</b>	<b>2 trees</b> Trees 39 & 93	<b>2 trees</b> Trees 52 & 88	<b>2 trees</b> Trees 73 & 74	<b>6 trees</b>	<b>1,485m<sup>2</sup></b>
	<b>Council Street verge</b>	<b>5 trees</b> Trees 49, 53, 68, 69 & 85	<b>7 trees</b> Trees 1, 5, 6, 63, 64, 65 & 102	<b>2 trees</b> Trees 71 & 72	<b>14 trees</b>	<b>809m<sup>2</sup></b>
	<b>Neighbour Allotments</b>	<b>2 trees</b> Trees 115 & 116	<b>3 trees</b> Trees 66, 67 & 110	<b>1 tree</b> Tree 70	<b>6 trees</b>	<b>505m<sup>2</sup></b>
<b>Total</b>					<b>26 trees</b>	<b>2,799m<sup>2</sup></b>
Remove	<b>Subject Site</b>	-	<b>6 trees</b> Trees 12, 17, 22, 26, 76 & 82	<b>82 trees</b> Trees 2, 3, 4, 7, 8, 9, 10, 11, 13, 14, 15, 16, 18, 19, 21, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 47, 48, 50, 51, 54, 55, 56, 57, 58, 59, 60, 61, 62, 75, 77, 78, 79, 80, 81, 83, 84, 87, 89, 90, 91, 92, 94, 95, 96, 97, 98, 99, 100, 101, 103, 104, 105, 106, 107, 108, 109, 111, 112, 113 & 114	<b>88 trees</b>	<b>1,486m<sup>2</sup></b>
	<b>Council Street verge</b>	<b>1 tree</b> Tree 20	-	<b>1 tree</b> Tree 86	<b>2 trees</b>	<b>213m<sup>2</sup></b>
	<b>Neighbour Allotments</b>	-	-	-	-	-
<b>Total</b>					<b>90 trees</b>	<b>1,699m<sup>2</sup></b>

This report concludes that the implementation of the following recommendations and mitigation measures will need to be adopted to mitigate potential negative impacts to retained trees:

- Project arborist consultation and participation to ensure that development-related impacts to retained trees are appropriately managed for their long-term preservation;
- Preparation of a Tree Protection and Management Plan to ensure trees are appropriately maintained throughout the development;
- Root-sensitive design and construction of decking and pathways within the NRZ of retained trees (**Trees 39, 52, 88 & 93**);
- Root-sensitive installation of Landscape Seating Walls and Play Area within the NRZ of retained trees (**Trees 52, 88 & 93**).

## 2 INTRODUCTION

### 2.1 Background

A State Significant Development Application (SSDA) was lodged for 259 residential apartments under application SSD-78996460. The application has since been modified in response to stakeholder comments with the development now seeking consent for demolition of existing buildings and structures on the site and construction of 252 residential apartments (with a similar affordable housing component). Specifically, the SSDA seeks development consent for:

- demolition of existing buildings and structures and removal of selected trees
- excavation & construction of a three-level basement
- construction of a residential flat building up to nine-storeys in height (RL120.45 metres) to provide 252 apartments including affordable housing, residential amenities and services
- provision of car parking spaces at basement level and bicycle parking
- provision of hard and soft landscaping
- associated works for the provision of infrastructure and servicing.

### 2.2 The Site

The site is located at 16-24 Lord Street and 21-27 Roseville Avenue, Roseville within the Ku-ring-gai Local Government Area. The site has a site area of 0.94ha and is legally described as:

- Lot 9 DP1046734
- Lot 66 Section B DP3277
- Lot 65 Section B DP3277
- Lot 64 Section B DP3277
- Lot 14 Section B DP3277
- Lot 15 Section B DP3277
- Lot 16 Section B DP3277
- Lot 17 Section B DP3277 & Lot 1 DP104781
- Lot 18 DP1173328.

The urban context surrounding the site is characterised by low-density residential development and Roseville Centre. The surrounding locality is described as:

- To the north the site is bounded by Roseville Avenue. Existing development consists of low-density residential uses, beyond which is Roseville Park and the suburb of Lindfield.
- To the east the site is bounded by Martin Lane which separates the site from low density residential development consisting of detached single and two storey dwellings beyond which is the Roseville Presbyterian Church.
- To the south the site is bounded by Lord Street. Development consists of low-density residential uses, beyond which is Roseville College, Bancroft Park and Roseville Lawn Tennis Club. Boundary Street is situated approximately 450 m to the south.

- To the west of the site are low and medium residential uses including three storey walk up flat buildings, beyond which is Roseville Local Centre (Hill Street Precinct) which accommodates a mixture of local scale commercial, retail and health care facilities as well as Roseville train station.

The site is situated within convenient walk distance of Roseville Railway Station (200m), with existing pedestrian access to the station available from Roseville Avenue and Lord Street. Regular, train services are available to North Sydney, Chatswood and Sydney CBD to the south, and Hornsby to the north with a direct connection to the Sydney Metro available at Chatswood Station. Bus services are also available on Pacific Highway providing services to Chatswood and Sydney CBDs and the wider Kur-ring gai locality.

The existing development consists of 9 detached residential dwellings. There are several large trees and vegetation located throughout the site (refer to **Figure 1** below).

### 2.3 Proposed Development

The proposed development is for:

- Construction of 252 residential apartments in buildings up to 9-storeys in height.
- Provision of 30,247.6m<sup>2</sup> GFA.
- Provision of:
  - 29 no. 1-bedroom apartments
  - 112 no. 2-bedroom apartments
  - 101 no. 3-bedroom apartments
  - 10 no. 4-bedroom apartments
- Provision of 344 basement car parking spaces and bicycle parking.
- Provision of 17% affordable housing in a mix of units.
- Provision of residential amenities and services on site, including swimming pool, gym, media and games rooms and kids' club.
- Retention of existing significant trees and provision of landscape planting.
- Provision of central courtyard.

The purpose of the project is to deliver high quality market and affordable housing within convenient walking distance of Roseville Station (refer to **Figures 2 & 3** below).

This report has been prepared in response to the requirements of Item 14 contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 14 January 2025 and issued for the SSDA (SSD- 78996460) as well as requirements of Item 18 within the request for additional information letter issued by DPHI, and dated 15 July 2025. Specifically, this report has been prepared to respond to the SEARs and DPHI requirements identified below:

**Table 3 - SEARs requirement**

Item	Description of Requirement	Relevant Section of this Report that addresses Requirement
<b>14. Trees and Landscaping</b>	<ul style="list-style-type: none"> <li>• If the proposal involves impacts to trees, provide an Arboricultural Impact Assessment that assesses the number, location, condition and significance of trees to be removed and retained including:                             <ul style="list-style-type: none"> <li>○ Any existing canopy coverage to be retained on-site</li> <li>○ Tree root mapping. If the proposal involves significant impacts to tree protection zones of retained trees identified as being significant</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Section 1 – Executive Summary;</li> <li>• Section 4.5 – Root Mapping Investigations</li> </ul>

**Table 4 - DPHI requirement**

Item	Description of Requirement	Relevant Section of this Report that addresses Requirement
<b>18. Trees and Landscaping</b>	<ul style="list-style-type: none"> <li>• Provide tree root mapping as recommended by the Arboricultural Assessment Report and demonstrate how the investigations have informed any necessary design changes or construction methods to ensure the trees retention and protection</li> </ul>	<ul style="list-style-type: none"> <li>• Section 4.5 – Root Mapping Investigations</li> <li>• Section 5.2 – Trees Recommended for Retention &amp; Protection</li> <li>• Section 5.3 – Trees Recommended for Removal</li> </ul>

## 2.4 Objectives

This report has been prepared to assess the level of impact development works are likely to cause to existing trees and make a determination as to whether trees will be adversely affected. The report will aim to provide guidance as to those trees requiring removal, retention or protection in accordance with the provisions of AS4970-2009 *Protection of trees on development sites*. Where necessary, it will also provide recommendations for design modifications. As such, the objectives of this report are as follows:

- Assess the current site and growing conditions of trees;
- Assess the current health, condition, lifespan & significance of the trees within the site;
- Identify relative retention values of trees within the site;
- Calculate anticipated encroachment levels resulting from proposed works;
- Determine the likely impact as a result of the calculated encroachments;
- Assess potential for retention and protection of trees where possible;
- Advise any design modifications necessary to retain important trees;
- Recommend tree and root sensitive design and construction methodologies to mitigate impacts to trees to be retained;
- Inform of any tree removal necessary due to unsustainable impacts;

No aerial inspection or internal diagnostic testing has been carried out as part of this report. Additionally, no cation exchange capacity testing or plant tissue analysis has been undertaken.

## 2.5 Legislation & Regulating Documents

This Arboricultural Impact Assessment has considered the following regulatory documents:

- *State Environmental Planning Policy (Biodiversity and Conservation) 2021*
- *Ku-ring-gai Local Environmental Plan (LEP) 2015*
- *Ku-ring-gai Development Control Plan (DCP) 2024*
- *Greater Sydney Regional Strategic Weed Management Plan 2023-2027*

## 2.6 Documentation Received

The following documents were received and have been relied upon for this Assessment:

**Table 5** - Documentation received and reviewed as part of the AIA

Document Description	Author	Revision No. / Date
Architectural Plans	Fender Katsalidis	B / 28 October 2025
Civil Plans	PTC	P6 / 10 October 2025
Stormwater Drainage Plan	PTC	P7 / 24 October 2025
Landscape Plans	Land and Form	2 / 14 October 2025
Survey	LTS	4 / 8 August 2024

Note: care has been taken to obtain all information from reliable sources; however, the author makes no representations, guarantees or warranties as to the accuracy of information provided by others. No other information has been reviewed, should this become available impacts may be subject to change.

## 2.7 Limitations

Trees are living organisms whose health and condition can change rapidly. The conclusions and recommendations in this report are valid for one (1) year only from the date of the report, unless otherwise stated. Any changes to the site as it stands at present, for example building extensions, excavation works, importing of soils, extreme weather events etc. will invalidate this report. Any reproduction of this report must be in full colour using the report in its entirety.



Figure 1 - Site Aerial. Source: Urbis 2025

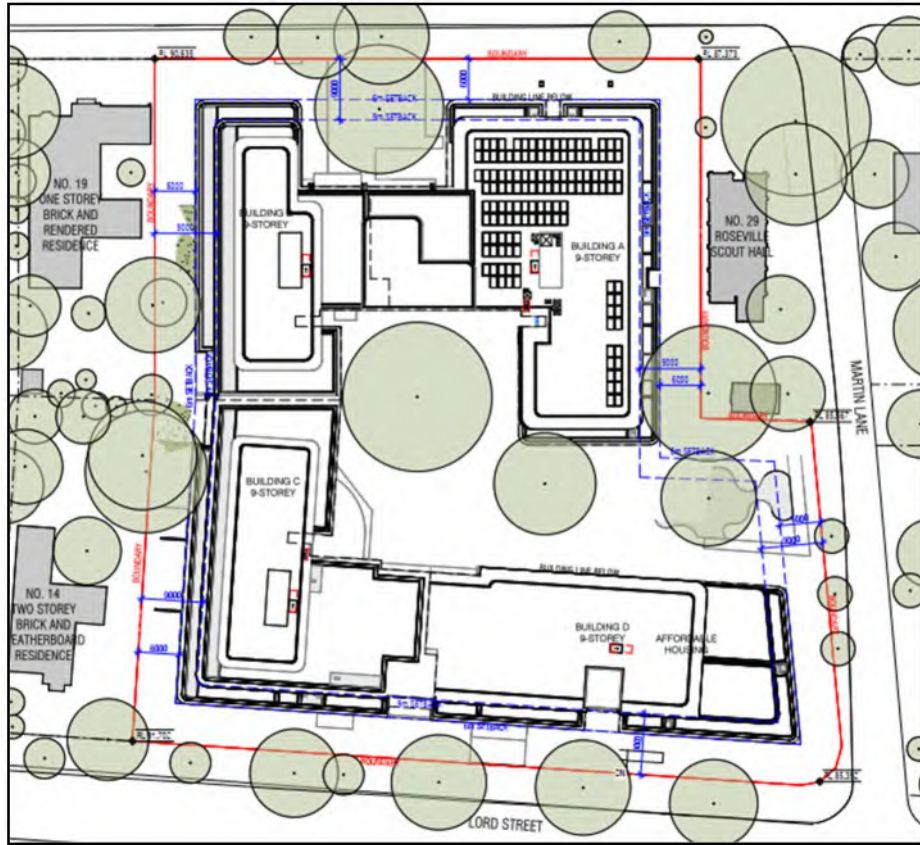


Figure 2 - Site Plan extract showing the layout of the proposed development. Source: Fender Katsalidis 10.10.2025



Figure 3 – Local Context. Source: Urbis 2025

## 3 METHOD

### 3.1 Method

#### 3.1.1 Site Inspection

A site inspection was carried out by James Hume-Grimm (AQF Level 5 Consulting Arborist) with the subject trees and the general growing environment evaluated on the 3<sup>rd</sup> of October 2024. The weather at the time of inspection was overcast to sunny with good visibility.

The subject trees were inspected visually from ground level with the following information recorded and provided in tabulated form at **Appendix 1**:

- Tree Species (Botanical & Common Name);
- Approximate height;
- Approximate canopy spread;
- Trunk Diameter (measured at 1.4 metres from ground level);
- Trunk Diameter at base (above root crown);
- Age class;
- Health & vigour; using foliage size, colour, extension growth, presence of disease or pest infestation, canopy density, presence of deadwood, dieback and epicormic growth as indicators;
- Condition; using visible evidence of structural defects, instability, evidence of previous pruning and physical damage as indicators;
- Suitability of the tree to the site and its existing location;
- Useful Life Expectancy (ULE).

#### 3.1.2 Visual Tree Assessment (VTA)

The modified Level 1 limited Visual Tree Assessment (VTA) was undertaken for all trees during the site inspection. The VTA consists of a detailed inspection of the subject tree from ground level to the upper canopy. This method of tree evaluation is adapted from Mattheck, 1994 and is recognised by The International Society of Arboriculture (ISA), Arboriculture Australia and The Institute Australian of Consulting Arborists (IACA). No aerial inspection was undertaken.

#### 3.1.3 Useful Life Expectancy (ULE)

The remaining Useful Life Expectancy of a tree is an estimate of the sustainability of the tree in the landscape, calculated based on an estimate of the average age of the species in an urban area, less its estimated current age. The life expectancy of each tree has been further modified where necessary in consideration of its current health, vigour, condition and suitability to the site. The estimated ULE of each tree is shown in **Appendix 1**.

The following ranges have been allocated to each tree:

- Long ULE: Trees that appear to be retainable with an acceptable level of risk for > 40 years.
- Medium ULE: Trees that appear to be retainable with an acceptable level of risk for 15 to 40 years.
- Short ULE: Trees that appear to be retainable with an acceptable level of risk for 5–15 years.
- Remove: Trees with a high level of risk that would need removing within the next 5 years.
- Small, Young or Regularly Pruned.

### 3.1.4 Landscape Significance

The landscape significance of a tree is an essential criterion to establish the importance that a particular tree may have on a site. Several factors contribute towards the assessment of a tree's significance including but not limited to condition and vigour, form, visual prominence, heritage status, indigeneity, legislative protection, cultural sentiment and future growth potential.

For the purposes of this report the Australian Institute of Consulting Arborists (IACA) Significance of a Tree, Assessment Rating System (STARS)® has been utilised. The system uses a scale of High, Medium and Low significance in the landscape. Once the landscape significance of an individual tree has been defined, the retention value can be determined.

**Appendix 3** provides a full outline of assessment criteria for each significance rating as per IACA STARS (2010).

### 3.1.5 Retention Value

Retention values have been determined for each tree on site to establish a hierarchy for tree retention. Retention values are based on estimated life spans and their associated landscape significance rating in accordance with the Tree Retention Value Priority Matrix. This matrix established the following retention values and can be found at **Appendix 3** with attributed retention values found within **Appendix 1**:

- Priority for Retention (**High**)
- Consider for Retention (**Medium**)
- Consider for Removal (**Low**)
- Priority for Removal

### 3.1.6 AS4970-2025 Protection of Trees on Development Sites

The Australian Standard, AS4970-2025- 'Protection of trees on development sites', has been used as a guide to provide recommendations for the assessed trees. The Standard provides guidance on the principles for protecting trees on land subject to development as well as principles for determining viability of tree retention. Terminology and recommended methods are consistent with AS4970-2025.

### 3.1.7 Notional Root Zones

The assessed trees have been allocated Notional Root Zones (NRZ). The Australian Standard, AS4970-2025- 'Protection of trees on development sites', has been used as a guide in the allocation of NRZs for the assessed trees. The NRZ is calculated based on trunk (stem) diameter at standard height (DSH), measured at 1.4 metres above ground level. The radius of the NRZ is calculated by multiplying the trees DSH by 12. The method provides a NRZ that addresses health and growing requirements of a tree as well as the trees stability. NRZ distances are measured as a radius from the centre of the trunk at (or near) ground level. The maximum NRZ should be no more than 15m radius and the minimum NRZ should be no less than 2m radius.

An extract of the AS4970-2025 for calculating NRZ has been provided at **Appendix 4** for reference.

### 3.1.8 Structural Root Zone

The assessed trees have been allocated Structural Root Zones (SRZ). The Australian Standard, AS4970-2025 - 'Protection of trees on development sites', has been used as a guide in the allocation of SRZ's for the assessed trees. The SRZ is a notional area extending outwards from the centre of the trunk required for tree stability and is calculated as follows:

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

### 3.1.9 Tree Protection Zone

Using the NRZ as a starting point, a Tree Protection Zone (TPZ) is a specified area located both above and below ground that is required for the protection of trees during development works. The purpose of a TPZ is to protect of a tree's roots and crown throughout the development process via the installation of tree protection measures and appropriate site management. The location and alignment of specified TPZs are shown in the Tree Location Plans held at **Appendix 2**.

## 4 OBSERVATIONS

### 4.1 General

The site area subject to this assessment was observed as highly disturbed from its natural state with vegetation consisting primarily of landscape plantings. Species observed varied including exotic, Australian native and local species. Health, vigour and condition was also highly varied across the trees forming part of the assessment. Root zones of assessed trees were generally observed as modified groundcover within deep soil areas.

