

Meadowbank Education and Employment Precinct Schools Project Arboricultural Impact Assessment

SSD 18_9343

Prepared by Earthscape Horticultural Services

For School Infrastructure NSW

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1 INTRODUCTION

1.1 Overview

- 1.1.1 This Arboricultural Impact Assessment Report has been prepared by Earthscape Horticultural Services on behalf of the NSW Department of Education and School Infrastructure NSW (the Applicant). It accompanies an Environmental Impact Statement (EIS) in support of State Significant Development Application (SSD 18_9343) for the Meadowbank Education and Employment Precinct Schools Project (hereafter referred to as MEEPSP) at 2 Rhodes Street, Meadowbank (the site).
- 1.1.2 MEEPSP will cater for 1,000 primary school students and 1,620 high school students. The proposal seeks consent for:
- A multi-level, multi-purpose, integrated school building with a primary school wing and high school wing. The school building is connected by a centralised library that is embedded into the landscape. The school building contains:
 - Collaborative general and specialist learning hubs, with a combination of enclosed and open spaces;
 - Adaptable classroom home bases;
 - Four level central library, with primary school library located on ground floor and high school library on levels 1 to 3.
 - Laboratories and workshops;
 - Staff workplaces;
 - Canteens;
 - Indoor gymnasium;
 - Multipurpose communal hall;
 - Outdoor learning, play and recreational areas (both covered and uncovered).
 - Associated site landscaping and public domain improvements;
 - An on-site car park for 60 parking spaces; and
 - Construction of ancillary infrastructure and utilities as required.

1.2 Purpose of this report

- 1.2.1 The purpose of this Arboricultural Impact Assessment Report is to assess the potential impact of the proposed development on approximately two-hundred and seventy-five (275) trees located within the site, together with recommendations for amendments to the design or construction methodology where necessary to minimise any adverse impact on these trees. The report also provides recommended tree protection measures to ensure the long-term preservation of the trees to be retained where appropriate. This report forms part of the EIS.
- 1.2.2 This report has been prepared in accordance with Ryde City Council's guidelines for preparation of Arborists Reports as outlined in Section 4 of the *Tree Management Technical Manual* (August 2016) and Sections 2.3.2 – 2.3.3 of the Australian Standard for *Protection of Trees on Development Sites* (AS 4970:2009).

1.3 Response to SEARs

- 1.3.1 The Arboricultural Impact Assessment is required by the Secretary's Environmental Assessment Requirements (SEARs) for SSD 18_9343. This table identifies the SEARs and relevant reference within this report.

Table 1 – SEARs and Relevant Reference

SEARs Item	Report Reference
Forms part of the Environmental Impact Statement (EIS)	Arborists Report

2 THE SITE

- 2.1.1 The site is known as Lot 10 in DP 1232584 (forming part of Lot 1 in DP 837179), being 2 Rhodes Street, Meadowbank. The site was formerly part of Meadowbank TAFE College (See Street, Meadowbank) as shown in **Figure 1**. The total area of the site is 3.329 hectares. The site is zoned Infrastructure [SP2] (Educational Establishment) under the *Ryde Local Environmental Plan 2014* (RLEP). The site contains a number of buildings, on-grade car parking areas and open space areas originally forming part of the Meadowbank TAFE College.



Figure 1 - Showing the extent of the Site, as indicated by the red line.



Plate 1 – View to the south from Rhodes Street showing the central car parking area.



Plate 2 – View to the south-west adjacent Building Y1 showing the sandstone cutting/cliff

- 2.1.2 The south-eastern portion of the site has a moderate westerly gradient and the north-western portion of the site has a moderate to steep southerly gradient. Both areas fall toward a drainage easement orientated in an approximately north-south alignment. A large on-grade car parking area is located centrally within the Site (refer to **Plate 1**). The Northern Railway Line adjoins the western boundary of the site. The area adjacent the western boundary has a steep easterly gradient forming part of the railway embankment. A sandstone cliff (cutting) exists along the north-western side of Building Y1 near the northern corner of the site (refer to **Plate 2**), formed to create a level platform for this building.
- 2.1.3 Soils of this area are typical of the Lucas Heights Soil Landscape Group (as classified in the *Soil Landscapes of the Sydney 1:100,000 Sheet*), consisting of “moderately deep (500-1500 mm) hardsetting *Yellow Podzolic and Yellow Soloth soils and Yellow Earths*” on the outer edges of crests.¹ The site is located within the transition between Wianamatta Shale and Hawkesbury Sandstone. The landscape of the area is generally gently undulating terrain with level to gently inclined slopes of less than 10% grade.
- 2.1.4 The original vegetation of this area consisted of tall open forest typical of shale/sandstone transitional areas (Turpentine-Ironbark Forest) which was progressively cleared for timber getting early in the nineteenth century then later for agricultural and residential development.² The dominant locally-indigenous tree species found in this area include *Angophora costata* (Sydney Red Gum), *Eucalyptus pilularis* (Blackbutt) and *Syncarpia glomulifera* (Turpentine). Other species occurring in this vegetation community may include *Eucalyptus resinifera* (Red Mahogany), *Eucalyptus globoidea* (White Stringybark) and *Allocasuarina torulosa* (Forest Oak).
- 2.1.5 The site contains numerous semi-mature and mature trees. These include a variety of locally-indigenous, non-local native and exotic (introduced) species. The majority of these appear to have been planted within the site. However, the northern corner of the site (between the railway corridor and Building Y1) contains a species assemblage typical of the original vegetation community, including some shrub and ground cover layer species and appears relatively undisturbed. Several areas of the site also contain individual remnant trees and copses of the original forest.

3 SUBJECT TREES

- 3.1.1 The subject trees were inspected by Earthscape Horticultural Services (EHS) on the 7th and 8th of December 2017. Each tree has been provided with an identification number for reference purposes denoted on the attached Tree Location Plan (**Appendix 5**), based on the survey prepared by CMS Surveyors Pty Ltd, Dwg. Ref No. 17314detail [2] dated 15/11/2017. The numbers used on this plan correlate with the Tree Assessment Schedule (**Appendix 3**). Tree No.s T11, T23, T24, T38, T43, T44, T47, T54, T76, T116, T117, T172, T182, and T217 were not shown on the original survey and have been plotted on the drawing in their approximate positions.

4 HEALTH AND CONDITION ASSESSMENT

4.1 Methodology

- 4.1.1 An assessment of each tree was made using the Visual Tree Assessment (VTA) procedure.³ All of the trees were assessed in view from the ground. No aerial inspection or diagnostic testing has been undertaken as part of this assessment.
- 4.1.2 The following information was collected for each tree:-
- Tree Species (Botanical & Common Name);
 - Approximate height;
 - Canopy spread; measured using a metric tape and an average taken.
 - Trunk diameter (measured at 1.4 metres from ground level);

- Live Crown Size; (measured by subtracting the total height of the tree from the lowest point of the crown and multiplying by the average crown spread to give a value in square metres).
- 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; in consideration of damage or potential damage to services or structures, available space for future development and nuisance issues.

4.1.3 This information is presented in a tabulated form in **Appendix 3**.

4.2 Safe Useful Life Expectancy (SULE)

4.2.1 The remaining Safe Useful Life Expectancy⁴ of the 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 the tree has been further modified where necessary in consideration of its current health and vigour, condition and suitability to the site. The estimated SULE of each tree is shown in **Appendix 3**.

4.2.2 The following ranges have been allocated to each tree:-

- Greater than 40 years (Long)
- Between 15 and 40 years (Medium)
- Between 5 and 15 years (Short)
- Less than 5 years (Transient)
- Dead or immediately hazardous (defective or unstable)

4.2.3 SULE ratings are intended to provide a general overview of the long-term sustainability of the trees within the site in consideration of these factors. The allocated ranges are not intended to be absolute. This information is useful in guiding future planning by highlighting the probable lifespan of individual trees, for which a clear pattern may emerge. This information may be helpful in forecasting likely tree senescence and planning for replacement planting to ensure continuity in tree canopy across the site. It should be noted that SULEs may be extended or reduced depending on the way trees are managed. Intervention and remedial works may extend the SULE of some trees.

5 LANDSCAPE SIGNIFICANCE

5.1 Methodology for Determining Landscape Significance

5.1.1 The significance of a tree in the landscape is a combination of its environmental, heritage and amenity values. Whilst these values may be fairly subjective and difficult to assess consistently, some measure is necessary to assist in determining the retention value of each tree. To ensure a consistent approach, the assessment criteria shown in **Appendix 1** have been used in this assessment.