### 4.2 Tree Preservation Order

Part 13 – *Trees & Vegetation Preservation* of Ku-ring-gai Development Control Plan 2024 applies to all land within the Ku-ring-gai Local Government Area. The provisions included within the DCP generally protect any tree or vegetation that corresponds with the following criteria:

- (a) *a perennial plant with at least one self-supporting woody, fibrous stem, whether native or exotic, which is 5 metres or more in height; or*
- (b) *a plant that has a trunk diameter of 150mm or more measured at ground level.*
- (c) *Native vegetation - means any of the following types of plants native to New South Wales: a) trees (including any sapling or shrub or any scrub); b) understorey plants; c) groundcover (being any type of herbaceous vegetation); d) plants occurring in a wetland.*

### 4.3 Heritage Status

The subject site is listed as Clanville Conservation Area, Heritage Item No. C32 under the Ku-ring-gai Local Environmental Plan 2015. Exemptions for tree and vegetation works described in Section 13.2 of the Ku-ring-gai DCP 2024 do not apply on land within a Heritage Conservation Area. Section 13.3, Clause 5.10, states that development consent is required to undertake works in relation to a tree or vegetation that is within a Heritage Conservation Area.

### 4.4 The Trees

A total of one-hundred and sixteen (116) trees were observed on and adjoining the subject site which have been surveyed as part of this assessment. All tree data recorded on site has been tabulated and is contained at **Appendix 1**. Each tree has been provided with an identification number for reference purposes and is denoted on the Tree Location Plan held at **Appendix 2**.

#### 4.4.1 Site Trees

Ninety-seven (97) trees were located within the subject site, including **Trees 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 50, 51, 52, 54, 55, 56, 57, 58, 59, 60, 61, 62, 66, 67, 70, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 103, 104, 105, 106, 107, 108, 109, 111, 112, 113 & 114.**

#### 4.4.1.1 Tree 93

**Tree 93** was noted to be referenced as '*Eucalyptus saligna* – Sydney Blue Gum' within the Arboricultural Impact Assessment prepared by Creative Planning Solutions, dated 3rd of April 2025. Following subsequent detailed analysis in consultation with the Project Ecologist, key diagnostic features observed in the trees' fruit confirms the accurate identification of **Tree 93** as '*Eucalyptus grandis* – Flooded Gum'. An Arboricultural Statement detailing re-identification of this tree species is held at **Appendix 7**.

#### 4.4.2 Council Trees

Sixteen (16) trees were located within Council street verges fronting site, including **Trees 1, 5, 6, 20, 49, 53, 63, 64, 65, 68, 69, 71, 72, 85, 86 & 102**.

#### 4.4.3 Neighbouring Trees

Three (3) neighbouring trees (**Trees 110, 115 & 116**) located within 5 metres of site were surveyed as part of this assessment.

### 4.5 Root Mapping Investigations

Root Mapping Investigations were carried out within the subject site and within the Lord Street Council verge to determine the presence and location of existing tree roots where works are proposed within the Notional Root Zones (NRZ) of **Trees 20, 67, 85, 86 & 102**. Root mapping investigations within the NRZ of these trees was deemed necessary to ascertain the impacts associated with the proposed construction works and the subsequent ongoing viability of trees.

The detailed exploratory root investigations for **Trees 20, 67, 85, 86 & 102** were carried out by Greg Tesoriero & James Hume-Grimm (AQF Level 5 Arborists) between the 8-18<sup>th</sup> September 2025 to confirm the presence/absence of root activity in areas of proposed construction.

An AirSpade® was employed to sensitively excavate the trench utilising compressed air to remove soil and debris without causing significant damage to or displacement of existing roots encountered.

To determine root-to-tree associations, a detailed analysis of root epidermis, diameter, depth, location, alignment and orientation relative to tree locations was undertaken. Based on these criteria, the following estimated root-to-tree associations were recorded:

#### 4.5.1 Tree 20 Root Mapping Investigation

**Tree 20** (*Lophostemon confertus*) is a Council Street tree subject to major (24%) encroachment to its NRZ as per AS4970:2025 due to the proposed a proposed driveway crossover, paved area and stormwater infrastructure. The detailed exploratory root investigation within the NRZ of **Tree 20** involved root-sensitive excavation on the northern and eastern side of the tree where the new paved area, driveway and crossover are proposed to be constructed (refer to **Figure 4** below).

Once complete, the root-sensitive excavation extended for a total distance of 13.5 metres and achieved an excavation depth of approximately 500mm below the existing ground levels before refusal was encountered – sufficient to capture roots within the anticipated construction depth.

A total of twenty-seven (27) roots 10-90mm diameter were identified within the trench in the Lord

Street verge, while a total of thirty-one (31) roots 15-45mm diameter were identified within the trench in the front setback of No. 20 Lord Street. Roots were recorded at depths ranging from 50-350mm. A high level of fine/feeder roots ( $\leq 10\text{mm}$ ) were also observed.

**Table 6** – Findings of Lord Street verge root mapping investigations for Tree 20

Root Number	Distance Along Trench (m)	Depth in Trench (mm)	Diameter of Root (mm)
1	0.15	200	25,25
2	0.2	250	15
3	0.3	300	40
4	1.35	150	15
5	1.6	300	20
6	1.9	200	35
7	1.95	150	30
8	2	100	15
9	2.05	150	35
10	2.1	280	20
11	2.15	200	20
12	2.2	160	40
13	2.35	250	25
14	2.45	300	30
15	3	300	30
16	3.05	280	25
17	3.1	150	35
18	3.1	280	20
19	3.15	180	25
20	3.2	300	30
21	3.4	200	45
22	3.4	50	45
23	3.45	100	15
24	3.45	250	15
25	3.5	300	15
26	3.55	130	40
27	3.6	350	35

**Table 7** – Findings of No. 20 Lord Street front setback root mapping investigations for Tree 20

Root Number	Distance Along Trench (m)	Depth in Trench (mm)	Diameter of Root (mm)
1	8.0	50	15
2	8.1	250, 300	25, 25
3	7.25	250	40
4	7.2	350	15
5	7.15	100	10
6	7.1	130	30
7	6.15	150	45
8	6.05	250	10
9	6.1	100	20,35
10	5.9	150	25
11	5.85	150	80
12	5.75	130	50
13	4.95	280	50
14	4.9	200	60

Root Number	Distance Along Trench (m)	Depth in Trench (mm)	Diameter of Root (mm)
15	4.65	330	10
16	3.7	280	90
17	3.2	300	10
18	3.15	200	10
19	3.05	180	10
20	2.75	220	55
21	2.65	250	15
22	2.55	200	10
23	2.2	90	45,25
24	2.1	180	30
25	2.15	120	10
26	2.05	180	35
27	1.95	120	10
28	1.45	120	10
29	1.4	150	10
30	1.25	70	20
31	0.35	200	30

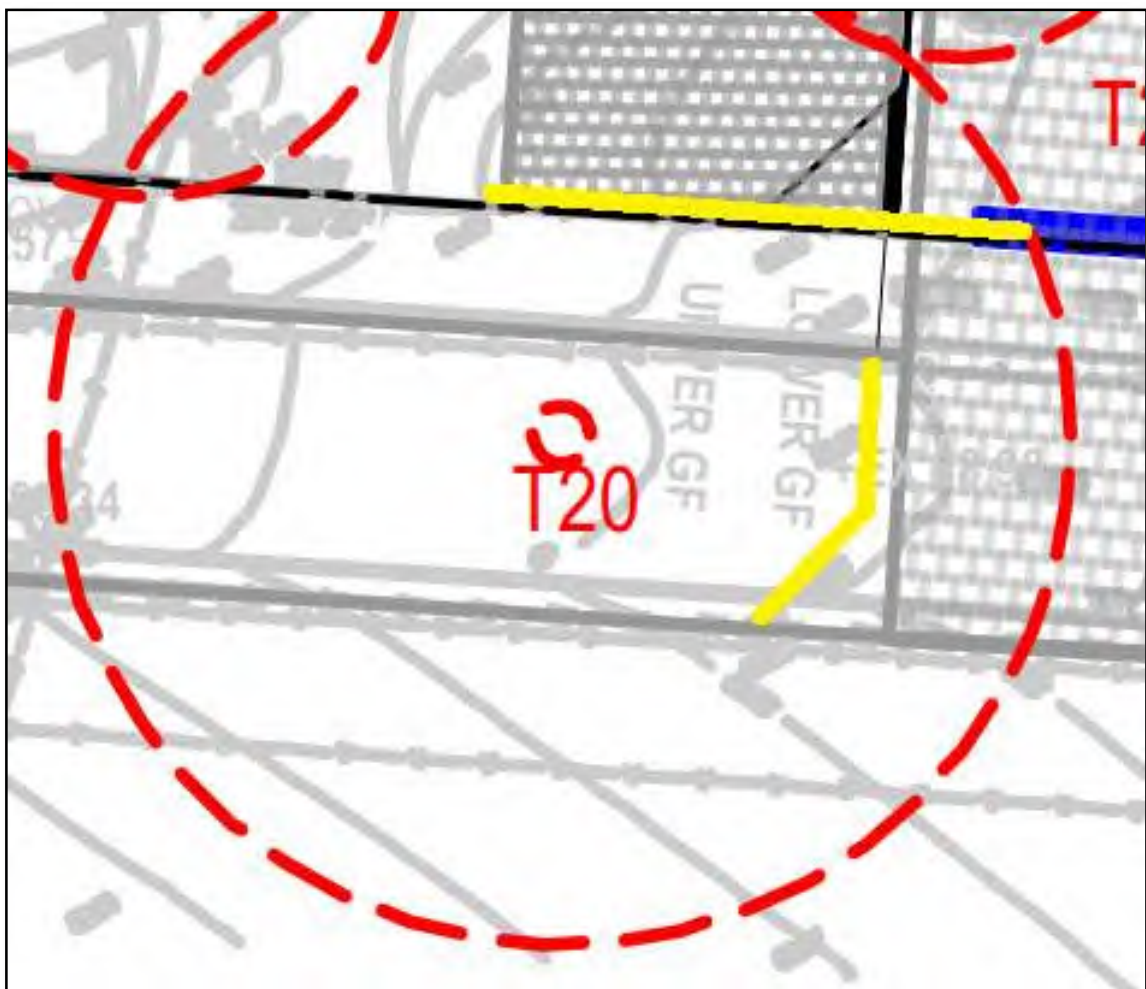


Figure 4 – Location of exploratory root mapping investigation (yellow lines) within NRZ of Tree 20.



**Figure 5** – Location of Lord Street verge root mapping investigation trench within NRZ of Tree 20



**Figure 6** – Roots 1-27 within Lord Street verge and NRZ of Tree 20



**Figure 7** – Location of No. 20 Lord Street front setback root investigation trench within NRZ of Tree 20 showing Roots 1-31

Discussion of the **Tree 20** exploratory root mapping investigation is contained within **Section 5.3.1** below.

#### 4.5.2 Tree 67 Root Mapping Investigation

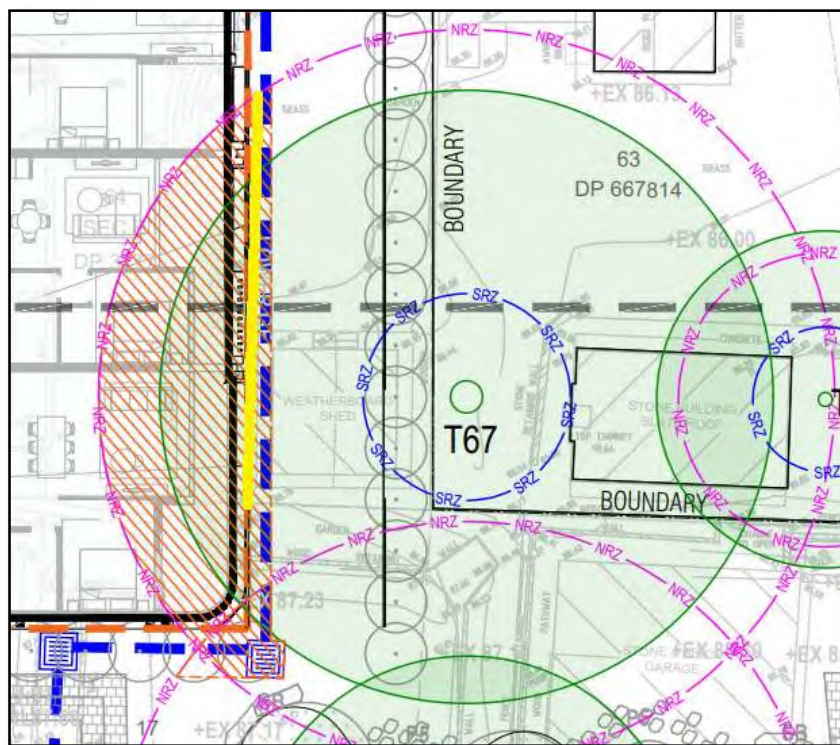
**Tree 67** (*Quercus robur*) is a neighbouring tree subject to moderate (18%) encroachment to its NRZ as per AS4970:2025 due to the proposed the proposed building/basement footprint and stormwater infrastructure. The detailed exploratory root investigation within the NRZ of **Tree 67** involved root-sensitive excavation on the western side of the tree where the new building/basement footprint and stormwater infrastructure are proposed to be constructed (refer to **Figure 8** below).

Once complete, the root-sensitive excavation extended for a total distance of 13.4 metres and achieved an excavation depth of approximately 600mm below the existing ground levels before refusal was encountered – sufficient to capture roots within the anticipated construction.

A total of nine (9) roots 10-50mm diameter were identified within the trench along with a moderate level of fine roots ( $\leq 10\text{mm}$ ). Roots were recorded at depths ranging from 90-550mm. One (1) 'medium' diameter root greater than 30mm diameter was observed.

**Table 8** – Findings of root mapping investigations for Tree 67

Root Number	Distance Along Trench (m)	Depth in Trench (mm)	Diameter of Root (mm)
1	1.85	100	25
2	2.0	90	25
3	2.40	120	25
4	2.60	550	20
5	3.3	400	15
6	3.6	300	10
7	3.7	150	25
8	6.7	350	15
9	11	450	50



**Figure 8** – Location of exploratory root mapping investigation (yellow line) within NRZ of Tree 67.



**Figure 9** – Location of exploratory root mapping investigation trench within NRZ of Tree 67



Figure 10 – Roots 1-5 within NRZ of Tree 67



**Figure 11** – Roots 6-7 within NRZ of Tree 67

Discussion of the **Tree 67** exploratory root mapping investigation is contained within **Section 5.2.5** below.

### 4.5.3 Tree 85 Root Mapping Investigation

**Tree 85** (*Lophostemon confertus*) is a Council Street tree subject to major (28%) encroachment to its NRZ as per AS4970:2025 due to proposed paved areas and retaining wall. The detailed exploratory root investigation within the NRZ of **Tree 85** involved root-sensitive excavation on the southern side of the tree where the new paved areas and retaining wall are proposed to be constructed (refer to **Figure 12** below).

Once complete, the root-sensitive excavation extended for a total distance of 14.7 metres and achieved an excavation depth of approximately 600mm below the existing ground levels before refusal was encountered – sufficient to capture roots within the anticipated construction.

A total of twelve (12) roots 20-40mm diameter were identified within the trench along with a moderate level of fine roots ( $\leq 10\text{mm}$ ). Roots were recorded at depths ranging from 50-350mm. Two (2) 'medium' diameter roots greater than 30mm diameter were observed.

**Table 9** – Findings of root mapping investigations for Tree 85

Root Number	Distance Along Trench (m)	Depth in Trench (mm)	Diameter of Root (mm)
1	0.8	270	40
2	1.65	330	20
3	1.8	220	20
4	5.7	270	25
5	6.6	350	20
6	7.45	240	20
7	8.85	180	20
8	8.9	180	25
9	8.9	160	20
10	9.45	350	30
11	11.45	50	25
12	11.65	150	35



**Figure 12** – Location of exploratory root mapping investigation (yellow lines) within NRZ of Tree 85.



**Figure 13** – Location of exploratory root mapping investigation trench within NRZ of Tree 85



**Figure 14** – Roots 1-3 (marked green) within NRZ of Tree 85



**Figure 15** – Roots 4-12 (marked green) within NRZ of Tree 85. Orange roots associated with Tree 86. Pink roots associated with Tree 102.

Discussion of the **Tree 85** exploratory root mapping investigation is contained within **Section 5.2.6** below.

#### 4.5.4 Tree 86 Root Mapping Investigation

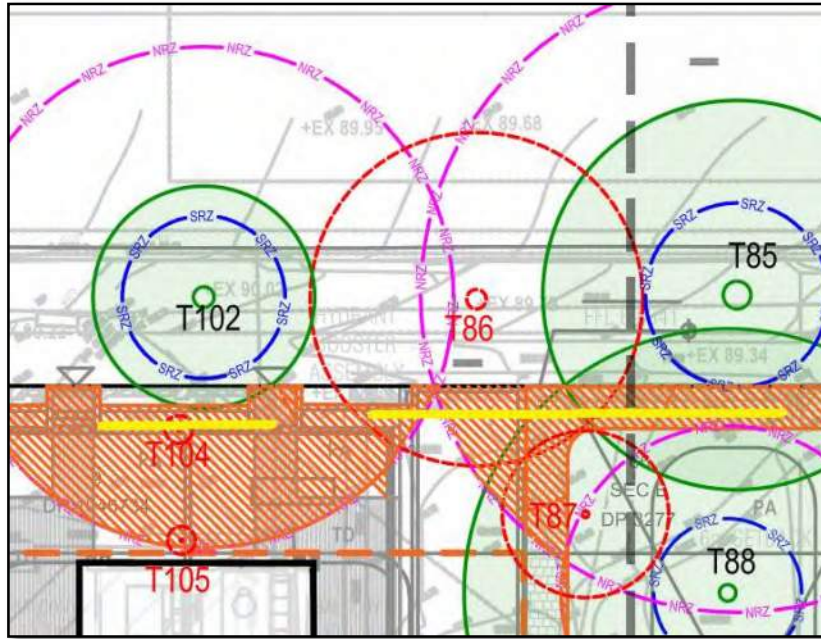
**Tree 86** (*Schinus molle* var. *areira*) is a Council Street tree subject to major (24%) encroachment to its NRZ as per AS4970:2025 due to proposed paved areas and retaining walls. The detailed exploratory root investigation within the NRZ of **Tree 86** involved root-sensitive excavation on the southern side of the tree where the new paved areas and retaining walls are proposed to be constructed (refer to **Figure 16** below).