5.1.2 A rating has been applied to each tree to give an understanding of the relative significance of each tree in the landscape and to assist in determining priorities for retention, in accordance with the following categories:-

- 1. Significant**
- 2. Very High**
- 3. High**
- 4. Moderate**

5. Low
6. Very Low
7. Insignificant

5.2 Environmental Significance

5.2.1 Tree Management Controls

Prescribed Trees within the Ryde City Local Government Area (LGA) are protected under Part 9.5 (Tree Preservation) of the *Ryde Development Control Plan (RDCP) 2014* made pursuant to Clause 9 of the *State Environmental Planning Policy (Vegetation in Non-rural Areas) 2017* (SEPP VNRA). The RDCP generally protects all trees (including palm trees) of a height of five (5) metres or greater or with a trunk circumference of 450mm (140mm in diameter). Some exemptions apply. The following trees are exempt (not protected) under the provisions of the RDCP 2014:-

Tree No.	Species	Exemption
T171	<i>Cinnamomum camphora</i> (Camphor Laurel)	Environmental Weed Species
T137 & T143	<i>Ligustrum lucidum</i> (Broad Leaf Privet)	Noxious Weed
T132	<i>Olea europaea subsp. africana</i> (African Olive)	Environmental Weed Species
T90	<i>Populus nigra</i> 'Italica' (Lombardy Poplar)	Undesirable species
T86	<i>Rhododendron sp.</i> (Rhododendron)	Dead tree
T162	<i>Eucalyptus sp.</i> (Gum)	Dead tree
T25, T26 & T71	<i>Banksia serrata</i> (Old Man Banksia)	Located within 4 metres of an existing building
T37 & T38	<i>Ulmus procera</i> (English Elm)	Located within 4 metres of an existing building
T28, T29, T30, T34, T35 & T36	<i>Corymbia citriodora</i> (Lemon-scented Gum)	Located within 4 metres of an existing building
T95, T97, T99, T100	<i>Banksia integrifolia</i> (Coast Banksia)	Located within 4 metres of an existing building
T158	<i>Quercus robur</i> (English Oak)	Located within 4 metres of an existing building
T163	<i>Melaleuca styphelioides</i> (Prickly Paperbark)	Located within 4 metres of an existing building
T161	<i>Melia azedarach</i> (White Cedar)	Located within 4 metres of an existing building
T160	<i>Flindersia australis</i> (Crows Foot Ash)	Located within 4 metres of an existing building
T168	<i>Tristaniaopsis laurina</i> (Water Gum)	Located within 4 metres of an existing building
T88, T96 & T98	<i>Callistemon viminalis</i> (Weeping Bottlebrush)	Located within 4 metres of an existing building

T79, T80, T81, T82, T164 & T275	<i>Casuarina glauca</i> (Swamp Oak)	Located within 4 metres of an existing building
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The remainder of the trees are protected under the provisions of the RDCP.

5.2.2 Wildlife Habitat

Angophora costata (Sydney Red Gum), *Pittosporum undulatum* (Native Daphne), *Allocasuarina torulosa* (Forest Oak), *Syncarpia glomulifera* (Turpentine), *Angophora floribunda* (Rough-barked Apple), *Corymbia gummifera* (Red Bloodwood), *Eucalyptus acmenioides* (White Mahogany), *Eucalyptus paniculata* (Grey Ironbark), *Eucalyptus pilularis* (Blackbutt) and *Eucalyptus saligna* (Sydney Blue Gum) are all locally-indigenous species, representative of the original vegetation of the area and would be of benefit to native wildlife. Several trees contain visible cavities that may be suitable as nesting hollows for arboreal mammals or birds. These include Trees T57 (Blackbutt) and T85, T197, T227 & T262 (Sydney Blue Gums). Several of the trees also show damage characteristic of Cockatoos, Galahs or Corellas. There were no other visible signs of wildlife habitation.

5.2.3 Noxious Plants & Environmental Weeds

Olea europaea subsp. africana (African Olive) [T132] is considered to be a Biosecurity Risk under the *Biosecurity Act 2015* in NSW. This plant is regulated with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk it may pose. This species should be eradicated from the land if possible.

In addition to the Environmental Weed Species listed in the table at Section Table 5.2.1, *Morus nigra* (Mulberry tree) [T91], whilst protected under Council's Tree Management Controls is considered to be an Environmental Weed Species in many Local Government Areas (LGAs) within the Sydney Metropolitan Area.

5.2.4 Threatened Species & Ecological Communities

Eucalyptus nicolii (New England Peppermint) [T84] is listed as Vulnerable Species in Schedule 2 of the *Threatened Species Conservation Act 1995* (NSW) and listed as a Vulnerable Species under the *Environmental Protection and Biodiversity Conservation Act 1999*. Whilst this species is listed as vulnerable in its native habitat, it is a commonly planted ornamental tree in parks, gardens and streetscapes. The species is not endemic to this area and therefore does *not* have any ecological significance in this context of this site.

Syzygium paniculatum (Magenta Cherry or Lilly Pilly) [T151, T153, T154, T155, T166, & T169] is listed as a Vulnerable Species on Schedule 2 of the *Threatened Species Conservation Act 1995* (NSW) and a Nationally Vulnerable species under the *Environment Protection and Biodiversity Conservation Act 1999*. Whilst this species is listed as vulnerable, it is a commonly planted ornamental tree and is not endemic to this area. As such, it does *not* have any ecological significance in the context of this site.

The National Parks and Wildlife Service (NPWS) 1:25000 Mapping Series (Native Vegetation of the Cumberland Plain) ⁵ indicates that the dominant remnant native vegetation community in the vicinity of the site is Turpentine-Ironbark Margin Forest (TIMF). The map indicates possible remnant TIMF vegetation extending alongside the western boundary (correlating with trees T109-T157) and into the southern end of the central carpark (correlating with trees T214-T232). TIMF is a sub-group of Sydney Turpentine-Ironbark Forest (STIF). STIF is classified as an Endangered Ecological Community (EEC) under the *Threatened Species Conservation Act 1995* (NSW) and a Critically Endangered Ecological Community under the *Environment Protection and Biodiversity Conservation Act 1999*.

Angophora costata (Sydney Red Gum) [T104, T120, T122, T125, T126 & T127], *Pittosporum undulatum* (Native Daphne) [T133, T139, T144 & T170], *Allocasuarina torulosa* (Forest Oak)

[T233, T234, T241, T244, T245, T246, T256, T257, T258, T259 & T260] and *Syncarpia glomulifera* (Turpentine) [T113, T116 & T124] are all Positive Diagnostic Species of this EEC.⁶ *Angophora floribunda* (Rough-barked Apple) [T43, T44, T45, T46, T59, T60, T67, T77, T78 & T105], *Corymbia gummifera* (Red Bloodwood) [T123], *Eucalyptus acmenioides* (White Mahogany) [T121 & T219], *Eucalyptus crebra* (Narrow-leaved Ironbark) [T73], *Eucalyptus paniculata* (Grey Ironbark) [T58, T178, T179, T214 & T215], *Eucalyptus pilularis* (Blackbutt) [T55, T56, T57, T110, T128, T136 & T180] and *Eucalyptus saligna* (Sydney Blue Gum) [T39, T42, T48, T49, T66, T69, T85, T109, T111, T112, T114, T115, T117, T118, T119, T129, T130, T131, T134, T140, T141, T142, T145, T146, T148, T149, T150, T152, T156, T157, T167, T176, T177, T181, T197, T206, T207, T211, T217, T220, T221, T222, T223, T224, T225, T226, T227, T228, T229, T230, T231, T235, T247, T261, T262, T265, T266, T267 & T270] are all associated canopy species, occurring less frequently in this vegetation community.

Whilst a large portion of this vegetation has been planted within the site or is re-growth (progeny of the original forest) following clearing on the site, the 1943 Aerial Photograph of Sydney (SIX Maps) indicates that Trees T55, T56, T57 (Blackbutt) and T85 & T270 (Sydney Blue Gum) were present as mature specimens at this time (following clearing, but prior to the development of the site for its current use). These trees appear to be remnant of the original forest and are therefore considered to form part of this EEC. The group of vegetation between Building Y1 and the western boundary appears to be regrowth, but still typical of the structure and floristics of the original vegetation community and therefore this vegetation is also considered to be constituent of this EEC. The grove of predominantly Sydney Blue Gums at the southern end of the carpark is also regrowth, but likely to be progeny of the original forest and therefore is also considered to be a constituent of this EEC.

It should be noted that the City of Ryde *Biodiversity Plan* (December 2016)⁷ and associated maps (refer *Figure 1: Vegetation communities within Ryde LGA*) does not indicate the presence of any EECs within the site and classifies the majority of vegetation within the site as ‘Urban Native and Exotic Cover’. However, Figure 4 of this report, (titled *Biodiversity Conservation Significance*), does indicate that the abovementioned vegetation is classified as ‘Moderate Biodiversity Conservation Significance’.

5.3 Heritage Significance

5.3.1 Heritage Items

The subject property is *not* listed as an item of Environmental Heritage under Schedule 5, Part 1 of the *Ryde Local Environmental Plan 2014* (RLEP).

5.3.2 Heritage Conservation Area

The subject property is *not* located within a Heritage Conservation Area under Schedule 5, Part 2 of the RLEP 2014.

5.3.3 Significant Tree Register

None of the subject trees are listed on Ryde City Council’s *Significant Tree Register* (August 2007).

5.3.4 Memorial and Commemorative Plantings

T159, a Broad-leaved Paperbark located adjacent Building Y1, is a memorial planting. A plaque adjacent the tree has the following inscription “*Dedicated to Nick Cattell and Nick Masterman, craftsman boatbuilders. Their careers shortened by the hazards of their trade. 1994*”

5.3.5 General Observations

Trees T182, T184, T188 and T189 [*Jacaranda mimosifolia* (Jacaranda)] T183 [*Podocarpus elatus* (Brown Pine)] are relatively old trees, probably planted c. 1950-1960 in association with the early development of the Meadowbank TAFE College. The majority of other trees within the site (aside

from locally-indigenous re-growth as described in Section 5.2.4) were probably planted c. 1970-1990.

5.4 Amenity Value

- 5.4.1 Criteria for the assessment of amenity values are incorporated into **Appendix 1**. The amenity value of a tree is a measure of its live crown size, visual appearance (form, habit, crown density), visibility and position in the landscape and contribution to the visual character of an area. Generally the larger and more prominently located the tree, and the better its form and habit, the higher its amenity value.

6 TREE RETENTION VALUES

- 6.1.1 The Retention Values shown in **Appendix 3** and **Appendix 5** have been determined on the basis of the estimated longevity of the trees and their landscape significance rating, in accordance with **Table 2**. Together with guidelines contained in **Section 7** (Tree Protection Zones) this information should be used to determine the most appropriate position of building footprints and other infrastructure within the site, with due consideration to other site constraints, to minimise the impact on trees considered worthy of preservation.

TABLE 2 – TREE RETENTION VALUES – ASSESSMENT METHODOLOGY

	Landscape Significance Rating						
Estimated Life Expectancy	1	2	3	4	5	6	7
Long - Greater than 40 Years	High Retention Value						
Medium- 15 to 40 Years			Moderate Retention Value				
Short - 5 to 15 years			Low Ret. Value				
Transient - Less than 5 Years		Very Low Retention Value					
Dead or Potentially Hazardous							

- 6.1.2 The following table describes the implications of the retention values on site layout and design.

TABLE 3 – TREE RETENTION PRIORITIES - IMPLICATIONS.

RETENTION VALUE	RECOMMENDED ACTION
“High”	<ul style="list-style-type: none"> These trees considered worthy of preservation; as such careful consideration should be given to their retention as a priority. Proposed site design and placement of buildings and infrastructure should consider the recommended setbacks as discussed in the following section (refer also Appendix 2) to avoid any adverse impact on these trees. In addition to Tree Protection Zones, the extent of the canopy (canopy drip-line) should also be considered, particularly in relation to high rise developments. Significant pruning of the trees to accommodate the building envelope or temporary scaffolding is generally not acceptable.

“Moderate”	<ul style="list-style-type: none">• The retention of these trees is desirable, but not essential.• These trees should be retained as part of any proposed development if possible, however they trees are considered less critical for retention.• If these trees must be removed, replacement planting should be considered in accordance with Council’s Tree Replenishment Policy to compensate for loss of amenity (refer also Section 11).
“Low”	<ul style="list-style-type: none">• These trees are not considered to worthy of any special measures to ensure their preservation, due to current health, condition or suitability. They do not have any special ecological, heritage or amenity value, or these values are substantially diminished due to their SULE.• These trees should not be considered as a constraint to the future development of the site.
“Very Low”	<ul style="list-style-type: none">• These trees are considered potentially hazardous or very poor specimens, or may be environmental or noxious weeds.• The removal of these trees is therefore recommended regardless of the implications of any proposed development.

7 TREE PROTECTION ZONES

7.1.1 The Tree Protection Zone (TPZ) is a radial distance measured from the centre of the trunk of the tree as specified in **Appendix 4**. These have been calculated in accordance with AS 4970-2009 (Protection of Trees on Development Sites).⁸

7.1.2 The intention of the TPZ is to ensure protection of the root system and canopy from the potential damage from construction works and ensure the long-term health and stability of each tree to be retained. Incursions to the root zone may occur due to excavations, changes in ground levels, (either lowering or raising the grade), trenching or other forms or soil disturbance such as ripping, grading or inverting the soil profile. Such works may cause damage or loss of part of the root system, leading to an adverse impact on the tree.

7.2 Structural Root Zone (SRZ)

7.2.1 The Structural Root Zone (SRZ) provides the bulk of mechanical support and anchorage for a tree. This is also a radial distance measured from the centre of the trunk as specified in **Appendix 4**. The SRZ has been calculated in accordance with AS 4970-2009 (Protection of Trees on Development Sites).

7.2.2 Incursions within the SRZ are not recommended as they are likely to result in the severance of woody roots which may compromise the stability of the tree or lead to its decline and demise.

7.3 Acceptable Encroachments to the Tree Protection Zone.

7.3.1 Where encroachment to the TPZ is unavoidable, an incursion to the TPZ of not exceeding 10% of the area of the TPZ and outside the SRZ may be acceptable. Examples of acceptable incursions are shown in **Appendix 2**. Greater incursions to the TPZ may result in an adverse impact on the tree.

7.3.2 Where incursions greater than 10% of the TPZ are unavoidable, exploratory excavation using non-destructive methods may be required to evaluate the extent of the root system affected and determine whether or not the tree can remain viable

7.4 Acceptable Encroachments to the Canopy

7.4.1 The removal of a small portion of the crown (foliage and branches) is generally tolerable provided that the extent of pruning required is less than 10% of the total foliage volume of the tree and the removal of branches does not create large wounds or disfigure the natural form and habit of the

tree. All pruning cuts must be undertaken in accordance with AS 4373:2007. This generally involves reduction of the affected branches back to the nearest branch collar at the junction with the parent branch, rather than at an intermediate point. The latter is referred to as “lopping” and is no longer an acceptable arboricultural practice. Generally speaking, the minimum pruning as required to accommodate any proposed works is desirable. Extensive pruning can result in a detrimental impact on tree health and may lead to exposure of remaining branches to wind forces that they were previously sheltered from, leading to a greater risk of branch failure.

- 7.4.2 Clearance to between the building line and canopy should take into account any projecting structures, such as balconies, awnings and the roofline and any requirement for temporary scaffolding to be erected during construction (typically 1-1.5 metres wide). High structures should preferably be located outside the canopy dripline (as shown indicatively on the attached plans) in order to avoid or minimise canopy pruning.

7.1 Legal Protection

- 7.1.1 Notwithstanding the above recommendations, Council may require a greater setback from certain types of structures to ensure the on-going legal protection of the tree (i.e. its legal status under Council’s Tree Management Controls). In the City of Ryde LGA, a tree located within four (4) metres of the wall of a dwelling or approved building is not protected under the RDCP 2014. As such, if a tree is considered worthy of preservation, Council is unlikely to approve the construction of a new building within four (4) metres of the tree, regardless of whether this can be undertaken without having an adverse impact on its health or longevity. As such, all new buildings should be at least five (5) metres (or greater if specified) of any tree classified as being of Moderate or High Retention Value.

8 PROPOSED DEVELOPMENT

- 8.1.1 The proposed development includes the construction of a new educational facility within the site to be known as the Meadowbank Education and Employment Precinct Schools Project (MEEPSP). MEEPSP will cater for 1,000 primary school students and 1,620 high school students. The proposed works include:
- A multi-level, multi-purpose, integrated school building with a primary school wing and high school wing. The school building is connected by a centralised library that is embedded into the landscape. The school building contains:
 - Collaborative general and specialist learning hubs, with a combination of enclosed and open spaces;
 - Adaptable classroom home bases;
 - Four level central library, with primary school library located on ground floor and high school library on levels 1 to 3.
 - Laboratories and workshops;
 - Staff workplaces;
 - Canteens;
 - Indoor gymnasium;
 - Multipurpose communal hall;
 - Outdoor learning, play and recreational areas (both covered and uncovered).
 - Associated site landscaping and public domain improvements;
 - An on-site car park for 60 parking spaces; and
 - Construction of ancillary infrastructure and utilities as required.

9 IMPACT ASSESSMENT

- 9.1.1 The intention of this assessment is to determine the incursions to the root zones and canopies created by the proposed development and evaluate the likely impact of the proposed works on the subject trees. Details shown on the following plans were used in this assessment:-

Title	Author	Dwg No.	Date
<i>Overall Site Plan</i>	Urbis	ND2043 LD200 [C]	29/05/2019

- 9.1.2 A summary of the impact of the proposed development on each tree within the site is shown in **Appendix 5**. The following criteria have been examined as part of this assessment:-

- Existing Relative Levels (R.L.);
- Tree Protection Zone (TPZ);
- Structural Root Zone (SRZ);
- Footprint and envelope of the proposed development 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; and
- Assessment of the likely impact of the works on existing trees.

- 9.1.1 The proposed development will necessitate the removal of fifty-seven (57) trees of low and very low retention value. These include Tree No.s T233, T234, T241, T244, T245, T246, T256, T257, T258, T259 & T260 (Forest Oak), T95, T97, T99 & T100 (Coast Banksia), T88, T96 & T98 (Weeping Bottlebrush), T102, T103, T106, T108, T195 & T275 (Swamp Oak), T268 (Bangalay), T214 (Grey Ironbark), T109, T145, T235 & T267 (Sydney Blue Gum), T162 (Gum), T1 & T5 (Claret Ash), T137 & T143 (Broad-leaf Privet), T185, T186 & T187 (Japanese Crab Apple), T24 (Crabapple), T199 & T200 (Bracelet Honey Myrtle), T236, T237, T249, T252, T253 & T255 (Broad-leaved Paperbark), T91 (Mulberry tree), T132 (African Olive), T90 (Lombardy Poplar), T23 (Ornamental Flowering Plum), T86 (Rhododendron), T271, T272, T273 & T274 (Chinese Tallow) and T38 (English Elm). It should be noted that fifteen (15) of these trees (T86, T88, T90, T91, T95, T96, T97, T98, T99, T100, T132, T137, T143, T162, & T275) are exempt (not protected) under Council's Management Controls (refer to **Section 5.2.1**). None of these trees are considered significant or worthy of special measures to ensure their preservation. The removal of these trees to accommodate the proposed development is therefore considered warranted in this instance.