Once complete, the root-sensitive excavation extended for a total distance of 19.4 metres and achieved an excavation depth of approximately 600mm below the existing ground levels before refusal was encountered – sufficient to capture roots within the anticipated construction.

A total of sixteen (16) roots 10-60mm diameter were identified within the trenches along with a moderate level of fine roots ( $\leq 10\text{mm}$ ). Roots were recorded at depths ranging from 140-590mm. Three (3) 'medium' diameter roots greater than 30mm diameter were observed.

**Table 10** – Findings of root mapping investigations for Tree 86

Root Number	Distance Along Trench (m)	Depth in Trench (mm)	Diameter of Root (mm)
1	2.225	490	20
2	2.9	340	20
3	3.05	220	40
4	3.95	320	10
5	7.1	590	15
6	13.05	240	40
7	13.05	280	15
8	13.5	420	15
9	13.75	310	20
10	14.5	230	15
11	15.6	270	20
12	15.75	160	60
13	16	240	30
14	16.9	190	30
15	17.4	140	25
16	17.45	290	30



**Figure 16** – Location of exploratory root mapping investigation (yellow lines) within NRZ of Tree 86.



**Figure 17** – Location of exploratory root mapping investigation trench within NRZ of Tree 86



**Figure 18** – Roots 1-3 (marked green) within NRZ of Tree 86. Pink roots associated with Tree 102.



**Figure 19** – Roots 6-16 (marked orange) within NRZ of Tree 86

Discussion of the **Tree 86** exploratory root mapping investigation is contained within **Section 5.3.2** below.

#### 4.5.5 Tree 102 Root Mapping Investigation

**Tree 102** (*Melaleuca salicina*) is a Council Street tree subject to major (24%) encroachment to its NRZ as per AS4970:2025 due to proposed retaining walls. The detailed exploratory root investigation within the NRZ of **Tree 102** involved root-sensitive excavation on the southern side of the tree where the new retaining walls are proposed to be constructed (refer to **Figure 21** below).

Once complete, the root-sensitive excavation extended for a total distance of 11.9 metres and achieved an excavation depth of approximately 700mm below the existing ground levels before refusal was encountered – sufficient to capture roots within the anticipated construction.

A total of sixteen (16) roots 10-25 diameter were identified within the trench along with a moderate level of fine roots ( $\leq 10\text{mm}$ ). Roots were recorded at depths ranging from 70-700mm. No roots greater than 30mm diameter were observed.

**Table 11** – Findings of root mapping investigations for Tree 102

Root Number	Distance Along Trench (m)	Depth in Trench (mm)	Diameter of Root (mm)
1	0.15	70	10
2	0.1175	450	15
3	0.3	360	10
4	0.55	300	20
5	1	610	10
6	1.05	460	10
7	2.05	460	15
8	2.2	590	10
9	2.35	700	10
10	2.40	700	15
11	2.5	680	25
12	3	410	25
13	3.3	250	10
14	4.55	700	20
15	6.25	410	10
16	6.75	510	10



Figure 20 – Location of exploratory root mapping investigation (yellow line) within NRZ of Tree 102.



Figure 21 – Location of exploratory root mapping investigation trench within NRZ of Tree 102



**Figure 22** – Roots 1-13 (marked pink) within NRZ of Tree 102. Green roots associated with Tree 86

Discussion of the **Tree 102** exploratory root mapping investigation is contained within **Section 5.2.9** below.

## 5 DISCUSSION

### 5.1 Impact Assessment

The impact assessment is to calculate the incursions to the root zones and canopies as a result of the proposed development works and evaluate the likely impact of the proposed works on the subject trees. A summary of the impacts anticipated are contained within the Tree Schedule at **Appendix 1**. Additionally, plans demonstrating the level of incursion and conflict to TPZs and SRZs can be found at **Appendix 2**. As part of the assessment the following criteria have been considered:

- Existing Relative Levels (R.L.);
- Proposed Relative Levels;
- Tree Protection Zones (TPZ);
- Structural Root Zones (SRZ);
- Footprint of the proposed development (incl. stormwater and services) and temporary structures (scaffolding, hoardings etc.);
- Incursions to the TPZ & SRZ, including estimated cut & fill beyond the building footprint;
- Incursions to the tree canopy from the building envelope and temporary structures;
- Pruning necessary for building clearance;
- Remediation works for soil contaminants;
- Species tolerance to disturbance; and
- Assessment of the likely impact of the works on existing trees.

### 5.2 Trees Recommended for Retention & Protection

Should the proposed works proceed in their current form, it is recommended that twenty-six (26) trees be retained and protected. This includes **Trees 1, 5-6, 39, 49, 52-53, 63-74, 85, 88, 93, 102, 110 & 115-116**. Refer to **Appendix 2** for a plan indicating the location of trees that are to be retained and protected (shaded green).

The existing canopy coverage of trees to be retained on site has been calculated to be 1,485m<sup>2</sup>, which equates to 16% of the total site area.

Retention of these trees is contingent on the implementation of mitigation measures and tree protection measures outlined within **Section 7** below.

**Table 12 - Trees recommended for retention & protection**

Works Within the Notional Root Zone (NRZ)	Trees Recommended for Retention & Protection			
	High Retention Value	Medium Retention Value	Low Retention Value	Total
Major, potentially sustainable incursions into the NRZ (>20%) as per AS4970-2025 as a result of the proposed seating walls, retaining walls, pathways or building/basement footprint.	One (1) site tree: <b>Tree 93</b>  One (1) Council Street tree: <b>Tree 85</b>	One (1) Council Street tree: <b>Tree 102</b>	-	Three (3) trees
Moderate, sustainable encroachment into the NRZ (11-20%) as per AS4970-2025 as a result of the proposed pathways, driveway retaining walls, stormwater infrastructure or building/basement footprint.	One (1) site tree: <b>Tree 39</b>  One (1) Council Street tree: <b>Tree 49</b>	Three (3) site trees: <b>(Trees 52, 67 &amp; 88)</b>  One (1) Council Street tree: <b>Tree 5</b>	-	Six (6) trees
Minor, sustainable encroachment to the NRZ (1-10%) as per AS4970-2025 as a result of the proposed pathways, retaining walls, stormwater infrastructure or building/basement footprint	One (1) Neighbouring trees: <b>Tree 116</b>  One (1) Council Street tree: <b>Tree 53</b>	One (1) Council Street tree: <b>Tree 6</b>  One (1) Neighbouring tree: <b>(Tree 110)</b>	One (1) Council Street tree: <b>Tree 72</b>	Five (5) trees
No works proposed within the NRZ.	Two (2) Council Street trees: <b>Trees 68 &amp; 69</b>  One (1) Neighbouring tree: <b>Tree 115</b>	Four (4) Council Street trees: <b>Trees 1, 63, 64 &amp; 65</b>  One (1) Neighbouring tree: <b>Tree 66</b>	Two (2) site trees: <b>Trees 73 &amp; 74</b>  One (1) Council Street tree: <b>Tree 71</b>  One (1) Neighbouring tree: <b>Tree 70</b>	Twelve (12) trees
<b>Total</b>				<b>Twenty-six (26) trees</b>

### 5.2.1 Tree 5 (*Lophostemon confertus*)

**Tree 5** is recommended for retention and protection despite 'moderate' (15% NRZ) encroachment from proposed retaining walls, pathways and stormwater infrastructure.

The anticipated impact to the health and condition of **Tree 5** from construction is considered sustainable given the species' known tolerance to high levels of root disturbance. Further proposed works are located outside the Structural Root Zone (SRZ) and NRZ encroachment is partly offset by contiguous areas of deep soil to the west available for compensatory root development.

### 5.2.2 Tree 39 (*Angophora costata*)

**Tree 39** is recommended for retention and protection despite 'moderate' (14% NRZ) encroachment from proposed retaining walls, pathways and building/basement footprint.

Impacts are not expected to significantly impact tree health, condition or structural viability, subject to the implementation of root-sensitive design and construction of pathways, Project Arborist supervision and tree protection measures throughout construction, as detailed in **Section 7**.

### 5.2.3 Tree 49 (*Lophostemon confertus*)

**Tree 49** is recommended for retention and protection despite 'moderate' (17% NRZ) encroachment from proposed driveway, pathways, stormwater infrastructure and building/basement footprint.

The anticipated impact to the health and condition of **Tree 49** from construction is considered sustainable given the species' known tolerance to high levels of root disturbance. Further proposed works are located outside the Structural Root Zone (SRZ) and NRZ encroachment is partly offset by contiguous areas of deep soil to the east available for compensatory root development.

### 5.2.4 Tree 52 (*Syzygium paniculatum*)

**Tree 52** is recommended for retention and protection despite a 'moderate' (15% NRZ) encroachment from proposed pathways and stormwater infrastructure.

Impacts are not expected to significantly impact tree health, condition or structural viability, subject to the implementation of root-sensitive design and construction of pathways and play area, Project Arborist supervision and tree protection measures throughout construction, as detailed in **Section 7**.

### 5.2.5 Tree 67 (*Quercus robur*)

**Tree 67** is recommended for retention and protection despite a 'moderate' (18% NRZ) encroachment from the proposed building/basement footprint and stormwater infrastructure. Root Mapping undertaken by CPS on 8-18<sup>th</sup> September 2025 has confirmed that nine (9) roots with 10-50mm diameter will require to be severed to allow for construction of the proposed development.

The proposed root loss is considered tolerable given the species' known tolerance to moderate levels of root disturbance and the existing average health/vitality of the specimen. Further proposed works are located outside the Structural Root Zone and NRZ encroachment is partly offset by contiguous areas of deep soil to the east available for compensatory root development. Impacts are not expected to significantly impact tree health, condition or structural viability, subject to the

implementation of Project Arborist supervision and tree protection measures throughout construction, as detailed in **Section 7**.

#### 5.2.6 Tree 85 (*Lophostemon confertus*)

**Tree 85** is recommended for retention and protection despite 'major' (28% NRZ) encroachment from proposed pathways and retaining walls. Root Mapping undertaken by CPS on 8-18<sup>th</sup> September 2025 has confirmed that twelve (12) roots with 20-40 diameter will require to be severed to allow for construction of the proposed development.

The proposed root loss is considered sustainable given the species' known tolerance to high levels of root disturbance and the existing average health/vitality of the specimen. Further, proposed works are located outside the Structural Root Zone. Impacts are not expected to significantly impact tree health, condition or structural viability, subject to the implementation of Project Arborist supervision and tree protection measures throughout construction, as detailed in **Section 7**.

#### 5.2.7 Tree 88 (*Ulmus parvifolia*)

**Tree 88** is recommended for retention and protection despite 'moderate' (19% NRZ) encroachment from proposed pathways and seating walls.

Impacts are not expected to significantly impact tree health, condition or structural viability given the species' known tolerance to moderate levels of root disturbance and the existing good health/vitality of the specimen, subject to the implementation of root-sensitive design and construction of pathway and seating walls, Project Arborist supervision and tree protection measures throughout construction, as detailed in **Section 7**.

#### 5.2.8 Tree 93 (*Eucalyptus grandis*)

**Tree 93** is recommended for retention and protection despite a 'major' (21% NRZ) encroachment from proposed seating walls, retaining walls, pathways and building/basement footprint.

This level of encroachment, as well as the modification of surrounding site conditions may alter ground water movement and availability of nutrients and has the potential to result in a reduction to the assigned Useful Life Expectancy (ULE) rating and health/condition of this tree. Recommendations for root-sensitive design and construction of decking, pathways and seating walls, Project Arborist supervision and tree protection measures throughout construction are detailed in **Section 7**.

#### 5.2.9 Tree 102 (*Melaleuca salicina*)

**Tree 102** is recommended for retention and protection despite 'major' (24% NRZ) encroachment as per AS4970-2025 *Protection of Trees on Development Sites*, from proposed retaining walls. Root Mapping undertaken by CPS on 8-18<sup>th</sup> September 2025 has confirmed that sixteen (16) roots with 10-25 diameter will require to be severed to allow for construction of the proposed development.

The proposed root loss is considered tolerable given the species' known tolerance to moderate levels of root disturbance and the existing average health/vitality of the specimen. Further, proposed works are located outside the Structural Root Zone and NRZ encroachment is partly offset by contiguous areas of deep soil within the street verge for compensatory root development. Impacts are not

expected to significantly impact tree health, condition or structural viability, subject to the implementation of Project Arborist supervision and tree protection measures throughout construction, as detailed in **Section 7**.

#### 5.2.10 Ancillary Construction Related Impacts

Vehicles, machinery and equipment requiring access to the site have potential to result in inadvertent impacts to those trees being retained including compaction of the root zone, soil disturbance, physical damage to roots, trunk damage etc. and as such will require management.

Furthermore, storage and stockpiling of material may result in similar impacts and will require management. In this regard, protection for those trees to be retained is to be carried out in accordance with **Appendix 5**.

### 5.3 Trees Recommended for Removal

Should the proposed works proceed in their current form, it is recommended that ninety (90) trees be removed. This includes **Trees 2-4, 7-38, 40-48, 50-51, 54-62, 75-84, 86-87, 89-92, 94-101, 103-109 & 111-114.**

Removals have been recommended based upon;

- trees being located within the building/basement footprint, grading extents, driveway, pathways, decks, stormwater infrastructure or walls;
- trees subject to 'major' and unsustainable encroachment as per AS4970-2025 Protection of trees on development sites from proposed building/basement footprint, grading extents, driveway/crossover, pathways, decks, stormwater infrastructure or walls;
- trees located in proximity to the proposed works and removal is proposed to either facilitate access to the development site during construction or to facilitate the future landscape scheme.

**Table 5** below provides a summary of impacts to be sustained as part of the proposed works and subsequent reasoning for removal.

Refer to **Appendix 2** for a plan indicating the location of trees that will require removal (dashed red).

**Table 13** - Trees recommended for removal

Reason for Removal	Trees Recommended for Removal			
	High Retention Value	Medium Retention Value	Low Retention Value	Total
Full encroachment - within the footprint of the proposed building/basement footprint, grading extents, driveway, pathways, decks, stormwater infrastructure or walls	Nil	Five (5) site trees: <b>Trees 17, 22, 26, 76, &amp; 82</b>	Fifty-five (55) site trees: <b>Trees 3, 8-11, 13-16, 18-19, 21, 23-25, 27-34, 36, 40-48, 50, 75, 78-81, 83-84, 89-91, 94-98, 103-104, 107, 109 &amp; 112-113</b>	Sixty (60) trees
'Major' 10-67% NRZ + 0-61% SRZ encroachment as per AS4970-2025 from proposed building/basement footprint, grading extents, driveway/crossover, pathways, decks, stormwater infrastructure or walls	One (1) Council Street tree: <b>Tree 20</b>	One (1) site tree: <b>Tree 12</b>	One (1) Council Street tree: <b>Tree 86</b>  Fifteen (15) site trees: <b>Trees 2, 4, 7, 37, 55, 56, 57, 58, 77, 87, 92, 99, 105, 106 &amp; 108</b>	Eighteen (18) trees

Reason for Removal	Trees Recommended for Removal			
	High Retention Value	Medium Retention Value	Low Retention Value	Total
Trees subject to nil or minor (<10%) NRZ encroachment being removed to facilitate new landscape scheme or to facilitate construction access to site during development	Nil	Nil	Twelve (12) site trees: <b>Trees 35, 38, 51, 54, 59, 60, 61, 62, 100, 101, 111 &amp; 114</b>	Twelve (12) trees
<b>Total</b>				<b>Ninety (90) trees</b>

### 5.3.1 Tree 20 (*Lophostemon confertus*)

**Tree 20** is a Council Street tree recommended for removal due to 'major' (27% NRZ) encroachment from proposed driveway, crossover, pathways and stormwater infrastructure.

Root Mapping undertaken by CPS on 8-18<sup>th</sup> September 2025 has confirmed that fifty-eight (58) roots with 10-90mm diameter will require to be severed to allow for construction of the proposed development.

The anticipated impact to the health and condition of **Tree 20** from construction is likely to result in a notable decline to the health and condition of this tree in the short term and marked reduction to the assigned Useful Life Expectancy (ULE) rating. On this basis, it has been determined that the retention of this tree is not viable.

### 5.3.2 Tree 86 (*Schinus molle var. areira*)

**Tree 86** is a Council Street tree recommended for removal due to 'major' (25% NRZ) encroachment from proposed driveway, crossover, pathways and stormwater infrastructure.

Root Mapping undertaken by CPS on 8-18<sup>th</sup> September 2025 has confirmed that sixteen (16) roots with 10-60mm diameter will require to be severed to allow for construction of the proposed development.

Given the current health and condition of **Tree 86**, impacts from construction are likely to result in a further reduction to the assigned Short (5-15 year) Useful Life Expectancy (ULE) rating and making the retention of this tree not viable.

## 6 CONCLUSION

### 6.1 Proposed Development Impact

Based on the plans and information supplied, the proposal would result in the following impacts to existing trees:

**Retention and protection** of twenty-six (26) trees, including:

- Three (3) trees which are to be subject to 'Major' (>20%) encroachment to their respective Notional Root Zones as a result of the proposed seating walls, retaining walls, pathways or building/basement footprint;
- Six (6) trees which are to be subject to 'moderate (11-20%) encroachment to their respective Notional Root Zones as a result of the proposed pathways, driveway retaining walls, stormwater infrastructure or building/basement footprint;
- Five (5) trees which are to be subjected to 'Minor' and sustainable encroachment to their respective Notional Root Zones;
- Twelve (12) trees which are generally located away from the proposed construction works and are to have nil encroachment to their respective Notional Root Zones;

**Removal** of ninety (90) trees, including:

- Sixty (60) site trees due to falling directly within the footprint of the proposed building/basement footprint, grading extents, driveway, pathways, decks, stormwater infrastructure or walls;
- Two (2) Council Street trees and sixteen (16) site trees due to 'Major' and unsustainable encroachment to their respective Notional Root Zones and Structural Root Zones as a result of the proposed building/basement footprint, grading extents, driveway/crossover, pathways, decks, stormwater infrastructure or walls;
- Twelve (12) site trees subject to nil or minor (<10%) NRZ encroachment, proposed for removal to facilitate new landscape scheme or to facilitate construction access to site during development.

Specific recommendations as per **Section 7** will need to be adopted to ensure root sensitive construction techniques and methodology are employed which mitigate the potential negative impacts to trees nominated for retention.