- 9.1.2 The proposed development will also necessitate the removal of forty-seven (47) trees of moderate retention value. These include Tree No.s T43, T44, T45, T46, T59, T60, T67, T77, T78 & T105 (Rough-barked Apple), T242 (Bunya Pine), T25, T26 & T71 (Old Man Banksia), T63 (Port Jackson Pine), T87 (Camellia), T94 (River Oak), T51, T64, T65, T89 & T107 (Swamp Oak), T47 (NSW Christmas Bush), T29, T30 & T31 (Lemon-scented Gum), T54 (Blueberry Ash), T84 (New England Peppermint), T247 (Sydney Blue Gum), T191 (Mugga Ironbark), T160 (Crows Foot Ash), T93 & T248 (Cheese Tree), T243 (Jacaranda), T238, T239, T240, T250, T251, T254 & T264 (Broad-leaved Paperbark), T163 (Prickly Paperbark), T101 & T161 (White Cedar), T158 (English Oak) T76 (Water Gum) and T37 (English Elm). These trees are not considered significant, but are in good health and condition and make a fair contribution to the amenity of the site and surrounding properties. It should be noted that Trees T43, T44, T45, T46, T59, T60, T67, T76, T77, T78 & T105 are located within the road reserve. In order to compensate for loss of amenity resulting from the removal of these trees to accommodate the proposed development, consideration should be given to replacement planting with new trees elsewhere within the site and within the road reserve in accordance with **Section 11**.

- 9.1.1 The proposed development will also necessitate the removal of twenty-two (22) trees of high retention value. These include Tree No.s T104 (Sydney Red Gum), T53 & T194 (Swamp Oak), T27, T28, T32, T33, T34 & T35 (Lemon-scented Gum), T193 (Spotted Gum), T22 (Argyle Apple), T72 (Flooded Gum), T70 (Swamp Mahogany), T69, T85 & T270 (Sydney Blue Gum), T52, T182 & T184 (Jacaranda), T92 (Brushbox), T159 (Broad-leaved Paperbark) and T183 (Brown Pine). Of these, T85 (Sydney Blue Gum) is a remnant of the original forest and is considered to be a constituent of the BGHF EEC (refer to **Section 5.2.4**). It should be noted that this is an isolated specimen and not contiguous with any larger stand of native trees. Trees T182 & T184 (both Jacarandas) and T183 (Brown Pine) were probably planted c. 1950-1960 in association with the early development of the Meadowbank TAFE College, but have no documented heritage significance. T159 (Broadleaved Paperbark) is a memorial planting (refer **Section 5.3.4**). The remaining trees have no special ecological or heritage significance, but are in good health and condition and make a positive contribution to the amenity of the site and surrounding properties. There are no feasible options that can be recommended that would permit the retention of these trees given their position within the site, the extent of site development proposed and other site constraints (including flood zone). In order to compensate for loss of amenity resulting from the removal of these trees to accommodate the proposed development, consideration should be given to replacement planting elsewhere within the site with new trees in accordance with **Section 11**.
- 9.1.2 The new public pathway along Rhodes Street will be located within the TPZs of Trees T40 (Chinese Elm), T41 (Lemon-scented Gum), T42 & T66 (Sydney Blue Gum), T55, T56 & T57 (Blackbutt), T58 (Grey Ironbark) & T68 (Gum). The pathway should not result in any adverse impact on these trees, provided that all excavation for the pavement sub-grade within the TPZs of these trees is carried out in accordance with **Section 10.6** and engineered fill for the pavement sub-base is supplied and installed in accordance with **Section 10.9**.
- 9.1.3 A new elevated walkway / platform and elevated seating decks are proposed to be constructed within the TPZs of Trees T36 & T41 (Lemon-scented Gum), T40 (Chinese Elm) T55, T56 & T57 (Blackbutt), T58 (Grey Ironbark) and T39 & T42, (Sydney Blue Gum). It is understood that the walkways will be constructed as elevated (permeable) decks supported by piers (with void beneath) to minimise the encroachment to the TPZs of these trees. Excavations for the pier supports should *not* result in any adverse impact on these trees, provided that all such excavations within the TPZs are undertaken in accordance with **Section 10.6**. The decks should be constructed of a permeable material to permit water percolation to the underlying root zone. There should be sufficient flexibility in the structural design to allow pier positions to be moved slightly (as required) to avoid severance of woody roots. A minimum of one metre clearance shall be provided between the face of the trunks for these trees and the platform and a minimum of 200mm clearance shall be provided between any woody root of 40mm or greater in diameter and any pier or beam. Piers should be excluded from SRZs.
- 9.1.4 A new driveway is proposed to be constructed within the TPZs of Trees T61 & T62 (Swamp Oak), T66 (Sydney Blue Gum), T56 (Blackbutt) and T68 (Gum). In the case of trees T56, T61, T62 & T68, the extent of the encroachment to the root zones is less than 10% of the TPZ, which is considered within acceptable limits under AS 4970:2009. As such, the proposed works will not result in any adverse impact on these trees. In the case of T66, the extent of encroachment to the root zone is approximately 27%, which exceeds acceptable limits under AS 4970:2009. Excavations and compaction for the pavement sub-grade have the potential to result in root severance and damage, leading to an adverse impact on this tree. In order to *minimise* any adverse impact on this tree, all excavations for the pavement sub-grade within the TPZ should be carried out in accordance with **Section 10.6** and any required engineered fill for the pavement sub-base should be supplied and installed in accordance with **Section 10.9**
- 9.1.5 Proposed new hard courts and an associated retaining wall are located within the TPZs of Trees T113 & T124 (Turpentine), T125, T126 & T127 (Sydney Red Gum), T112 & T134 (Sydney Blue

Gum), T136 (Blackbutt) and T133 (Native Daphne). In all cases, the proposed new wall is located beyond (to the south-east of) on in the alignment of an existing sandstone cliff face. This cliff acts as a barrier to any root development of these trees to the south-east. As such, the proposed works will not result in any actual incursion to the root zones and therefore the works will not result in any adverse impact on these trees. In order to avoid any adverse impact, the existing cliff face should be maintained intact and not be excavated any further to facilitate construction of the new retaining wall. The use of rock anchors, however, penetrating the rock face (where required) is considered acceptable and would not result in any adverse impact on these trees.

- 9.1.6 The proposed new hard courts will also require bulk excavation and some form of retaining wall or constructed batter within the TPZs of Trees T140, T141, T142 & T181 (Sydney Blue Gums) and T180 (Blackbutt). In order to reduce the encroachments to the TPZs of these trees, the level difference should be resolved with a vertical retaining wall on the edge of the proposed paved zone (rather than an engineered batter). Assuming this can be achieved, the extent of encroachment to these trees will be within acceptable limits and the proposed works will not result in any adverse impact.
- 9.1.7 New pathways are proposed to be constructed within the TPZs of trees T188, T189 & T190 (Jacaranda), T192 (Mugga Ironbark), T212 (Bungalay), T232 (Sydney Blue Gum), T261, T262 & T266 (Sydney Blue Gum), T263 (Broadleaved Paperbark). In most of these instances the new pathways are located within the footprint of existing paved areas (to be demolished) at similar grades. As such, these works will not result in any increase in encroachment (in most areas the extent of pavement within the TPZs of these trees will be decreased) and therefore these works will not result in any adverse impact on these trees. In order to avoid any adverse impact, the pavement should be constructed above grade to avoid any excavation within the TPZs in accordance with Sections 10.8 & 10.9.
- 9.1.8 Proposed new paved areas are located within the TPZs of trees T19, T20 & T21 (Jacarandas). This will require compaction and placement of engineered fill within the TPZs for the pavement sub-grade, which is likely to result in some adverse impact on these trees. In order to minimise any adverse impact, the pavement should be constructed in accordance with Section 10.8 & 10.9.
- 9.1.9 Some canopy pruning of T49 & T266 (Sydney Blue Gum), T55 & T56 (Blackbutt) and T50 (Swamp Oak) may be required to accommodate the building envelope and temporary scaffolding. The extent of pruning required will depend on the width of scaffold proposed and the actual incursion to the crown. In order to avoid any adverse impact on this tree all pruning required (that essential to clear the building envelope and temporary scaffolding) should be carried out in accordance with **Section 10.11**. Temporary scaffolding within the TPZ should be erected in accordance with **Section 10.14**
- 9.1.10 Proposed new stormwater pipelines are located within the TPZs of Trees T50 (Swamp Oak), T196 (Gum) , T197 & T266 (Sydney Blue Gum) and T269 (Bungalay). Open trenching to facilitate installation of the stormwater line may necessitate severance of woody roots leading to an adverse impact on these trees. In order to avoid any adverse impact, all excavations for the proposed stormwater pipelines within the TPZs shall be undertaken in accordance with Section 10.6. The pipeline shall only be installed by Horizontal Directional Drilling within the TPZs of T196, T197, T263 & T50 or alternatively the alignment of the pipeline should be adjusted to avoid encroachment to the TPZs of these trees.
- 9.1.11 No other trees within the site will be adversely affected by the proposed development.

10 RECOMMENDED TREE PROTECTION MEASURES

10.1 Tree Protection Plan

10.1.1 The following Tree Protection Measures should be read in accordance with the Tree Protection Plan (**Appendix 6**). The Tree Protection Plan (TPP) indicates the position of tree protection devices and other recommended measures to ensure the protection of trees within the site to be retained as part of the proposed development.