## 7 RECOMMENDATIONS & MITIGATION MEASURES

### 7.1 Tree Retention & Protection

Retain and protect **Trees 1, 5-6, 39, 49, 52-53, 63-74, 85, 88, 93, 102, 110 & 115-116** (26 trees) in accordance with the Tree Location Plan & Tree Protection Specification held at **Appendix 2 & 5, AS497-2009 Protection of trees on development sites** and the specific recommendations below:

#### 7.1.1 Project Arborist Engagement

A Project Arborist experienced in tree protection on construction sites should be engaged prior to the commencement of any works on site. The Project Arborist shall monitor and report regularly to the Principal Certifying Authority (PCA) and the Applicant on the condition and protection of the retained trees during the works. The Project Arborist is to supervise and monitor any excavation, machine trenching or compacted fill placement within the TPZ of retained trees throughout construction.

#### 7.1.2 Tree Protection and Management Plan

Following design development and prior to any construction works taking place on site, a dedicated Tree Protection and Management Plan is to be prepared by a suitably qualified AQF Level 5 Arborist. The purpose of this document is to provide a suitable framework for tree protection to ensure all trees nominated for retention are not adversely impacted by the proposed works.

#### 7.1.3 Root-Sensitive Construction of Pathways and Decking

The decking and pathways within the NRZ of **Trees 39, 52, 88 & 93** are to be constructed utilising lightweight, raised, low profile decking or grate structure (FRP). The structure is to be constructed entirely above the existing ground levels with minimal excavation for isolated supports/piers to mitigate potential impacts within the root zone.

The final design, levels and construction methodology of the are to be reviewed and approved by the Project Arborist prior to construction.

Works associated with the isolated footings/piers of the elevated pathways and decking within the NRZ of **Trees 39, 52, 88 & 93** must be undertaken under the supervision of the Project Arborist.

Initial test exploratory excavation must be undertaken for footing/pier locations to a depth of 600mm to ensure no conflict with existing significant tree roots. Exploratory test excavation is to be carried out by hand using non-motorised hand tools or pneumatic excavation methods (or similar approved device) to protect tree roots.

Should test excavation reveal conflict between the proposed footing/piers locations and existing significant tree roots, footings/piers are to be re-positioned as directed by the Project Arborist to avoid any conflict.

#### 7.1.4 Root-Sensitive Installation of Landscape Seating Walls and Play Area

Prior to the installation of the proposed seating walls, nature themed play area elements and recycled brick seating within the NRZ of **Trees 52, 88 & 93** test excavation for proposed pier / footing locations is to be completed under the supervision of the Project Arborist using root-sensitive techniques such as hand digging using non-motorised tools or via pneumatic device (i.e AirSpade). If any roots >25mmØ are encountered during this process, the Project Arborist is to determine whether the pier / footing is to be required relocated or re-designed in order to avoid significant impacts.

## 7.2 Tree Removal

Remove **Trees 2-4, 7-38, 40-48, 50-51, 54-62, 75-84, 86-87, 89-92, 94-101, 103-109 & 111-114** (90 trees) to facilitate the proposed development works.

Development consent and relevant approvals must be obtained prior to the removal or pruning of any tree protected under Part 13 – *Tree & Vegetation Preservation* of the Ku-ring-gai Development Control Plan 2024.

All tree removal work is to be carried out by an experienced Arborist with minimum AQF Level 3 qualifications in accordance with AS4373-2007 - *Pruning of Amenity Trees*, Safe Work Australia Guide for Managing Risks of Tree Trimming and Removal Work (2016) and other applicable legislation.

## 8 REFERENCES

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## APPENDIX 1: TREE ASSESSMENT DATA SCHEDULE

Tree No.	Genus & species	Common Name	Height (m)	Crown Spread (m)	DBH (mm)	DGL (mm)	NRZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
1	<i>Jacaranda mimosifolia</i>	Jacaranda	7	6	200	250	2.40	1.85	SM	Average	Average	Medium 15-40 years	Medium	Medium	No works proposed within NRZ	Retain	Council street tree
2	<i>Camellia japonica</i>	Camellia	4	2	150, 100, 50, 50	300	2.32	2.00	M	Average	Fair	Medium 15-40 years	Low	Low	Major 30% NRZ + 30% SRZ encroachment from proposed pathway.	Remove	Pruned/hedged
3	<i>Camellia japonica</i>	Camellia	4	2	150, 100, 50, 50	300	2.32	2.00	M	Average	Fair	Medium 15-40 years	Low	Low	Within proposed pathway	Remove	Pruned/hedged
4	<i>Camellia japonica</i>	Camellia	3	1	100	140	2.00	1.50	M	Average	Fair	Medium 15-40 years	Low	Low	Major 34% NRZ + 27% SRZ encroachment from proposed stormwater infrastructure.	Remove	Pruned/hedged
5	<i>Lophostemon confertus</i>	Brush Box	12	13	750	800	9.00	3.01	M	Fair	Fair	Medium 15-40 years	Medium	Medium	Moderate 15% NRZ encroachment from proposed retaining walls, pathways and stormwater infrastructure	Retain	Council street tree. Basal burf. Branch dieback
6	<i>Harpullia pendula</i>	Tulipwood	7	6	300	350	3.60	2.13	M	Fair	Fair	Medium 15-40 years	Medium	Medium	Minor 1% NRZ encroachment from proposed pathway	Retain	Council street tree. Upper canopy dieback
7	<i>Camellia sasanqua</i>	Camellia	7	7	150, 150, 150	300	3.12	2.00	OM	Fair	Fair	Short 5-15 years	Low	Low	Major 22% NRZ and 2% SRZ encroachment from proposed pathway, stormwater infrastructure and building footprint	Remove	Sparse foliage. Pruned/flush cut
8	<i>Camellia japonica</i>	Camellia	4	3	50, 50, 50, 50	100	2.00	1.50	M	Average	Fair	Medium 15-40 years	Low	Low	Within proposed pathway	Remove	Shrub habit
9	<i>Archontophoenix cunninghamiana</i>	Bangalow Palm	13	4	250	350	3.00	N/A	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
10	<i>Archontophoenix cunninghamiana</i>	Bangalow Palm	5	3	100	200	2.50	N/A	SM	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
11	<i>Lagerstroemia indica</i>	Crepe Myrtle	11	9	250, 200, 200, 150	500	4.87	2.47	OM	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Dense vegetation in garden bed surrounding base.
12	<i>Pyrus ussuriensis</i>	Manchurian Pear	9	10	250	300	3.00	2.00	M	Good	Average	Medium 15-40 years	Medium	Medium	Major 18% NRZ and 6% SRZ encroachment from proposed building/basement and pathway	Remove	Pruned-crown lift
13	<i>Syzygium sp.</i>	Lilly Pilly	6	4	100, 100, 50, 50	200	2.00	1.68	M	Average	Average	Medium 15-40 years	Low	Low	Within grading extents	Remove	Dense vegetation in garden bed surrounding base
14	<i>Archontophoenix cunninghamiana</i>	Bangalow Palm	8	5	200, 200	300	3.50	N/A	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Group of 2x palms
15	<i>Tibouchina cv.</i>	Tibouchina	9	9	300, 300, 250	500	5.91	2.47	OM	Fair	Fair	Short 5-15 years	Low	Low	Within building/basement footprint	Remove	Pruned/lopped. Branch dieback. Epicormic growth
16	<i>Lagerstroemia indica</i>	Crepe Myrtle	7	4	100, 50, 50, 50	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Growing in raised garden bed
17	<i>Rhododendron sp.</i>	Rhododendron	7	5	200, 150	300	3.00	2.00	M	Good	Average	Medium 15-40 years	Medium	Medium	Within building/basement footprint	Remove	Dense canopy
18	<i>Unknown species</i>	-	7	5	100, 100, 50, 50	200	2.00	1.68	OM	Fair	Fair	Short 5-15 years	Low	Low	Within building/basement footprint	Remove	Pruned/topped. Sparse foliage. Branch dieback
19	<i>Beaucarnea recurvata</i>	Ponytail Palm	6	1	300	750	1.50	N/A	OM	Fair	Fair	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Pronounced basal flare
20	<i>Lophostemon confertus</i>	Brush Box	14	14	700	800	8.40	3.01	M	Average	Average	Long 40 years +	Medium	High	Major 27% NRZ encroachment from proposed driveway, crossover, pathways and stormwater infrastructure	Remove	Council street tree

Tree No.	Genus & species	Common Name	Height (m)	Crown Spread (m)	DBH (mm)	DGL (mm)	NRZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
21	<i>Magnolia grandiflora</i>	Bull Bay Magnolia	4	1	50	100	2.00	1.50	SM	Average	Fair	Medium 15-40 years	Low	Low	Within proposed driveway	Remove	Chlorotic foliage
22	<i>Rhododendron sp.</i>	Rhododendron	6	6	300, 200, 100	500	4.49	2.47	M	Average	Average	Medium 15-40 years	Medium	Medium	Within proposed driveway	Remove	Nil
23	<i>Camellia sasanqua</i>	Camellia	3	2	50, 50	100	2.00	1.50	M	Average	Fair	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Hedged
24	<i>Camellia sasanqua</i>	Camellia	3	2	50, 50	100	2.00	1.50	M	Average	Fair	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Hedged
25	<i>Magnolia grandiflora</i>	Bull Bay Magnolia	9	4	150	200	2.00	1.68	M	Fair	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Chlorotic foliage
26	<i>Jacaranda mimosifolia</i>	Jacaranda	12	13	500	500	6.00	2.47	M	Average	Average	Medium 15-40 years	Medium	Medium	Within building/basement footprint	Remove	Vine throughout canopy
27	<i>Camellia sasanqua</i>	Camellia	6	5	150, 150, 100, 100	400	3.06	2.25	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Pruned-driveway clearance
28	<i>Viburnum odoratissimum</i>	Sweet Viburnum	5	4	100, 50	150	2.00	1.50	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
29	<i>Viburnum odoratissimum</i>	Sweet Viburnum	5	4	100, 50	150	2.00	1.50	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
30	<i>Viburnum odoratissimum</i>	Sweet Viburnum	5	4	100, 50	150	2.00	1.50	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
31	<i>Archontophoenix cunninghamiana</i>	Bangalow Palm	9	5	200	250	3.50	N/A	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
32	<i>Syzygium sp.</i>	Lilly Pilly	4	3	100	140	2.00	1.50	M	Fair	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Sparse foliage
33	<i>Magnolia champaca</i>	Champak	12	10	250	300	3.00	2.00	M	Fair	Average	Medium 15-40 years	Low	Low	Within proposed pathway	Remove	Sparse foliage
34	<i>Dracaena marginata</i>	Dragon Tree	6	4	50, 50, 50, 50	350	3.00	N/A	M	Average	Average	Medium 15-40 years	Low	Low	Within proposed pathway	Remove	Nil
35	<i>Dracaena marginata</i>	Dragon Tree	7	3	150, 150, 50, 50	350	2.50	N/A	M	Average	Average	Medium 15-40 years	Low	Low	Minor 4% NRZ encroachment from proposed pathway	Remove	Nil
36	<i>Viburnum odoratissimum</i>	Sweet Viburnum	4	3	150, 150, 100, 100	400	3.06	2.25	M	Good	Fair	Medium 15-40 years	Low	Low	Within proposed pathway	Remove	Hedged
37	<i>Tibouchina cv.</i>	Tibouchina	4.5	3	50, 50, 50	100	2.00	1.50	M	Fair	Fair	Short 5-15 years	Low	Low	Major 30% NRZ + 23% SRZ encroachment from proposed retaining wall and pathway	Remove	Upper canopy dieback
38	<i>Camellia japonica</i>	Camellia	4	5	50, 50, 50, 50	250	2.00	1.85	M	Good	Average	Medium 15-40 years	Low	Low	No works proposed within NRZ	Remove	Pruned
39	<i>Angophora costata</i>	Sydney Red Gum	18	15	550	600	6.60	2.67	M	Good	Average	Long 40 years +	Medium	High	Moderate 14% NRZ encroachment from proposed building/basement, retaining wall and pathways	Retain	Minor lean to south east
40	<i>Syzygium australe</i>	Brush Cherry	5	2	50	100	2.00	1.50	SM	Average	Average	Medium 15-40 years	Low	Low	Within proposed retaining wall footprint	Remove	Nil
41	<i>Syzygium australe</i>	Brush Cherry	5	2	50	100	2.00	1.50	SM	Average	Average	Medium 15-40 years	Low	Low	Within proposed retaining wall footprint	Remove	Nil
42	<i>Camellia japonica</i>	Camellia	4	1	50, 50	100	2.00	1.50	M	Fair	Average	Medium 15-40 years	Low	Low	Within proposed grading extents	Remove	Nil

Tree No.	Genus & species	Common Name	Height (m)	Crown Spread (m)	DBH (mm)	DGL (mm)	NRZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
43	<i>Archontophoenix cunninghamiana</i>	Bangalow Palm	13	4	250	300	3.00	N/A	M	Average	Average	Medium 15-40 years	Low	Low	Within proposed grading extents	Remove	Nil
44	<i>Archontophoenix cunninghamiana</i>	Bangalow Palm	13	4	250	300	3.00	N/A	M	Average	Average	Medium 15-40 years	Low	Low	Within proposed seating wall	Remove	Nil
45	<i>Gordonia axillaris</i>	Fried Egg Plant	6	5	150	200	2.00	1.68	M	Fair	Fair	Medium 15-40 years	Low	Low	Within proposed retaining wall footprint	Remove	Pruned. Branch dieback
46	<i>Lagerstroemia indica</i>	Crepe Myrtle	8	7	150, 150, 150	300	3.12	2.00	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
47	<i>Gordonia axillaris</i>	Fried Egg Plant	5	2	150, 100	200	2.16	1.68	M	Fair	Fair	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
48	<i>Gordonia axillaris</i>	Fried Egg Plant	7	5	150	200	2.00	1.68	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
49	<i>Lophostemon confertus</i>	Brush Box	15	14	900	1050	10.80	3.38	M	Average	Good	Long 40 years +	Medium	High	Moderate 17% NRZ encroachment from proposed driveway, pathways, stormwater infrastructure and building/basement footprint	Retain	Council street tree
50	<i>Archontophoenix cunninghamiana</i>	Bangalow Palm	14	5	300	350	3.50	N/A	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
51	<i>Lagerstroemia indica</i>	Crepe Myrtle	4	3	50	100	2.00	1.50	M	Average	Average	Medium 15-40 years	Low	Low	No works proposed within NRZ	Remove	Nil
52	<i>Syzygium paniculatum</i>	Magenta Cherry	14	14	950	950	11.40	3.24	M	Fair	Fair	Medium 15-40 years	Medium	Medium	Moderate 15% NRZ encroachment from proposed pathways and stormwater infrastructure	Retain	Pruned/lopped-crown lift. Branch dieback. Epicormic growth
53	<i>Lophostemon confertus</i>	Brush Box	14	13	800	800	9.60	3.01	M	Fair	Average	Long 40 years +	Medium	High	Minor 10% NRZ encroachment from proposed pathways and stormwater infrastructure	Retain	Council street tree. Branch dieback
54	<i>Alnus jorullensis</i>	Evergreen Alder	4	3	250	300	3.00	2.00	M	Average	Fair	Medium 15-40 years	Low	Low	No works proposed within NRZ	Remove	Excessive pruning
55	<i>Alnus jorullensis</i>	Evergreen Alder	4	3	250	300	3.00	2.00	M	Average	Fair	Medium 15-40 years	Low	Low	Major 37% NRZ + 31% SRZ encroachment from proposed retaining wall	Remove	Excessive pruning
56	<i>Alnus jorullensis</i>	Evergreen Alder	4	3	250	300	3.00	2.00	M	Average	Fair	Medium 15-40 years	Low	Low	Major 32% NRZ + 19% SRZ encroachment from proposed retaining wall	Remove	Excessive pruning
57	<i>Alnus jorullensis</i>	Evergreen Alder	4	3	250	300	3.00	2.00	M	Average	Fair	Medium 15-40 years	Low	Low	Major 23% NRZ + 12% SRZ encroachment from proposed retaining wall	Remove	Excessive pruning
58	<i>Alnus jorullensis</i>	Evergreen Alder	4	3	250	300	3.00	2.00	M	Average	Fair	Medium 15-40 years	Low	Low	Major 19% NRZ + 6% SRZ encroachment from proposed retaining wall	Remove	Excessive pruning
59	<i>Pyrus calleryana</i>	Callery Pear	3	2	150	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	No works proposed within NRZ	Remove	Excessive pruning. Growing in planter box
60	<i>Pyrus calleryana</i>	Callery Pear	3	2	150	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	No works proposed within NRZ	Remove	Excessive pruning. Growing in planter box
61	<i>Pyrus calleryana</i>	Callery Pear	3	2	150	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	No works proposed within NRZ	Remove	Excessive pruning. Growing in planter box
62	<i>Pyrus calleryana</i>	Callery Pear	3	2	150	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	No works proposed within NRZ	Remove	Excessive pruning. Growing in planter box
63	<i>Pyrus calleryana</i>	Callery Pear	5	5	150	200	2.00	1.68	M	Average	Average	Medium 15-40 years	Medium	Medium	No works proposed within NRZ	Retain	Council street tree. Under powerlines
64	<i>Pyrus calleryana</i>	Callery Pear	5	5	200	200	2.40	1.68	M	Average	Average	Medium 15-40 years	Medium	Medium	No works proposed within NRZ	Retain	Council street tree. Under powerlines

Tree No.	Genus & species	Common Name	Height (m)	Crown Spread (m)	DBH (mm)	DGL (mm)	NRZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
65	<i>Pyrus calleryana</i>	Callery Pear	5	5	200	200	2.40	1.68	M	Average	Average	Medium 15-40 years	Medium	Medium	No works proposed within NRZ	Retain	Council street tree. Under powerlines
66	<i>Morus sp.</i>	Mulberry	11	11	400	450	4.80	2.37	M	Good	Average	Medium 15-40 years	Medium	Medium	No works proposed within NRZ	Retain	Minor lean east. Pronounced surface structural roots. Not surveyed. 1.2m east of building 1.5m south of path
67	<i>Quercus robur</i>	English Oak	16	20	1000	1050	12.00	3.38	M	Average	Average	Medium 15-40 years	Medium	Medium	Moderate 18% NRZ encroachment from proposed building/basement footprint and stormwater infrastructure	Retain	Branch failures. Branch dieback.
68	<i>Melaleuca salicina</i>	Willow Bottlebrush	12	12	650	650	7.80	2.76	M	Average	Average	Long 40 years +	Medium	High	No works proposed within NRZ	Retain	Council street tree
69	<i>Melaleuca salicina</i>	Willow Bottlebrush	13	14	1100	1100	13.20	3.44	M	Average	Average	Long 40 years +	Medium	High	No works proposed within NRZ	Retain	Council street tree
70	<i>Ceratopetalum gummiferum</i>	NSW Xmas Bush	9	3	200	250	2.40	1.85	M	Fair	Fair	Short 5-15 years	Low	Low	No works proposed within NRZ	Retain	Branch dieback. Stem decay
71	<i>Tristaniopsis laurina</i>	Water Gum	3	2	100, 50	200	2.00	1.68	SM	Average	Average	Medium 15-40 years	Low	Low	No works proposed within NRZ	Retain	Council street tree
72	<i>Jacaranda mimosifolia</i>	Jacaranda	6	9	250, 200, 150	400	4.24	2.25	M	Average	Fair	Medium 15-40 years	Low	Low	Minor 8% NRZ encroachment from proposed pathway	Retain	Excessive pruning/topping. Under powerlines
73	<i>Plumeria sp.</i>	Frangipani	3	4	100, 100, 100	250	2.08	1.85	M	Average	Average	Medium 15-40 years	Low	Low	No works proposed within NRZ	Retain	Nil
74	<i>Ceratopetalum gummiferum</i>	NSW Xmas Bush	4	2	50, 50	100	2.00	1.50	SM	Average	Average	Medium 15-40 years	Low	Low	No works proposed within NRZ	Retain	Nil
75	<i>Plumeria sp.</i>	Frangipani	5	5	150, 150, 150, 150	300	3.60	2.00	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
76	<i>Magnolia sp.</i>	Magnolia	9	11	450	450	5.40	2.37	M	Good	Average	Medium 15-40 years	Medium	Medium	Within building/basement footprint	Remove	Pruned-building clearance. Epicormic growth
77	<i>Camellia japonica</i>	Camellia	6	4	150	200	2.00	1.68	M	Average	Average	Medium 15-40 years	Low	Low	Major 36% NRZ + 27% SRZ encroachment from proposed pathways and stormwater infrastructure	Remove	Nil
78	<i>Citrus paradisi</i>	Grapefruit	3	3	100	140	2.00	1.50	M	Fair	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
79	<i>Syzygium australe</i>	Brush Cherry	8	5	300	350	3.60	2.13	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
80	<i>Citrus reticulata</i>	Mandarin	3	3	50, 50, 50	140	2.00	1.50	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
81	<i>Archontophoenix cunninghamiana</i>	Bangalow Palm	5	2	100	200	2.00	N/A	SM	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
82	<i>Magnolia x soulangeana</i>	Saucer Magnolia	6	8	200, 150, 150, 150	500	3.93	2.47	M	Good	Average	Medium 15-40 years	Medium	Medium	Within building/basement footprint	Remove	Nil
83	<i>Magnolia grandiflora 'Little Gem'</i>	Magnolia	4.5	2	50	100	2.00	1.50	SM	Average	Average	Medium 15-40 years	Low	Low	Within proposed deck	Remove	Nil
84	<i>Magnolia grandiflora 'Little Gem'</i>	Magnolia	6	3	100	150	2.00	1.50	M	Average	Average	Medium 15-40 years	Low	Low	Within proposed deck	Remove	Nil
85	<i>Lophostemon confertus</i>	Brush Box	14	14	950	1000	11.40	3.31	M	Average	Fair	Long 40 years +	Medium	High	Major 28% NRZ encroachment from proposed pathways and retaining walls	Retain	Council street tree. Under powerlines
86	<i>Schinus molle var. areira</i>	Pepper Tree	9	12	650	700	7.80	2.85	M	Fair	Fair	Short 5-15 years	Low	Low	Major 25% NRZ encroachment from proposed pathways and retaining walls	Remove	Excessive pruning/topping. Under powerlines. Branch dieback

Tree No.	Genus & species	Common Name	Height (m)	Crown Spread (m)	DBH (mm)	DGL (mm)	NRZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
87	<i>Malus sp.</i>	Crab Apple Cultivar	5	6	150, 150, 100	250	2.81	1.85	M	Average	Average	Medium 15-40 years	Low	Low	Major 36% NRZ + 28% SRZ encroachment from proposed pathways	Remove	Nil
88	<i>Ulmus parvifolia</i>	Chinese Elm	13	19	500	600	6.00	2.67	M	Good	Good	Medium 15-40 years	Medium	Medium	Moderate 19% NRZ encroachment from proposed pathways and seating walls	Retain	Nil
89	<i>Pyrus calleryana</i>	Callery Pear	10	10	250	250	3.00	1.85	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Nil
90	<i>Xylosma senticosum</i>	Shiny Xylsoma	12	12	250, 250, 200, 200	500	5.43	2.47	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Pruned/topped
91	<i>Pyrus calleryana</i>	Callery Pear	10	10	250	300	3.00	2.00	M	Average	Average	Medium 15-40 years	Low	Low	Within proposed deck	Remove	Nil
92	<i>Ginkgo biloba</i>	Maidenhair Tree	12	7	250	300	3.00	2.00	M	Average	Average	Medium 15-40 years	Low	Low	Major 17% NRZ + 4% SRZ encroachment from proposed deck	Remove	Nil
93	<i>Eucalyptus grandis</i>	Flooded Gum	22	22	1000	1200	12.00	3.57	M	Good	Average	Long 40 years +	Medium	High	Major 21% NRZ encroachment from proposed seating walls, retaining walls, pathways and building/basement footprint	Retain	Past pruning. Minor deadwood
94	<i>Viburnum odoratissimum</i>	Sweet Viburnum	4	2	150, 50	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	Within proposed deck	Remove	Pruned/topped. Formed into boundary hedge
95	<i>Viburnum odoratissimum</i>	Sweet Viburnum	4	2	150, 50	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	Within proposed deck	Remove	Pruned/topped. Formed into boundary hedge
96	<i>Viburnum odoratissimum</i>	Sweet Viburnum	4	2	150, 50	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	Within proposed deck	Remove	Pruned/topped. Formed into boundary hedge
97	<i>Viburnum odoratissimum</i>	Sweet Viburnum	4	2	150, 50	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	Within proposed deck	Remove	Pruned/topped. Formed into boundary hedge
98	<i>Viburnum odoratissimum</i>	Sweet Viburnum	4	2	150, 50	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	Within proposed seating wall	Remove	Pruned/topped. Formed into boundary hedge
99	<i>Viburnum odoratissimum</i>	Sweet Viburnum	4	2	150, 50	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	Major 10% NRZ + 4% SRZ encroachment from proposed seating wall	Remove	Pruned/topped. Formed into boundary hedge
100	<i>Viburnum odoratissimum</i>	Sweet Viburnum	4	2	150, 50	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	No works proposed within NRZ	Remove	Pruned/topped. Formed into boundary hedge
101	<i>Viburnum odoratissimum</i>	Sweet Viburnum	4	2	150, 50	200	2.00	1.68	M	Average	Fair	Medium 15-40 years	Low	Low	No works proposed within NRZ	Remove	Pruned/topped. Formed into boundary hedge
102	<i>Melaleuca salicina</i>	Willow Bottlebrush	6	8	750	750	9.00	2.93	M	Average	Fair	Medium 15-40 years	Medium	Medium	Major 24% NRZ encroachment from proposed retaining walls	Retain	Council street tree. Pruned/topped. Under powerlines
103	<i>Cupressus sempervirens</i>	Mediterranean Cypress	8	2	200	250	2.40	1.85	M	Average	Average	Medium 15-40 years	Low	Low	Within proposed retaining wall footprint	Remove	Thick vegetation surrounding base
104	<i>Camellia japonica</i>	Camellia	3	1	50	100	2.00	1.50	M	Average	Average	Medium 15-40 years	Low	Low	Within proposed retaining wall footprint	Remove	Nil
105	<i>Camellia japonica</i>	Camellia	3	1	50, 50	100	2.00	1.50	M	Average	Average	Medium 15-40 years	Low	Low	Major 67% NRZ + 61% SRZ encroachment from proposed building/basement footprint and retaining wall	Remove	Nil
106	<i>Camellia sasanqua</i>	Camellia	5	2	100, 50, 50, 50	150	2.00	1.50	M	Average	Fair	Medium 15-40 years	Low	Low	Major 36% NRZ + 35% SRZ encroachment from proposed stormwater infrastructure	Remove	Pruned/topped
107	<i>Camellia sasanqua</i>	Camellia	5	2	100, 50, 50, 50	150	2.00	1.50	M	Average	Fair	Medium 15-40 years	Low	Low	Within proposed stormwater infrastructure	Remove	Pruned/topped
108	<i>Camellia sasanqua</i>	Camellia	5	2	100, 50, 50, 50	150	2.00	1.50	M	Average	Fair	Medium 15-40 years	Low	Low	Major 16% NRZ + 6% SRZ encroachment from proposed stormwater infrastructure	Remove	Pruned/topped

Tree No.	Genus & species	Common Name	Height (m)	Crown Spread (m)	DBH (mm)	DGL (mm)	NRZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
109	<i>Cupressus sp.</i>	Cypress	7	5	200, 150, 100	350	3.23	2.13	M	Fair	Fair	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Pruned/lopped. Sparse foliage
110	<i>Jacaranda mimosifolia</i>	Jacaranda	14	14	600	700	7.20	2.85	M	Good	Average	Medium 15-40 years	Medium	Medium	Minor 6% NRZ encroachment from proposed stormwater infrastructure and building/basement footprint	Retain	Neighbouring tree. Limited access. Canopy bias north
111	<i>Cupressus macrocarpa</i>	Monterey Cypress	12	7	200, 150	300	3.00	2.00	M	Average	Average	Medium 15-40 years	Low	Low	No works proposed within NRZ	Remove	Canopy bias to east
112	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	7	300, 250, 250	500	5.56	2.47	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Exposed surface structural roots
113	<i>Acer negundo</i>	Box Elder	13	11	600	650	7.20	2.76	M	Average	Average	Medium 15-40 years	Low	Low	Within building/basement footprint	Remove	Surrounded by overgrown vegetation
114	<i>Cupressus macrocarpa</i>	Monterey Cypress	13	7	200, 200	300	3.39	2.00	M	Average	Average	Medium 15-40 years	Low	Low	No works proposed within NRZ	Remove	Not surveyed. 1.6m from western boundary fence 4.2m from southern boundary fence. Surrounded by overgrown vegetation
115	<i>Corymbia citriodora</i>	Lemon-scented Gum	20	16	450	500	5.40	2.47	M	Average	Average	Long 40 years +	Medium	High	No works proposed within NRZ	Retain	Neighbouring tree. Limited access
116	<i>Corymbia citriodora</i>	Lemon-scented Gum	22	18	500	550	6.00	2.57	M	Average	Average	Long 40 years +	Medium	High	Minor 3% encroachment from proposed retaining walls and stormwater infrastructure	Retain	Neighbouring tree. Limited access

**Tree Inspection Data Notes & Terminology****Tree No. (Tree Number)**

The tree number associated to each tree located on or adjacent to the subject site.

**Botanical Name and Common Name**

The botanical and common name of each tree is identified and recorded. Occasionally the exact species name is unknown; sp. is recorded to indicate this.

**Height, Crown Width and DSH**

- The trees height and crown spread is recorded in metres (m);
- The tree DSH is recorded in millimetres (mm). DSH is an abbreviation of Diameter (of the trunk) measured at Standard Height (or 1.4m from the base of the trunk). If more than one trunk is present the DSH is calculated in accordance with AS4970:2025 Protection of Trees on Development Sites

**Age Class**

The age class of each tree is estimated as either:

- J – Juvenile refers to a well established but young tree
- SM – Semi Mature, a tree that has not grown to mature size
- M – Mature, a tree that has reached mature size and will slowly increase in size over time
- OM – Over Mature, a tree that has been mature for a long period and is beginning to display signs of decline, e.g. large dead branches
- S – Senescent, an over mature tree that is now in decline

**Health & Condition**

The trees health and vigour is recorded as a measurement of:

**Good** - the tree does not appear to appear stressed with no excessive dieback, insect infestation, decay, deadwood or epicormic shoots

**Average** - the tree appears stressed and has some crown dieback, and/or a few epicormic shoots, and/or some deadwood in the crown and some new growth at branch tips. These trees may benefit from remediation of the growing environment to reduce stress and return it to good health

**Fair** - the tree may have areas of crown dieback, and/or epicormic shoots, and/or areas of decay, and/or reduced new growth at branch tips. These trees have been stressed for a short period of time, remediation of the growing environment may improve trees health

**Poor** - the tree may have large areas of crown dieback, and/or many epicormic shoots, and/or reduced new growth at branch tips. These trees have been stressed for a long period of time, remediation of the growing environment would not return the tree to good health.

**SRZ (Structural Root Zone)**

The SRZ is a radial area extending outwards from the centre of the trunk. This area contains the majority of the structural woody roots. This area is responsible primarily for stability. Root damage or root loss within this zone greatly increases the opportunity for decay fungi to ingress into the heartwood, causing internal decay in addition to destabilising the trees structural integrity. The SRZ is calculated as follows (This calculation is taken from the Australian Standard 4970 – 2025 Protection of Trees on Development Sites);  $(D \times 50) / 0.42 \times 0.64$

**NRZ (National Root Zone)**

The NRZ is a radial area measured by multiplying the DSH by twelve (12) or a circular area the size of the trees drip line, whichever is greater. This area contains the majority of the structural and feeder roots responsible for stability, gaseous exchange and water and nutrient uptake. Excavation, back filling, compaction or other disturbance should not occur in this area. The NRZ is used to identify the minimum area required for the safe retention of a given tree. This calculation is derived from the Australian Standard 4970:2025 Protection of Trees on Development Sites. NRZ encroachment is potentially acceptable if no other option is available and is classified under AS4970:2025 as 'Minor (<10%)', 'Moderate' (>10%<20%) or 'Major (>20%)'. A major encroachment (in excess of 20%) is required to be clearly justified by the Project Arborist and compensated for elsewhere. Justification methodology may vary depending on site or individual tree's health, vigour and ability to withstand disturbance and may require root investigation.

**Landscape Significance**

The landscape significance of a tree or group of trees is determined using a combination of health/vigour/condition, amenity, heritage and ecological values in accordance with IACA Significance of a Tree, Assessment Rating System (STARS)© (IACA 2010)©.

1. High Significance in Landscape
2. Medium Significance in Landscape
3. Low Significance in Landscape

**Retention Value (RV)**

Determined by [1] tree free of visual defects and viable for retention, [2] viable for retention with minor faults which may reduce ULE, [3] trees which should not restrict development applications containing faults that are likely to become problematic in the short term, [4] trees to be considered for removal due to average condition.

**High Retention** - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 Protection of trees on development sites. Tree sensitive construction measures must be implemented e.g. pier and beam etc. if works are to proceed within the Tree Protection Zone.

**Medium Retention** - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.

**Low Retention** - These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.

**Priority for Removal** - These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

**U.L.E. Categories**

Useful Life Expectancy (after *Barrell* 1996, modified by the author). A trees U.L.E. category is the life expectancy of the tree modified first by its age, health, condition and location. U.L.E. assessments may be modified as dictated by changes in trees health and environment.

**Long** - Appear retainable at the time of assessment for over 40 years assuming reasonable maintenance.

**Medium** - Appear to be retainable at the time of assessment for 15 to 40 years assuming reasonable maintenance.

**Short** - Trees appear to be retainable at the time of assessment for 5 to 15 years assuming reasonable maintenance.

**Very Short** - Removal - Trees which should be scheduled for removal within the very short term or as specified within this report.

**Small, Young or Regularly Pruned** - Trees under 5m in height that can be easily moved or replaced, includes screen plantings or hedge lines.

**Development Impact**

Brief outline of the impact of the proposed development works or ancillary construction related activities likely to impact the tree.

**Retain/Remove**

The proposed removal or retention recommendation in light of the proposed development related impacts.

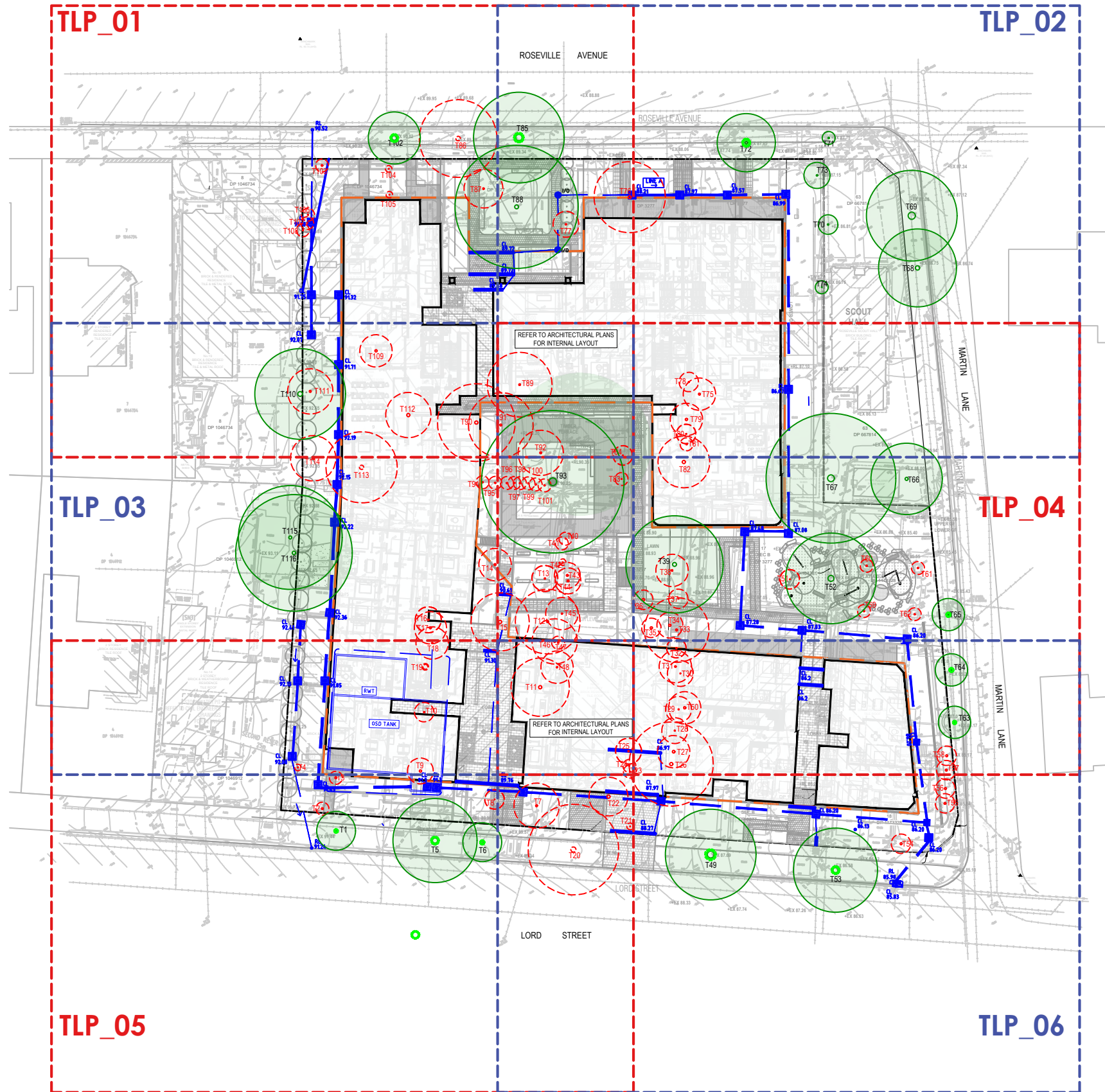
**NOTES:** This report acknowledges the current Australian Standard 'Protection of Trees on Development Sites' AS 4970 – 2025 with reference to the National Root Zone (NRZ); being a combination of the root and crown area requiring protection. The NRZ takes into consideration the Structural Root Zone (SRZ); The area required for tree stability. The standard states where a greater than 20% encroachment occurs the arborist is to take into consideration the schedule of determining impacts as set within AS4970 s. 3.3.2. Encroachments are referred to within this report as major or minor encroachments (AS4970 s. 3.3.2 & 3.3.3). To retain specific trees and ensure their viability, development must take into consideration protection of the NRZ radius.