10.2 Prohibited Activities

10.2.1 The following activities should be avoided within specified Tree Protection Zones (refer **Appendix 4 & 6** for extent of the TPZ for each tree):-

- Excavations and trenching (with exception of the approved remediation works, underground services, building foundations or pavement sub-grade);
- Soil disturbance, surface grading, compaction, tining, ripping or cultivation of soil;
- Mechanical removal of vegetation, including extraction of tree stumps;
- Soil level changes including the placement of fill material (excluding imported validated fill for remediation works or placement of fill for approved works)
- Movement and storage of plant, equipment & vehicles (except within defined temporary haul roads, where ground protection has been installed, or within the footprint of existing floor slabs or paved areas);
- Erection of site sheds (except where approved by the site arborist);
- Affixing of signage, barricades or hoardings to trees;
- Storage of building materials, waste and waste receptacles;
- Stockpiling of spoil or fill;
- Stockpiling of bulk materials, such as soil, sand, gravel, roadbase or the like;
- Stockpiling of demolition waste;
- Disposal of waste materials and chemicals including paint, solvents, cement slurry, fuel, oil and other toxic liquids;
- Other physical damage to the trunk or root system; and
- Any other activity likely to cause damage to the tree.

10.3 Tree Protection Fencing

10.3.1 All trees within the site to be retained shall be protected prior to and during construction from all activities that may result in detrimental impact by erecting a suitable protective fence in the positions indicated on the Tree Protection Plan (**Appendix 6**). As a minimum, the fence should consist of temporary chain wire panels of 1.8 metres in height, supported by steel stakes as required and fastened together and supported to prevent sideways movement using corner braces where required. The fence shall be erected prior to the commencement of any work on-site and shall be maintained in good condition for the duration of construction. Where tree protection zones merge together a single fence encompassing the area is deemed to be adequate. Existing site boundary fences may form part of the enclosure.

10.3.2 Appropriate signage shall be installed on the fencing to prevent unauthorised movement of plant and equipment or entry to the Tree Protection Zone.

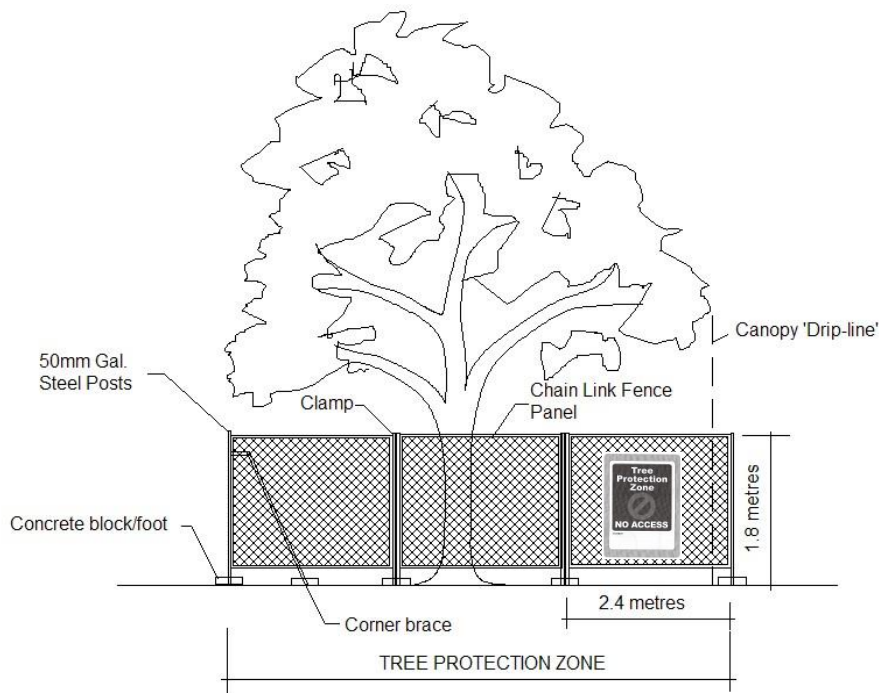


Figure 1 – Detail of Tree Protection Fence

- 10.3.3 Signs shall be installed on the Tree Protection Fence to prevent unauthorised movement of plant and equipment or entry to the Tree Protection Zone. The signs shall be securely attached to the fence using cable ties or equivalent. Signs shall be placed at minimum 10 metre intervals. The wording and layout of the sign shall comply with AS 4970-2009 as shown in **Figure 2**.



Figure 2 – Detail of Tree Protection Sign

10.4 Trunk Protection

- 10.4.1 Trunk protection boarding shall be erected around Trees [T188, T189, T190, T192, T263 & T264] to avoid accidental damage, as indicated on the Tree Protection Plan (**Appendix 6**). The trunk protection shall consist of a layer of carpet underfelt (or similar) wrapped around the trunk, followed by 1.8 metre lengths of softwood timbers (90 x 45mm in section) aligned vertically and spaced evenly around the trunk at 150mm centres (i.e. with a 50mm gap) and secured together with 2mm galvanised wire or galvanised hoop strap as shown in **Figure 3**. Recycled timber (such as demolition waste) may be suitable for this purpose, subject to the approval of the Project Arborist. The timbers shall be wrapped around the trunk (over the carpet underfelt), but not fixed to the tree to avoid mechanical injury or damage to the trunk. Trunk protection should be installed prior to any site works and maintained in good condition for the duration of the construction period. Carpet underfelt (alone) is sufficient for trees with a trunk diameter of less than 200mm. This shall be wrapped around the trunk in a double layer and held in place with heavy-duty fibre reinforced adhesive tape (e.g. Gaffer Tape).



Figure 3 – Detail of Trunk Protection

10.5 Demolition Works within Tree Protection Zones

- 10.5.1 Demolition of paved areas within the Tree Protection Zones (TPZs) of trees [**all trees nominated for retention**] shall be undertaken under the supervision of a qualified Arborist [Australian Qualification Framework (AQF) Level 5].
- 10.5.2 Concrete pavements shall be demolished by breaking the slab into manageable sections (using a rock hammer or similar) and asphalt pavements shall be removed by breaking the topcoat into manageable pieces. The broken sections shall be carefully lifted and folded over the remaining paved surface to minimise disturbance and compaction of the underlying soil profile. Special care shall be taken where underlying woody roots have lifted or displaced the pavement. Any plant or equipment used in demolition work shall operate within the footprint of existing paved areas and avoid traversing soft landscape areas. Where this is unavoidable, suitable ground protection shall first be installed in accordance with **Section 10.15**.
- 10.5.3 The pavement sub-base within the TPZ shall be gradually removed (where required) in layers of no greater than 50mm thick using a small rubber tracked excavator or alternative approved method to avoid excessive disturbance and compaction of the underlying soil profile and damage to underlying roots and minimise. The machine shall work within the footprint of the existing path footprint to avoid compaction of the underlying soil. The final layer of sub-base material shall be removed using hand tools where required to avoid compaction of the underlying soil profile and avoid damage to any underlying woody roots.
- 10.5.4 Where area currently occupied by pavement are to be returned to soft landscape areas, following removal of the pavement surface and sub-base, clean, friable topsoil shall be used to fill in the excavated area and bring flush with surrounding levels within new landscape areas. Soil shall only be imported and spread when the underlying soil conditions are dry to avoid compaction of the soil profile. Where there is insufficient recovered site topsoil for this purpose, any imported material shall be free of rocks, vegetation, heavy clay or other extraneous matter and supplied and spread in accordance with **Section 10.10**. Any imported soil material should be similar in texture to the existing site topsoil.
- 10.5.5 Demolition of existing walls, kerbs and other structures within the TPZ of trees [**T36, T55, T56, T75, T79-T83, T188, T189, T192, T261, T262, T263, T264, T265 & T266**] shall be undertaken

under the supervision of a qualified Arborist [AQF level 5]. The structures shall be demolished using equipment on stationed outside the TPZ where possible or within the footprint of existing hardstand areas.

- 10.5.6 Care shall be taken to avoid the root systems, trunks and lower branches of trees in the vicinity of the structures during demolition works, with special attention required during demolition of the footings and other sub-surface members to avoid damage to woody roots. An observer ('spotter') shall be employed to assist the plant operator in order to detect and avoid damage to underlying woody roots during demolition. Trunk and/or branch protection shall be installed where there is a potential risk of damage to trees in proximity or overhead of the work.

10.6 Excavations within Tree Protection Zones

- 10.6.1 Prior to any mechanical excavations for building foundations or pavement sub-grade within the TPZs of Trees [T39, T40, T41, T42, T48, T49, T55, T56, T57, T58, T61, T62, T66, T68, T188, T189, T190, T192, T232, T261, T262, T263, T264 & T266] exploratory excavation using non-destructive techniques shall be taken along the perimeter of the structure or pavement within the TPZ. Non-destructive excavation techniques may include the use of hand-held implements, air pressure (using an Air-spade® device) or water pressure. The exploratory excavation shall be undertaken along the perimeter of the foundation or pavement (within the TPZ) to the depth of the foundation or to a maximum of 800mm from surface levels, to locate and expose any woody roots prior to any mechanical excavation.
- 10.6.2 All care shall be undertaken to preserve woody roots intact and undamaged during exploratory excavation. Any roots encountered of less than 50mm in diameter may be cleanly severed with clean sharp pruning implements at the face of the excavation. The root zone in the vicinity of the excavation shall be kept moist following excavation for the duration of construction to minimise moisture stress on the tree. Where large woody roots (greater than 40mm diameter) are encountered during exploratory excavations, further advice from a qualified arborist shall be sought prior to severance.
- 10.6.3 Where necessary, (to avoid severing large woody roots) consideration should be given to the installation of an elevated structure (e.g. pier and beam footing, suspended slab or floor supported on piers, cantilevered slab, up-turned edge beam etc) in preference to structures requiring a deep edge beam or continuous perimeter strip footing. The beam section of any pier and beam footing should be placed **above** grade to avoid excavation within the SRZ. Pier footings intersecting large woody roots should be slightly offset where necessary to avoid root severance. A minimum of one metre clearance shall be provided between the face of the trunks for these trees and any structure and a minimum of 200mm clearance shall be provided between any woody root of 40mm or greater in diameter and any pier or beam. Piers shall be avoided within SRZs.
- 10.6.4 For masonry walls or fences it may be acceptable to delete continuous concrete strip footings and replace with suspended in-fill panels (eg steel or timber pickets, lattice etc) fixed to pillars. For paved areas, consideration should be given to raising the proposed pavement level and using a porous fill material in preference to excavation where large woody roots are found within the sub-base.