# APPENDIX 2 - TREE LOCATION PLANS

NOTE: MUST BE READ IN CONJUNCTION WITH ARBORICULTURAL IMPACT ASSESSMENT

## DRAWING LIST -

SHEET:	TITLE:
G845_TLP_00	COVER SHEET
G845_TLP_01A	TREE LOCATION PLAN - OVERALL SITE
G845_TLP_01	TREE LOCATION PLAN 01
G845_TLP_02	TREE LOCATION PLAN 02
G845_TLP_03	TREE LOCATION PLAN 03
G845_TLP_04	TREE LOCATION PLAN 04
G845_TLP_05	TREE LOCATION PLAN 05
G845_TLP_06	TREE LOCATION PLAN 06



Issue Code	Issue Description	By	Chk	Date
D	PRE UPDATED	SZ	GT	28.10.25
C	PRE UPDATED	SZ	GT	03.04.25
B	PRE UPDATED	NZ	GT	11.03.25
A	PRE FOR INFORMATION	JZ	GT	06.03.25

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

**21-27 ROSEVILLE  
AVE,  
ROSEVILLE**

DRAWING TITLE

COVER SHEET

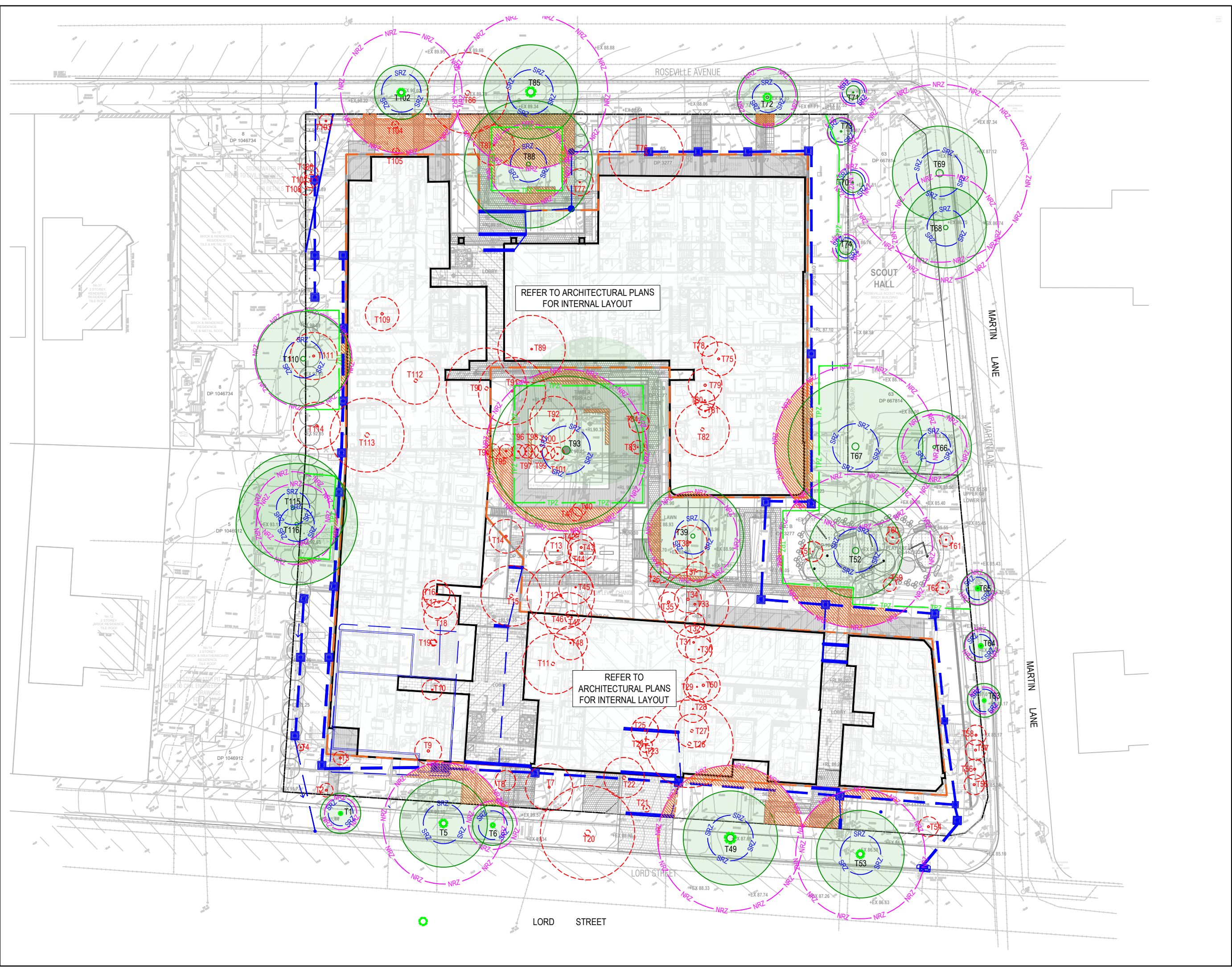
CLIENT



Drawn : SZ  
Designed : SZ  
Project No. : G845  
Scale :



1:750 @ A3  
SHEET NUMBER : G845\_TLP\_00  
REVISION : D



**LEGEND**

- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- NOTIONAL ROOT ZONE (NRZ)
- STRUCTURAL ROOT ZONE (SRZ)
- OUTLINE OF BASEMENT LEVEL
- NRZ ENCROACHMENT ZONE
- SITE BOUNDARY
- STORMWATER INFRASTRUCTURE

Issue Code	Issue Description	By	Chk	Date
D	PRE UPDATED	SZ	GT	28.10.25
C	PRE UPDATED	SZ	GT	03.04.25
B	PRE UPDATED	NZ	GT	11.03.25
A	PRE FOR INFORMATION	JZ	GT	06.03.25

PRE - Preliminary CA - Council Approval T - Tender CON - Construction PROJECT

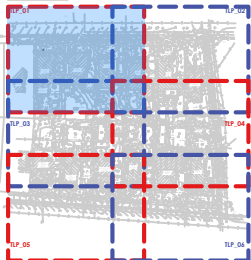
**21-27 ROSEVILLE AVE, ROSEVILLE**

DRAWING TITLE  
**TREE LOCATION PLAN - OVERALL SITE**

CLIENT  
**HYECORP PROPERTY GROUP**

Drawn : SZ  
Designed : SZ  
Project No. : G845  
Bar Scale  
1:500 @ A3  
SHEET NUMBER G845\_TLP\_01A REVISION D

SHEET PLAN:



LEGEND

- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- NOTIONAL ROOT ZONE (NRZ)
- STRUCTURAL ROOT ZONE (SRZ)
- OUTLINE OF BASEMENT LEVEL
- NRZ ENCROACHMENT ZONE
- SITE BOUNDARY
- STORMWATER INFRASTRUCTURE

Issue Code	Issue Description	By	Chk	Date
D	PRE UPDATED	SZ	GT	28.10.25
C	PRE UPDATED	SZ	GT	03.04.25
B	PRE UPDATED	NZ	GT	11.03.25
A	PRE FOR INFORMATION	JZ	GT	06.03.25

PRE - Preliminary CA - Council Approval T - Tender CON - Construction PROJECT

**21-27 ROSEVILLE AVE, ROSEVILLE**

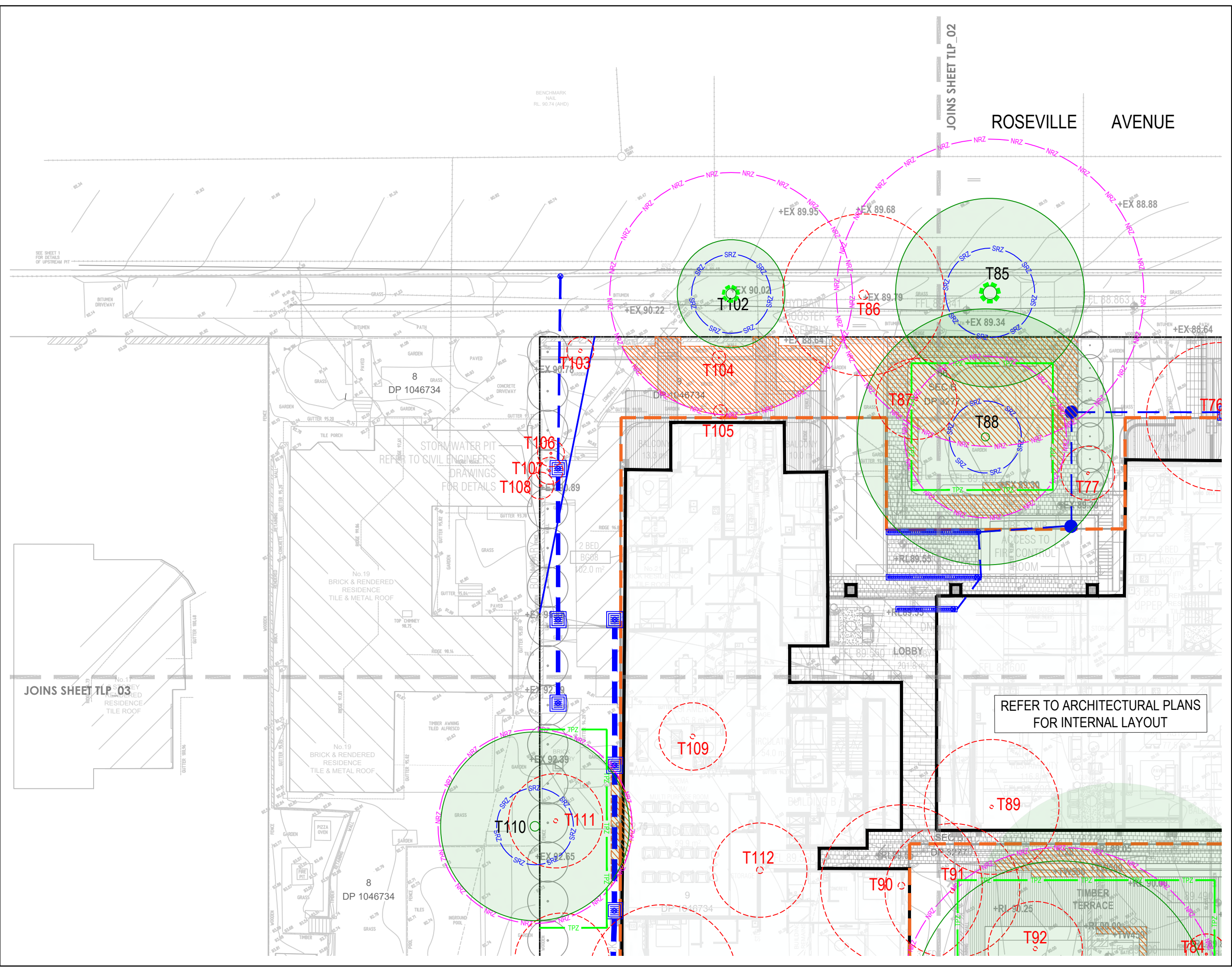
DRAWING TITLE  
**TREE LOCATION PLAN 01**

CLIENT



Drawn : SZ  
Designed : SZ  
Project No. : G845  
Bar Scale  
1:250 @ A3

SHEET NUMBER G845\_TLP\_01 REVISION D



REFER TO ARCHITECTURAL PLANS FOR INTERNAL LAYOUT

JOINS SHEET TLP\_03

JOINS SHEET TLP\_02

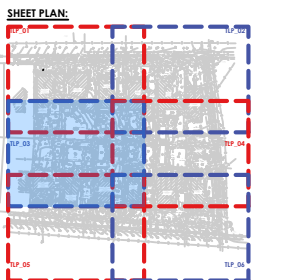
SEE SHEET 1 FOR DETAILS OF UPSTREAM PIT

STORMWATER PIT REFER TO CIVIL ENGINEERS DRAWINGS FOR DETAILS

ACCESS TO FIRE CONTROL ROOM

REFER TO ARCHITECTURAL PLANS FOR INTERNAL LAYOUT





- LEGEND**
- T1 EXISTING TREE TO BE RETAINED
  - EXISTING TREE TO BE REMOVED
  - NOTIONAL ROOT ZONE (NRZ)
  - STRUCTURAL ROOT ZONE (SRZ)
  - - - - - OUTLINE OF BASEMENT LEVEL
  - ▨ NRZ ENCROACHMENT ZONE
  - - - - - SITE BOUNDARY
  - STORMWATER INFRASTRUCTURE

Issue Code	Issue Description	By	Chk	Date
D	PRE UPDATED	SZ	GT	28.10.25
C	PRE UPDATED	SZ	GT	03.04.25
B	PRE UPDATED	NZ	GT	11.03.25
A	PRE FOR INFORMATION	JZ	GT	06.03.25

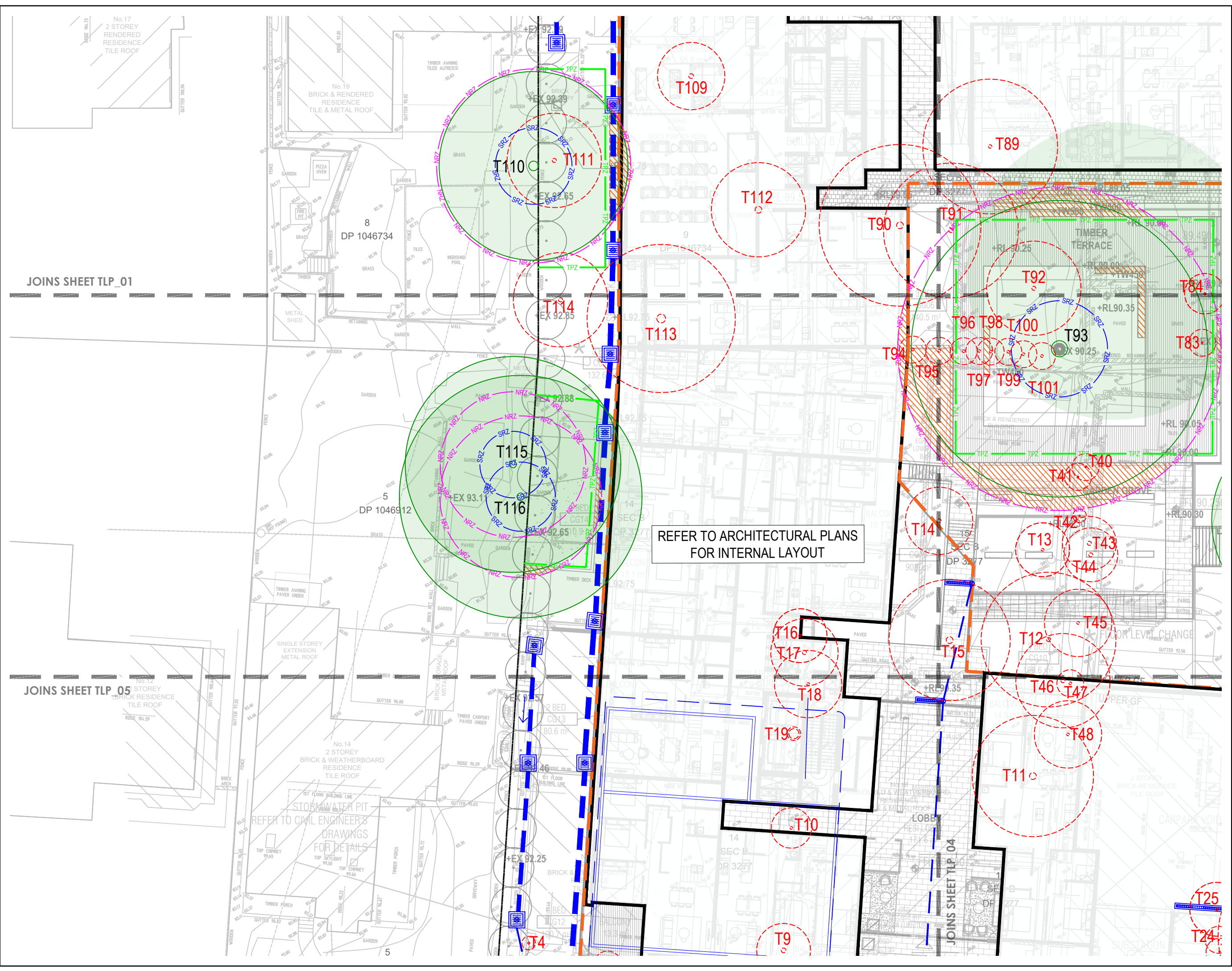
PRE - Preliminary CA - Council Approval T - Tender CON - Construction