10.7 Underground Services

- 10.7.1 All proposed stormwater lines and other underground services should be located outside TPZs of trees proposed to be retained wherever possible or installed by alternative measures. Alternative measures include suspending pipelines beneath the floor of a building or structure (to avoid excavation within the TPZ), non-destructive excavation methods or Horizontal Directional Drilling

(HDD). Where the installation of service lines within TPZs is unavoidable, the pipelines or conduits should be installed as follows.

- 10.7.2 Trenching for underground services and stormwater pipes within the TPZs of Trees [**any tree nominated for retention**], shall be undertaken using non-destructive excavation in accordance with **Section 10.6**. Where large woody roots are encountered during excavation or trenching (root diameter greater than 40mm), these shall be retained intact wherever possible (e.g. by tunnelling beneath roots and inserting the pipeline or conduit beneath or re-routing the service etc). Where this is not practical and root pruning is the only alternative, proposed root pruning should be assessed by a qualified arborist [AQF 5] to evaluate the potential impact on the health and stability of the subject tree.
- 10.7.3 Installation of underground services and stormwater pipes within the SRZs of Trees [**T50, T196, T197 & T263**], shall only be undertaken by Horizontal Directional Drilling (HDD) (also referred to as sub-surface boring or Micro-tunnelling for large diameter pipes). The Invert Level of the pipe, plus the pipe diameter, must be lower than the estimated root zone depth as specified. At this site a minimum depth of 1 metre cover to the external wall of the pipe is specified.

10.8 Pavements

- 10.8.1 Proposed paved areas within the TPZs of Trees [**T42, T55, T56, T57, T58, T66, T68, T261, T188, T189, T192, T261, T262, T263, T264 & T266**] shall be placed at or slightly above grade where possible to minimise excavations within the root zone and avoid severance and damage of woody roots. The pavement sub-base material should be supplied and installed in accordance with **Section 10.9**.

10.9 Pavement Sub-base

- 10.9.1 Pavement sub-base material within TPZs of trees [**T42, T55, T56, T57, T58, T66, T68, T261, T188, T189, T192, T261, T262, T263, T264 & T266**] shall be a coarse, gap-graded material such as 20 – 50mm crushed basalt (Blue Metal) or equivalent no-fines gravel material to provide some aeration and moisture permeation to the root zone. Note that road base or crushed sandstone or other similar material containing a high percentage of fines is unacceptable for this purpose. The fill material should be consolidated using a non-vibrating roller or similar to minimise compaction of the underlying soil. A permeable geotextile may be used beneath the sub-base to prevent migration of the stone into the sub-grade and provide greater load capacity.

10.10 Placement of Fill Material

- 10.10.1 Placement of fill material within the TPZs of Trees [**all trees nominated for retention**] (where required) shall be a well-drained friable material, equivalent in texture to the existing site topsoil material. The fill should be free from rocks, vegetation and other extraneous material complying with AS 4419:2003 (*Soils for Landscaping and Garden Use*).
- 10.10.2 The fill may be lightly consolidated, but shall not be compacted to engineering standards. No fill material should be placed in direct contact with the trunk.
- 10.10.3 Plant and equipment used to place and spread fill material should be stationed outside the TPZ where possible. Where not possible, suitable ground protection should be installed in accordance with **Section 10.15** to avoid compaction of the underlying soil profile and root zone.

10.11 Canopy & Root Pruning

- 10.11.1 Any required canopy pruning of Trees [T49, T50, T55, T56 & T266] shall be carried out in accordance with Australian Standard 4373-2007 – *Pruning of Amenity Trees*. All pruning work shall be carried out by a qualified and experienced arborist or tree surgeon [Australian Qualification Framework Level 3] in accordance with the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998). No branches of greater than 100mm in diameter should be removed or pruned without further advice from a Consulting Arborist [Australian Qualification Framework Level 5].
- 10.11.2 Where root pruning is required, roots shall be severed with clean, sharp pruning implements and retained in a moist condition during the construction phase using Hessian material or mulch where practical. Severed roots shall be treated with a suitable root growth hormone containing the active constituents Indol-3-yl-Butric Acid (IBA) and 1-Naphthylacetic Acid (NAA) to stimulate rapid regeneration of the root system.

10.12 Tree Damage

- 10.12.1 Care shall be taken when operating cranes, drilling rigs and similar equipment near trees to avoid damage to tree canopies (foliage and branches). Under no circumstances shall branches be torn-off by construction equipment. Where there is potential conflict between tree canopy and construction activities, the advice of the Site Arborist must be sought.
- 10.12.2 In the event of any tree becoming damaged for any reason during the construction period a consulting arborist [Australian Qualification Framework Level 5] shall be engaged to inspect and provide advice on any remedial action to minimise any adverse impact. Such remedial action shall be implemented as soon as practicable and certified by the arborist.

10.13 Tree Removal

- 10.13.1 The removal of Trees [**all trees indicated for removal on the attached Tree Protection Plan**] shall be carried out by an experienced tree surgeon in accordance with the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998). Care shall be taken to avoid damage to other trees during the felling operation.
- 10.13.2 Stumps located within the TPZs of trees to be retained shall be grubbed-out where required using a mechanical stump grinder (or by hand where less than 150mm in diameter) without damage to the root system of other trees. Where trees to be removed are within the SRZ of any trees to be retained, consideration should be given to cutting the stump close to ground level and retaining the root crown intact. Stumps within the Tree Protection Zone of other trees to be retained shall **not** be pulled out using excavation equipment or similar.

10.14 Temporary Scaffolding

- 10.14.1 Where temporary scaffolding must be erected within the TPZ of trees [T49, T50, T55, T56 & T266] (as indicated in **Appendix 6**), the scaffold shall be erected in accordance with **Figure 5**. Where foliage or branches project through the scaffold and create a safety hazard, this foliage and branches shall be temporarily excluded from the inner part of the scaffold by affixing a shade cloth screen on the outside of the scaffold (refer to **Figure 5**), or alternatively temporarily tying back branches where required. The pruning or removal of branches to accommodate the scaffold should be avoided wherever possible. Suitable ground protection shall be installed beneath the scaffold as shown in **Figure 5** to prevent contamination, disturbance and compaction of the soil profile within the scaffold zone during construction.

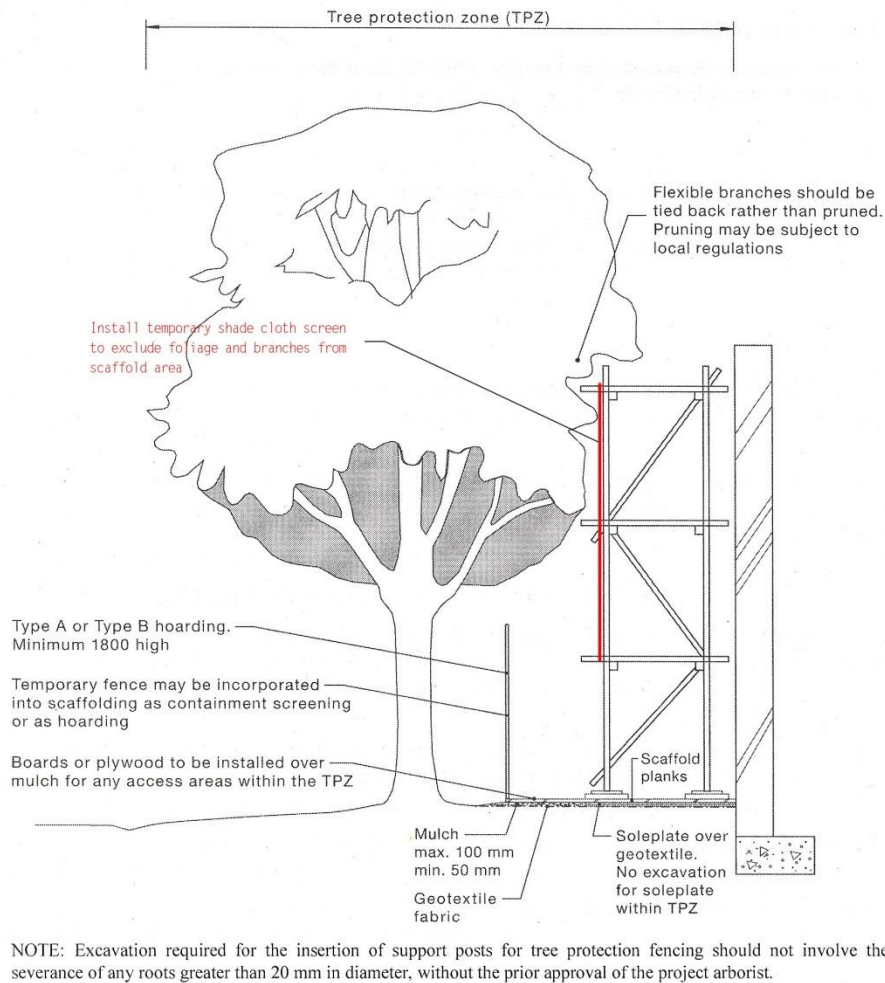


Figure 5 - Detail of Temporary scaffolding within a Tree Protection Zone

10.14.2 Where pruning or removal of branches to accommodate temporary scaffolding is unavoidable, all such pruning work shall be undertaken in accordance with **Section 10.11**.