**21-27 ROSEVILLE AVE, ROSEVILLE**

**DRAWING TITLE**  
**TREE LOCATION PLAN 03**



Drawn : SZ  
Designed : SZ  
Project No. : G845  
Bar Scale  
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SHEET NUMBER G845\_TLP\_03 REVISION D



JOINS SHEET TLP\_01

JOINS SHEET TLP\_05

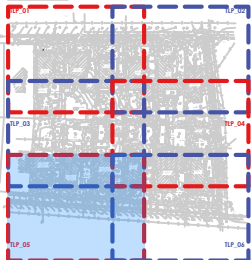
REFER TO ARCHITECTURAL PLANS FOR INTERNAL LAYOUT

REFER TO CIVIL ENGINEER'S DRAWINGS FOR DETAILS

JOINS SHEET TLP\_04



SHEET PLAN:



LEGEND

- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- NOTIONAL ROOT ZONE (NRZ)
- STRUCTURAL ROOT ZONE (SRZ)
- OUTLINE OF BASEMENT LEVEL
- NRZ ENCROACHMENT ZONE
- SITE BOUNDARY
- STORMWATER INFRASTRUCTURE

Issue Code	Issue Description	By	Chk	Date
D	PRE UPDATED	SZ	GT	28.10.25
C	PRE UPDATED	SZ	GT	03.04.25
B	PRE UPDATED	NZ	GT	11.03.25
A	PRE FOR INFORMATION	JZ	GT	06.03.25

PRE - Preliminary CA - Council Approval T - Tender CON - Construction PROJECT

**21-27 ROSEVILLE AVE, ROSEVILLE**

DRAWING TITLE  
**TREE LOCATION PLAN 05**

CLIENT

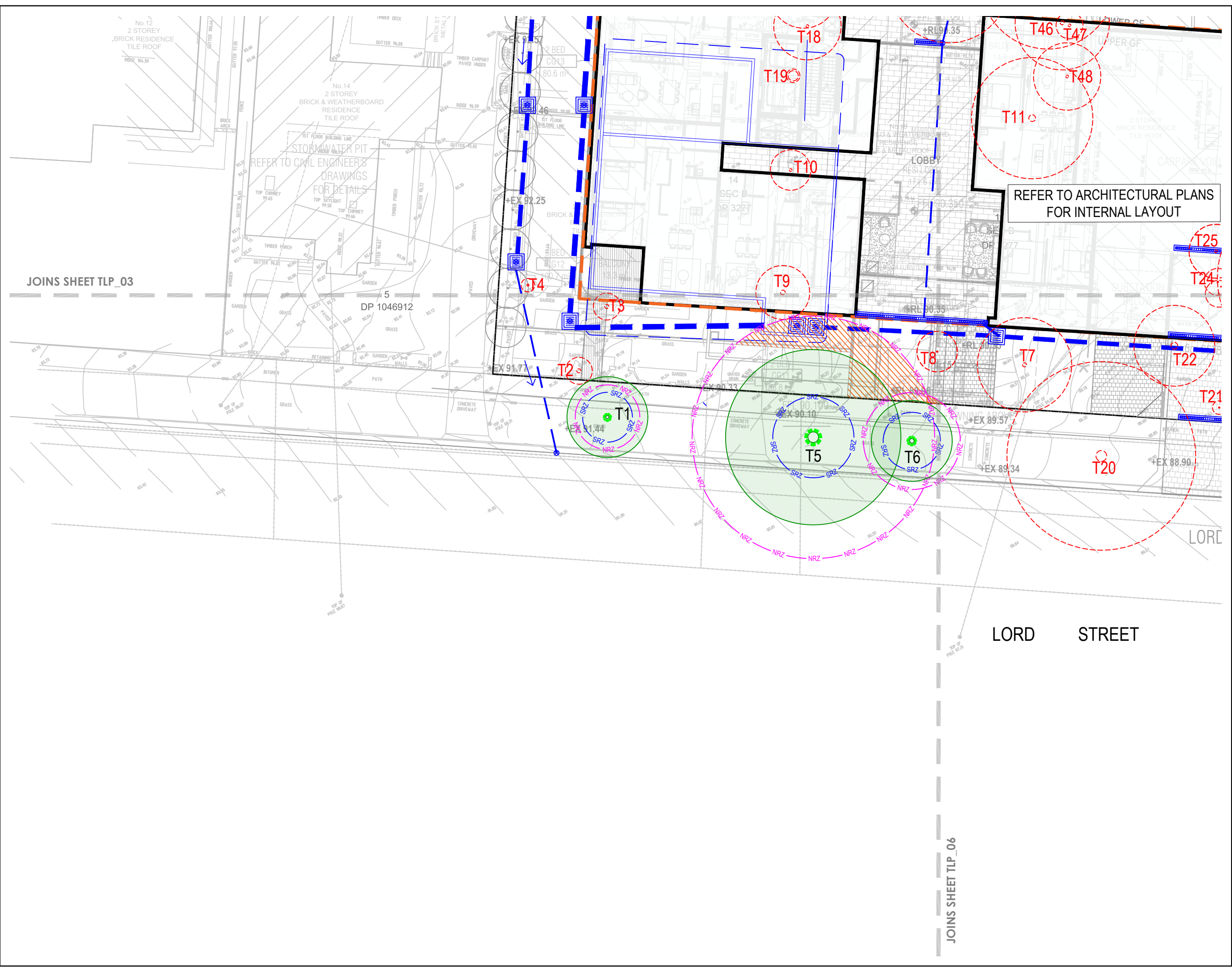


Drawn : SZ  
Designed : SZ  
Project No. : G845  
Bar Scale  
1:250 @ A3



SHEET NUMBER  
G845\_TLP\_05

REVISION  
D



JOINS SHEET TLP\_03

JOINS SHEET TLP\_06

LORD STREET

LORD

STREET



## APPENDIX 3

# IACA Significance of a Tree, Assessment Rating System (STARS)© (IACA 2010)©

In the development of this document IACA acknowledges the contribution and original concept of the Footprint Green Tree Significance & Retention Value Matrix, developed by Footprint Green Pty Ltd in June 2001.

The landscape significance of a tree is an essential criterion to establish the importance that a particular tree may have on a site. However, rating the significance of a tree becomes subjective and difficult to ascertain in a consistent and repetitive fashion due to assessor bias. It is therefore necessary to have a rating system utilising structured qualitative criteria to assist in determining the retention value for a tree. To assist this process all definitions for terms used in the *Tree Significance - Assessment Criteria and Tree Retention Value - Priority Matrix*, are taken from the IACA Dictionary for Managing Trees in Urban Environments 2009.

This rating system will assist in the planning processes for proposed works, above and below ground where trees are to be retained on or adjacent a development site. The system uses a scale of *High*, *Medium* and *Low* significance in the landscape. Once the landscape significance of an individual tree has been defined, the retention value can be determined. An example of its use in an Arboricultural report is shown as Appendix A.

### **Tree Significance - Assessment Criteria**



#### **1. High Significance in landscape**

- The tree is in good condition and good vigour;
- The tree has a form typical for the species;
- The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age;
- The tree is listed as a Heritage Item, Threatened Species or part of an Endangered ecological community or listed on Councils significant Tree Register;
- The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity;
- The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values;
- The tree's growth is unrestricted by above and below ground influences, supporting its ability to reach dimensions typical for the taxa *in situ* - tree is appropriate to the site conditions.

#### **2. Medium Significance in landscape**

- The tree is in fair-good condition and good or low vigour;
- The tree has form typical or atypical of the species;
- The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area
- The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street,
- The tree provides a fair contribution to the visual character and amenity of the local area,
- The tree's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa *in situ*.

#### **3. Low Significance in landscape**

- The tree is in fair-poor condition and good or low vigour;
- The tree has form atypical of the species;
- The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings,
- The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area,
- The tree is a young specimen which may or may not have reached dimension to be protected by local Tree Preservation orders or similar protection mechanisms and can easily be replaced with a suitable specimen,
- The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa *in situ* - tree is inappropriate to the site conditions,
- The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms,
- The tree has a wound or defect that has potential to become structurally unsound.

#### **Environmental Pest / Noxious Weed Species**

- The tree is an Environmental Pest Species due to its invasiveness or poisonous/ allergenic properties,
- The tree is a declared noxious weed by legislation.

#### **Hazardous/Irreversible Decline**

- The tree is structurally unsound and/or unstable and is considered potentially dangerous,
- The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

**The tree is to have a minimum of three (3) criteria in a category to be classified in that group.**

Note: The assessment criteria are for individual trees only, however, can be applied to a monocultural stand in its entirety e.g. hedge.

**Table 1.0 Tree Retention Value - Priority Matrix.**

		Significance				
		1. High	2. Medium	3. Low		
		Significance in Landscape	Significance in Landscape	Significance in Landscape	Environmental Pest / Noxious Weed Species	Hazardous / Irreversible Decline
Estimated Life Expectancy	1. Long >40 years					
	2. Medium 15-40 Years					
	3. Short <1-15 Years					
	Dead					

Legend for Matrix Assessment



	<b>Priority for Retention (High)</b> - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 <i>Protection of trees on development sites</i> . Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.
	<b>Consider for Retention (Medium)</b> - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.
	<b>Consider for Removal (Low)</b> - These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.
	<b>Priority for Removal</b> - These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

**USE OF THIS DOCUMENT AND REFERENCING**

The IACA Significance of a Tree, Assessment Rating System (STARS) is free to use, but only in its entirety and must be cited as follows:

IACA, 2010, *IACA Significance of a Tree, Assessment Rating System (STARS)*, Institute of Australian Consulting Arboriculturists, Australia, [www.iaca.org.au](http://www.iaca.org.au)

**REFERENCES**

Australia ICOMOS Inc. 1999, *The Burra Charter – The Australian ICOMOS Charter for Places of Cultural Significance*, International Council of Monuments and Sites, [www.icomos.org/australia](http://www.icomos.org/australia)

Draper BD and Richards PA 2009, *Dictionary for Managing Trees in Urban Environments*, Institute of Australian Consulting Arboriculturists (IACA), CSIRO Publishing, Collingwood, Victoria, Australia.

Footprint Green Pty Ltd 2001, *Footprint Green Tree Significance & Retention Value Matrix*, Avalon, NSW Australia, [www.footprintgreen.com.au](http://www.footprintgreen.com.au)

IACA 2010, *IACA Significance of a Tree, Assessment Rating System (STARS)*, Institute of Australian Consulting Arboriculturists, [www.iaca.org.au](http://www.iaca.org.au)

The following example shows the IACA **Significance** of a **Tree, Assessment Rating System (STARS)** used in an Arboricultural report.

Tree Significance

Determined by using the Tree Significance - Assessment Criteria of the *IACA Significance of a Tree, Assessment Rating System (STARS)©* (IACA, 2010), Appendix B.

Trees 14, 16, 17/3, 19 and 20/4 are of high significance with the remaining majority of medium significance and a few of low significance. Tree 14 is significant as a prominent specimen and a food source for indigenous avian fauna. Tree 16 as a non-locally indigenous planting is of good form and prominent *in situ*; Tree 17/3 as a stand of 6 street trees along the Davey Street frontage screening views to and from the site and contiguous with trees in Victoria Park extending the aesthetic influence of the urban canopy to the site. Similarly for Trees 20/4 as street trees in Long Road and Tree 19 as an extant exotic planting as a senescent component of the original landscaping. The trees of low significance are recent plantings as fruit trees – Avocados, and 1 Cootamundra Wattle as a non-locally indigenous tree in irreversible decline and potentially structurally unsound.

**Significance Scale**

- 1 – High
- 2 – Medium
- 3 – Low

Significance Scale	1	2	3
Tree No. / Stand No.	14, 16, 17/3, 19, 20/4	1/1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12/2, 15, 18, 21/5	3, 13, 22

Tree Retention Value

Determined by using the Retention Value - Priority Matrix of the *IACA Significance of a Tree, Assessment Rating System (STARS)©* (IACA, 2010), Appendix B.

**Retention Value**

- High** – Priority for Retention
- Medium** – Consider for Retention
- Low** – Consider for Removal
- Remove** - Priority for Removal

Retention Value	High Priority for Retention	Medium Consider for Retention	Low Consider for Removal	Remove Priority for Removal
Tree No. / Stand No.	1/1, 5, 17/3*, 19	2, 4, 6, 7, 8, 9, 10, 11, 14, 15, 16, 18, 20/4*, 21/5	3, 12/2, 13,	22

\* Trees located within the neighbouring property and should be retained and protected.

# APPENDIX 4 - EXTRACT FROM AS4970-2025: PROTECTION OF TREES ON DEVELOPMENT SITES

## Section 3 Determining protection zones

### 3.1 Tree Protection Zone (TPZ)

Establishing and maintaining a TPZ is the most important part of protecting trees during the onsite stages of work (e.g. site establishment, demolition, construction). The TPZ is the zone determined by the project arborist using the process set out below. It shall be shown on the TPP to be isolated or managed so that the tree remains viable.

The NRZ is the starting point for determining the TPZ, along with the considerations in [Clause 3.3.2](#). Alternatively, the TPZ may be specified by the consent authority.

### 3.2 Calculating the Notional Root Zone (NRZ)

The radius of the NRZ is calculated for each tree by multiplying its diameter at standard height (DSH) by 12.

$$\text{Radius of the NRZ} = \text{DSH} \times 12$$

where

DSH = trunk diameter measured at 1.4 m above ground

The radius of the NRZ is measured from the centre of the stem.

The NRZ for palms, cycads, tree ferns and the like, is not calculated but shall not be less than 2 m.

Any NRZ radius shall not be less than 2 m nor greater than 15 m. [Clause 3.3](#) details the methods to produce the TPZ based on the NRZ.

### 3.4 Structural Root Zone (SRZ)

The SRZ is a notional area required for tree stability. A larger area is required to maintain a viable tree.

The SRZ shall be calculated when major encroachment (greater than 20 %) into an NRZ is proposed. SRZ locations and dimensions may be included on arboriculture documentation.

Many factors affect the size of the SRZ (e.g. tree height, crown area, soil type, soil moisture). Natural or built structures, such as rocks and footings, can also influence the SRZ. An indicative SRZ radius can be determined from the trunk diameter measured immediately above the root buttress using the following formula or [Figure 2](#). Root investigation can provide more information on the extent of these roots.

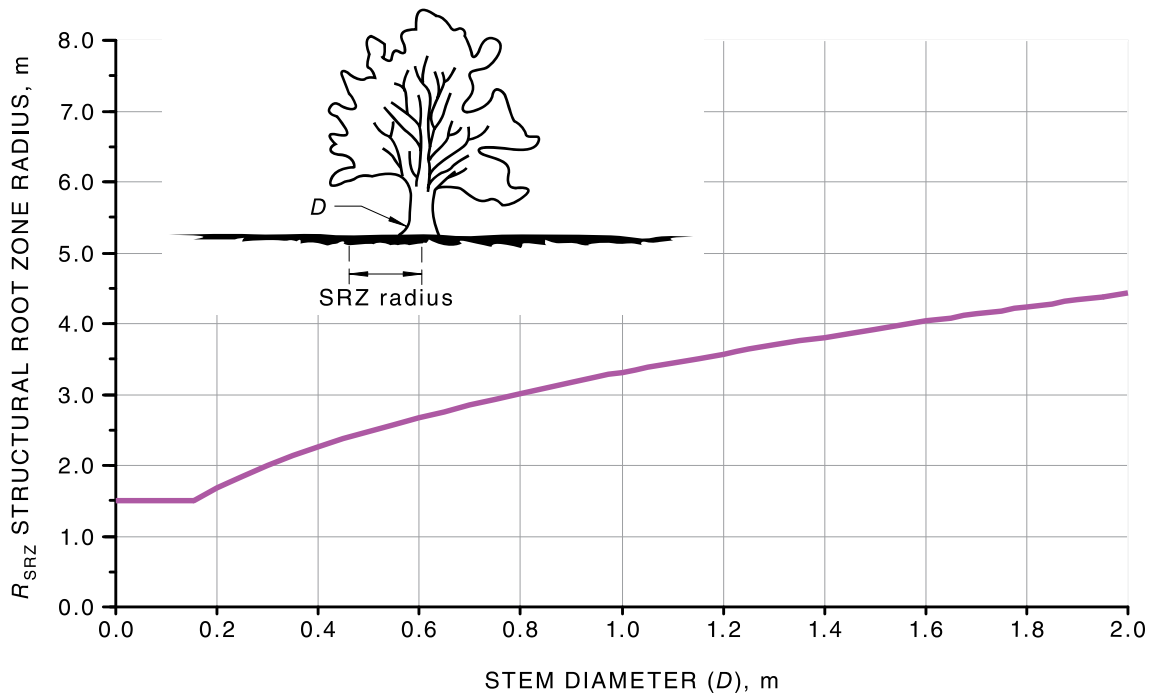
$$\text{SRZ radius} = (D \times 50)^{0.42} \times 0.64$$

where

D = trunk diameter, in m, measured above the root buttress flare.

Where the tree is multi-stemmed, the project arborist should determine if they will measure around all stems or work out the cross-sectional area, as noted in [Figure A.1](#), and provide their reasons for the method selected. The SRZ calculation does not apply to palms, cycads, tree ferns and the like.

NOTE The SRZ for trees with trunk diameters less than 0.15 m is 1.5 m, as shown in [Figure 2](#).



The curve can be expressed by the following formula:  
 $R_{SRZ} = (D \times 50)^{0.42} \times 0.64$

**Figure 2 — Structural Root Zone (SRZ) calculation**

# APPENDIX 5 – GENERAL TREE PROTECTION SPECIFICATION

## 1.0 Project Arborist

A Project Arborist with AQF Level 5 qualifications may be appointed prior to works commencing to ensure trees to be retained are appropriately monitored and protected throughout the proposed works. The Project Arborist shall review all tree protection measures, ensure compliance with requirements set out by the Principal Certifying Authority and provide compliance reports as per the schedule of works and responsibilities below.

**Table 5 - Schedule of Works and Responsibilities**

HOLD POINT	TASK	RESPONSIBILITY	CERTIFICATION	TIMING OF INSPECTION
1	Review & certification of all tree protection measures	Principal Contractor	Project Arborist (AQF5)	Prior to demolition or site establishment
2	Supervise all excavation works proposed within the TPZ	Principal Contractor	Project Arborist (AQF5)	As required prior to works proceeding within TPZ
3	Inspection of trees by Project Arborist	Principal Contractor	Project Arborist (AQF5)	Quarterly during construction
4	Final Inspection of trees by Project Arborist	Principal Contractor	Project Arborist (AQF5)	Following removal of tree protection measures prior to Occupation Certificate

## 2.0 Compliance

Compliance Documentation shall be prepared by the Project Arborist following each site inspection. The Compliance Documentation shall include documentary evidence of compliance with the tree protection measures and methods as outlined within this Specification. Upon the completion of the works, a final assessment of the trees shall be undertaken by the Project Arborist and future management strategies recommended.

## 3.0 Tree Removal

The trees to be removed shall be removed prior to the establishment of the tree protection measures. Tree removal works shall be undertaken in accordance with the *Workcover Code of Practice for the Amenity Tree Industry (1998)*. All tree removal work is to be carried out by an experienced Arborist with minimum AQF Level 3 qualifications in accordance with AS4373-2007 - Pruning of Amenity Trees, Safe Work Australia Guide for Managing Risks of Tree Trimming and Removal Work (2016) and other applicable legislation. Care should be taken to avoid damaging trees to be retained.

## 4.0 Tree Protection Zone

The Tree Protection Zone (TPZ) is a specified area above and below ground set aside for the protection of a tree. The TPZ should be protected to ensure development activities do not have an adverse effect on the viability and stability of trees to be retained. Activities restricted within the TPZ include:

- Soil cutting or filling, including excavation and trenching
- Soil compaction and modification
- Storage of materials and waste
- Parking of vehicles and plant
- Temporary or permanent installation of sheds, utilities and signs
- Cement or chemical preparation
- Refuelling
- Any other action leading to damage of the tree

## 5.0 Tree Protection Fencing

TPZ fencing shall be located at the perimeter of the TPZ. Where TPZ areas overlap, TPZ fencing may be combined to form a single larger TPZ area. The exact location of the fencing shall be confirmed through consultation between the Head Contractor/Project Manager and the Project Arborist prior to the commencement of works.

Fencing may be setback to allow for demolition/construction access only where appropriate ground protection is installed and approved by the Project Arborist.

Tree Protection Fencing shall consist of galvanised steel temporary fencing panels supported by concrete feet with panels coupled together. Care should be taken to avoid damaging the tree during the installation of the Tree Protection Fencing. Refer to Typical Tree Protection Details (**Appendix 6**).

### **6.0 Scaffolding**

Scaffolding shall be erected outside of the TPZ. If scaffolding is deemed essential within the TPZ, the ground shall be protected, and branch removal minimised. Ground below scaffolding shall be protected by boarding placed over a layer of mulch to prevent soil compaction. Scaffolding shall be designed to avoid branches or branches tied back. Refer to Typical Tree Protection Details (**Appendix 6**).

### **7.0 Ground Protection**

Where deemed necessary by the Project Arborist, temporary ground protection, such as ground mats or steel road plates placed over a mulch layer with geotextile fabric underneath, shall be utilised to prevent damage to tree roots during construction. Refer to Typical Tree Protection Details (**Appendix 6**).

### **8.0 Trunk Protection**

Trunk protection shall be installed by wrapping padding around the trunk and first order branches to a minimum height of 2m. Timber battens (90 x 45mm) spaced at 150mm centres shall be strapped together and placed over the padding. Timber battens must not be fixed to the trees. Refer to Typical Tree Protection Details (**Appendix 6**).

### **9.0 Works within the Tree Protection Zones**

The Principal Certifying Authority may approve works within Tree Protection Zones. The Project Arborist shall ensure compliance with the prescribed requirements as set out by the Principal Certifying Authority to ensure trees nominated for retention are adequately retained and protected throughout the works.

### **10.0 Structure & Pavement Demolition**

Demolition of existing structures/pavement within the TPZ shall be supervised by the Project Arborist. Machinery is to be excluded from the TPZ unless operating from the existing slabs, pavements or areas of ground protection.

Pavement is to be shattered with a hand-operated pneumatic/electric breaker prior to removal taking place and carefully lifted to minimise damage to the underlying soil profile and tree roots. The underlying soil profile and existing sub-base materials shall remain in-situ.

When removing slab sections within TPZ, machinery shall work backwards out of the TPZ to ensure machinery remains on un-demolished sections of slab at all times. Machinery should not contact the tree's roots, trunk, branches and crown.

Exposed roots shall be irrigated by hand and covered with a 75-100mm layer of mulch as soon as possible after being exposed. The mulch must remain in place until new surfaces are put into place.

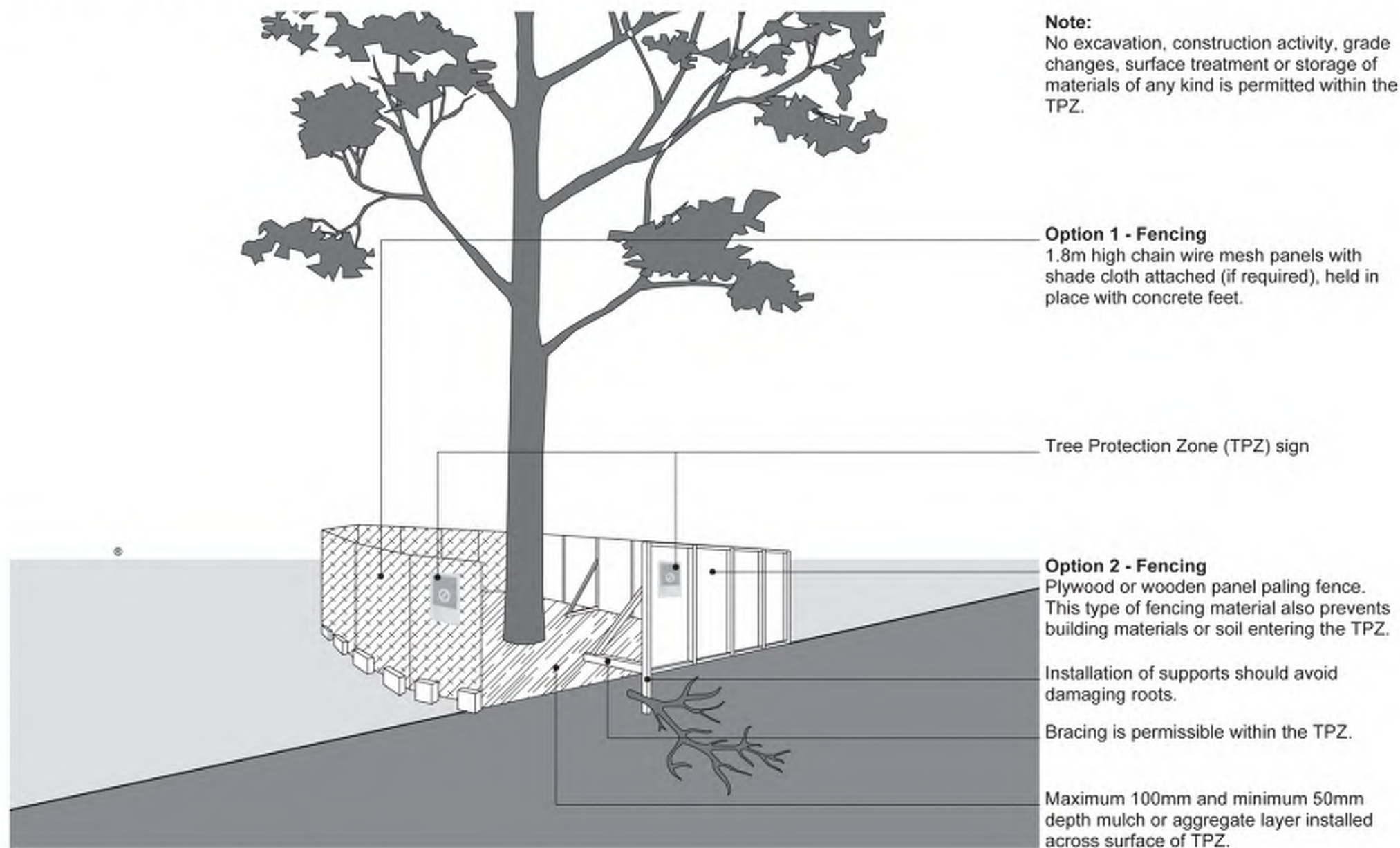
### **11.0 Underground Services**

The installation of underground services shall be located outside of the TPZ. Where this is not possible, they shall be installed using in a root-sensitive manner utilising manual hand excavation methods or employ a pneumatic excavation device to ensure roots are maintained and undamaged under supervision of the Project Arborist. Services are to be threaded in between and/or under to preserve existing roots.

### **13.0 Excavations, Root Protection & Root Pruning**

Excavation required within the TPZ shall be undertaken using non-motorised hand tools or a pneumatic excavation device under supervision of the Project Arborist. Excavation must be undertaken in a root sensitive manner to ensure roots are maintained and un-damaged. Should significant roots be identified (>25mmØ) during construction, works are to cease and direction sought from the Project Arborist with regards to root pruning, modification of construction methodology or design alteration.

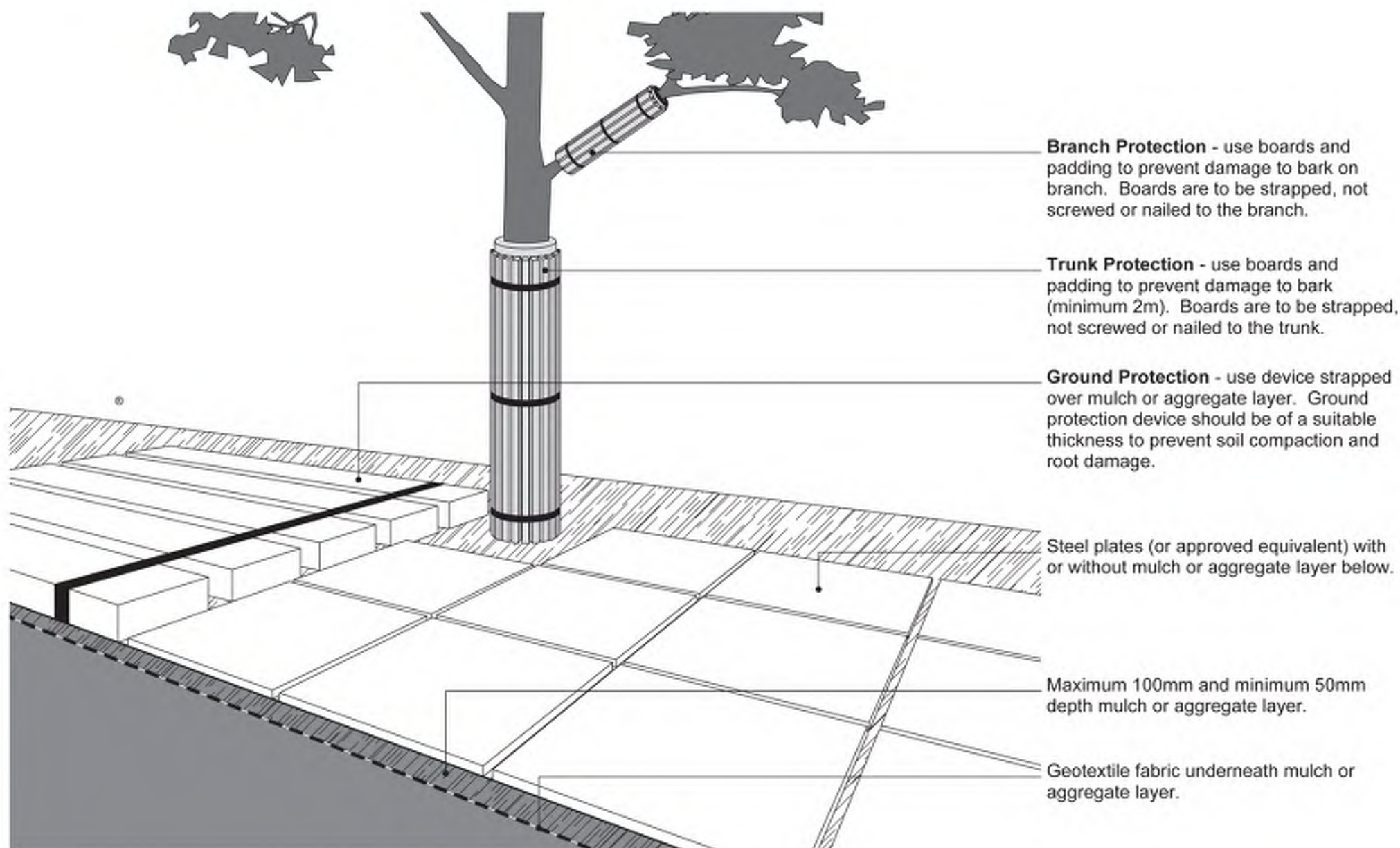
## APPENDIX 6 - TYPICAL TREE PROTECTION DETAILS

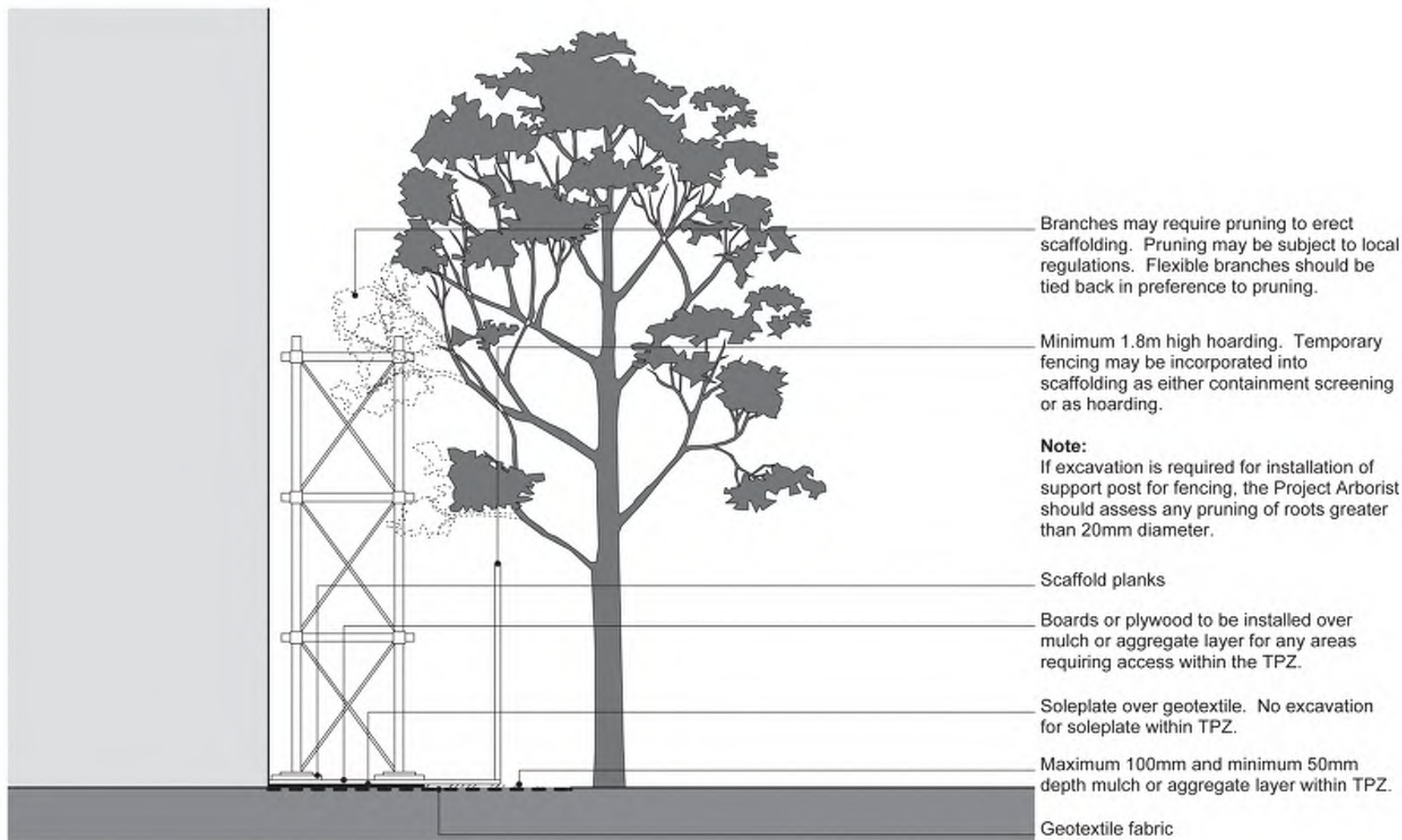


01

### Tree Protection Fencing

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# APPENDIX 7 - TREE 93 IDENTIFICATION STATEMENT



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Creative Planning Solutions Pty Limited – ABN: 70 135 093 926

11 August 2025

Hyecorp  
Heritage House, 256 Victoria Avenue  
Chatswood NSW 2067

## ARBORICULTURAL STATEMENT: TREE 93 SPECIES IDENTIFICATION CORRECTION 16-24 LORD STREET & 21-27 ROSEVILLE AVENUE, ROSEVILLE

This Arboricultural Statement relates to the State Significant Development application (SSD-78996460) for the proposed residential development with infill affordable housing at the subject site at 16-24 Lord Street & 21-27 Roseville Avenue, Roseville within the Ku-ring-gai Local Government Area (LGA).

Specifically, this statement relates to further analysis to formally identify the correct species of **Tree 93** which was referenced as '*Eucalyptus saligna* – Sydney Blue Gum' within the Arboricultural Impact Assessment prepared by Creative Planning Solutions, dated 3<sup>rd</sup> of April 2025.

Further detailed analysis in consultation with the Project Ecologist has been undertaken. Specifically, the fruit from **Tree 93** revealed key diagnostic features of 4 or 5 incurved valves, either exserted or at rim level (see **Figure 1**). Cross-referencing these characteristics with EUCLID: Eucalypts of Australia by Slee et al. confirms the accurate identification of **Tree 93** as *Eucalyptus grandis* (Flooded Gum).



**Figure 1** – Fruit from **Tree 93** with five (5) exserted and incurved valves

If you have any queries in relation to the information presented above, please do not hesitate to get in contact.

Sincerely,

Creative Planning Solutions Pty Ltd

James Hume-Grimm  
Creative Planning Solutions Pty Ltd  
CONSULTING ARBORIST  
Dip. Arboriculture - AQF Level 5  
IACA Accredited Member No. 083