10.15 Ground Protection

10.15.1 A 100mm layer of woodchip mulch shall be installed within designated areas of the TPZs as indicated on the Tree Protection Plan (**Appendix 6**) to minimise compaction of the underlying soil profile during construction activity and haulage. A Geotextile fabric, such as Geotex® ‘ST’ Series manufactured by Synthetic Industries or an equivalent product, shall be installed beneath the mulch/sand layer to minimise compaction to the underlying soil profile and limit migration of mulch into the underlying soil profile. Mulch shall be installed and spread by hand to avoid soil disturbance and compaction within the root zone.

10.15.2 To minimise displacement of woodchip in highly trafficked areas, 20mm thick marine ply sheets, truck mats (such as Envirex Versadeck® access mats) (refer **Figure 6**) or rumble boards should be placed over the top of the woodchip/sand. Rumble boards can be constructed with timber sleepers or similar spaced with no more than 200mm gaps between boards and held together with galvanised hoop strap or similar (refer **Figure 7**).



Figure 6 – Showing typical detail for truck mats.



Figure 7 – Showing typical detail for rumble boards.

10.15.3 Ground protection shall be installed prior to any site works and maintained in good condition for the duration of the construction period. On completion of the works, ground protection shall be removed without damage or disturbance to the underlying soil profile.

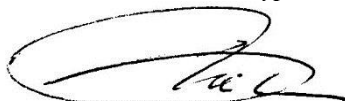
11 REPLACEMENT PLANTING

11.1.1 In order to compensate for loss of amenity resulting from the proposed development, a minimum number of twenty-five (25) new trees capable of attaining a height of at least ten (10) metres at maturity shall be planted within the site in appropriate locations.

11.1.2 Replacement trees should preferably include some locally indigenous species. These will be most appropriate to the site conditions and be most valuable in terms of preserving the landscape

character and wildlife habitat of the area. The following species are appropriate to the site conditions and could be considered for replacement planting:-

- *Syzygium paniculatum* (Magenta Cherry)
- *Angophora costata* (Sydney Red Gum)
- *Syncarpia glomulifera* (Turpentine),
- *Angophora floribunda* (Rough-barked Apple),
- *Eucalyptus acmenoides* (White Mahogany),
- *Eucalyptus paniculata* (Grey Ironbark),
- *Eucalyptus pilularis* (Blackbutt) and
- *Eucalyptus saligna* (Sydney Blue Gum)



Andrew Morton
EARTHSCAPE HORTICULTURAL SERVICES
10th October 2019

12 REFERENCES

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⁴ Barrell, Jeremy (1996)

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⁵ National Parks and Wildlife Service of NSW (October 2002)

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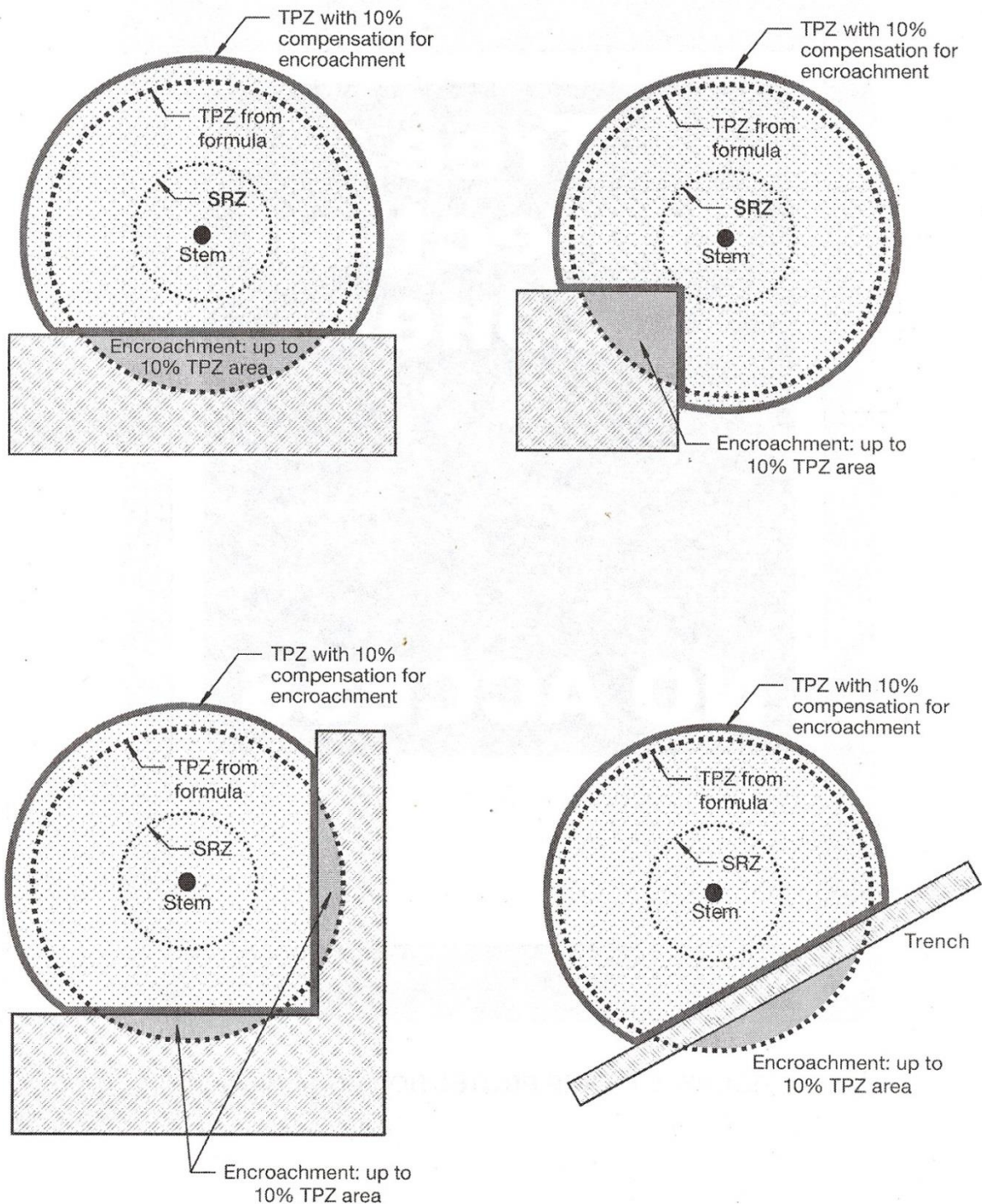
APPENDIX 1 - CRITERIA FOR ASSESSMENT OF LANDSCAPE SIGNIFICANCE

RATING	HERITAGE VALUE	ECOLOGICAL VALUE	AMENITY VALUE
1. SIGNIFICANT	The subject tree is listed as a Heritage Item under the Local Environment Plan (LEP) with a local, state or national level of significance or is listed on Council's Significant Tree Register	The subject tree is scheduled as a Threatened Species as defined under the Threatened Species Conservation Act 1995 (NSW) or the Environmental Protection and Biodiversity Conservation Act 1999	The subject tree has a very large live crown size exceeding 300m ² with normal to dense foliage cover, is located in a visually prominent position in the landscape, exhibits very good form and habit typical of the species
	The subject tree forms part of the curtilage of a Heritage Item (building /structure /artefact as defined under the LEP) and has a known or documented association with that item	The tree is a locally indigenous species, representative of the original vegetation of the area and is known as an important food, shelter or nesting tree for endangered or threatened fauna species	The subject tree makes a significant contribution to the amenity and visual character of the area by creating a sense of place or creating a sense of identity
	The subject tree is a Commemorative Planting having been planted by an important historical person (s) or to commemorate an important historical event	The subject tree is a Remnant Tree, being a tree in existence prior to development of the area	The tree is visually prominent in view from surrounding areas, being a landmark or visible from a considerable distance.
2. VERY HIGH	The tree has a strong historical association with a heritage item (building/structure/artefact/garden etc) within or adjacent the property and/or exemplifies a particular era or style of landscape design associated with the original development of the site.	The tree is a locally-indigenous species, representative of the original vegetation of the area and is a dominant or associated canopy species of an Endangered Ecological Community (EEC) formerly occurring in the area occupied by the site.	The subject tree has a very large live crown size exceeding 200m ² ; a crown density exceeding 70% (normal-dense), is a very good representative of the species in terms of its form and branching habit or is aesthetically distinctive and makes a positive contribution to the visual character and the amenity of the area
3. HIGH	The tree has a suspected historical association with a heritage item or landscape supported by anecdotal or visual evidence	The tree is a locally-indigenous species and representative of the original vegetation of the area and the tree is located within a defined Vegetation Link / Wildlife Corridor or has known wildlife habitat value	The subject tree has a large live crown size exceeding 100m ² ; The tree is a good representative of the species in terms of its form and branching habit with minor deviations from normal (e.g. crown distortion/suppression) with a crown density of at least 70% (normal); The subject tree is visible from the street and surrounding properties and makes a positive contribution to the visual character and the amenity of the area
4. MODERATE	The tree has no known or suspected historical association, but does not detract or diminish the value of the item and is sympathetic to the original era of planting.	The subject tree is a non-local native or exotic species that is protected under the provisions of this DCP.	The subject tree has a medium live crown size exceeding 40m ² ;The tree is a fair representative of the species, exhibiting moderate deviations from typical form (distortion/suppression etc) with a crown density of more than 50% (thinning to normal); and
			The tree is visible from surrounding properties, but is not visually prominent – view may be partially obscured by other vegetation or built forms. The tree makes a fair contribution to the visual character and amenity of the area.
5. LOW	The subject tree detracts from heritage values or diminishes the value of a heritage item	The subject tree is scheduled as exempt (not protected) under the provisions of this DCP due to its species, nuisance or position relative to buildings or other structures.	The subject tree has a small live crown size of less than 40m ² and can be replaced within the short term (5-10 years) with new tree planting
6. VERY LOW	The subject tree is causing significant damage to a heritage Item.	The subject tree is listed as an Environment Weed Species in the relevant Local Government Area, being invasive, or is a known nuisance species.	The subject tree is not visible from surrounding properties (visibility obscured) and makes a negligible contribution or has a negative impact on the amenity and visual character of the area. The tree is a poor representative of the species, showing significant deviations from the typical form and branching habit with a crown density of less than 50% (sparse).
7. INSIGNIFICANT	The tree is completely dead and has no visible habitat value	The tree is a declared Noxious Weed under the Noxious Weeds Act (NSW) 1993 within the relevant Local Government Area.	The tree is completely dead and represents a potential hazard.

Ref:- Morton, A (2006) **Determining the Retention Value of Trees on Development Sites**

TreeNet - Proceedings of the 7th National Street Tree Symposium 2006 Government of South Australia Department for Transport, Energy and Infrastructure

APPENDIX 2 – ACCEPTABLE INCURSIONS TO THE TREE PROTECTION ZONE (TPZ)



NOTE: Less than 10% TPZ area and outside SRZ. Any loss of TPZ compensated for elsewhere.

REF:- Council of Standards Australia (August 2009)
AS 4970 – 2009 – Protection of Trees on Development Sites
 Standards Australia, Sydney

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
1	<i>Fraxinus Raywood</i> (Claret Ash)	7	7	350	35	SM	Appears stable with sound branching structure. Exhibits a large wound on lower trunk due to borer damage. Some dieback with 20% deadwood and 30% epicormic growth. Prominent lean to the north-west.	Selectively pruned & deadwooded.	Poor with sparse crown	High Wisteria vine infestation. High borer infestation	Transient (less than 5 years)	5	Very Low	On-site
2	<i>Fraxinus Raywood</i> (Claret Ash)	7	6	255	30	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the south-west. Minor dieback with 5% deadwood and 30% epicormic growth.	Selectively pruned & deadwooded.	Fair	Low Wisteria vine infestation.	Medium 15-40 Years	5	Low	On-site
3	<i>Fraxinus Raywood</i> (Claret Ash)	6	5	300	25	SM	Appears stable with fair branching structure. Exhibits moderate dieback in upper crown with 30% deadwood and 30% epicormic growth (basal sprouts). Sunburn on trunk and PLs.	Selectively pruned & deadwooded.	Fair with thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site
4	<i>Fraxinus Raywood</i> (Claret Ash)	6	6	325	24	SM	Appears stable with sound branching structure. Exhibits some dieback in upper crown with 10% deadwood.	Selectively pruned.	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	4	Moderate	On-site
5	<i>Fraxinus Raywood</i> (Claret Ash)	6	6.5	258	29.25	SM	Appears stable with sound branching structure. Exhibits multiple co-dominant leaders at 1.2 metres. 5% deadwood.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	Low	On-site
6	<i>Jacaranda mimosifolia</i> (Jacaranda)	11	13	600	104	M	Appears stable with sound branching structure. Crown suppressed on south-west side due to crowding.	Selectively pruned.	Good	Moderate Ivy infestation	Long - more than 40 years	3	High	On-site
7	<i>Jacaranda mimosifolia</i> (Jacaranda)	11	12	400	84	M	Appears stable with fair branching structure. Crown suppressed on NE and SW side due to crowding.	Selectively pruned.	Fair	Moderate Ivy infestation	Medium 15-40 Years	4	Moderate	On-site
8	<i>Jacaranda mimosifolia</i> (Jacaranda)	10	14	400	84	M	Appears stable with fair branching structure. Exhibits extended lateral PLs. Moderate dieback with 20% deadwood.	Selectively pruned.	Fair with thinning crown	Low Ivy infestation	Short 5-15 Years	4	Low	On-site
9	<i>Jacaranda mimosifolia</i> (Jacaranda)	12	16	370 + 400	112	M	Appears stable with sound branching structure. Crown suppressed on the SW side due to crowding.	Selectively pruned & deadwooded.	Good	Low Ivy infestation	Long - more than 40 years	3	High	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
10	<i>Jacaranda mimosifolia</i> (Jacaranda)	11	14	400	112	M	Appears stable with sound branching structure.	Selectively pruned & deadwooded.	Good	Low Ivy infestation	Long - more than 40 years	4	Moderate	On-site
11	<i>Jacaranda mimosifolia</i> (Jacaranda)	6	5	100+ 150	25	I	Appears stable with sound branching structure.	No Evidence	Good	Low Ivy infestation	Long - more than 40 years	5	Moderate	On-site
12	<i>Jacaranda mimosifolia</i> (Jacaranda)	7	5	160 + 60	30	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the west.	No Evidence	Good	Low Ivy infestation	Long - more than 40 years	5	Moderate	On-site
13	<i>Jacaranda mimosifolia</i> (Jacaranda)	8	8	150 + 200	48	SM	Appears stable with sound branching structure.	No Evidence	Good	Moderate Ivy infestation	Long - more than 40 years	5	Moderate	On-site
14	<i>Jacaranda mimosifolia</i> (Jacaranda)	7	9	180x2 + 200 + 150	45	SM	Appears stable with fair branching structure. Exhibits multiple co-dominant PLs with multiple moderate bark inclusions at GL.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
15	<i>Jacaranda mimosifolia</i> (Jacaranda)	7	6	150x2	30	SM	Appears stable with fair branching structure. Crown suppressed on NE and SW side due to crowding. Moderate bark inclusion at GL.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
16	<i>Jacaranda mimosifolia</i> (Jacaranda)	8	6	250	36	SM	Appears stable with fair branching structure. Exhibits a very prominent lean to the west.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
17	<i>Jacaranda mimosifolia</i> (Jacaranda)	6	6	150x2 + 120	24	SM	Appears stable with sound branching structure. Exhibits 3 x co-dominant leaders.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
18	<i>Jacaranda mimosifolia</i> (Jacaranda)	8	6	160 + 180	36	SM	Appears stable with sound branching structure. Exhibits a low bark inclusion at GL.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
19	<i>Jacaranda mimosifolia</i> (Jacaranda)	12	9	330 + 220	90	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
20	<i>Jacaranda mimosifolia</i> (Jacaranda)	11	8	220 + 140 + 170	72	SM	Appears stable with fair branching structure. Crown suppressed on the south-west side due to crowding. Low bark inclusion at GL.	Crown lifted to 3 metres	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
21	<i>Jacaranda mimosifolia</i> (Jacaranda)	13	10	420	100	M	Appears stable with sound branching structure.	Crown lifted to 3 metres	Good	Moderate wisteria infestation	Long - more than 40 years	3	High	On-site
22	<i>Eucalyptus cinerea</i> (Argyle Apple)	14	11	350 + 420	154	M	Appears stable with sound branching structure. Exhibits a low bark inclusion at GL. Some dieback with 15% deadwood and 30% epicormic growth.	Deadwooded	Good	Low wisteria infestation	Long - more than 40 years	3	High	On-site
23	<i>Prunus cerasifera</i> 'Nigra' (Ornamental Flowering Plum)	4	3.5	180	14	SM	Appears stable with fair branching structure. Exhibits multiple low bark inclusions at GL.	No Evidence	Very Good	No Evidence	Medium 15-40 Years	5	Low	On-site
24	<i>Malus x purpurea</i> 'Eleyi' (Crabapple)	5	6	100x2 + 70x4	30	SM	Appears stable with fair branching structure. Crown suppressed on east side due to crowding.	No Evidence	Fair	No Evidence	Short 5-15 Years	5	Low	On-site
25	<i>Banksia serrata</i> (Old Man Banksia)	5	7	200x2 + 150	35	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
26	<i>Banksia serrata</i> (Old Man Banksia)	7	8	350	56	M	Appears stable with sound branching structure. Exhibits a prominent lean to the north.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
27	<i>Corymbia citriodora</i> (Lemon-scented Gum)	18	6	334	42	SM	Appears stable with sound branching structure.	Crown lifted to 5 metres. Deadwooded.	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
28	<i>Corymbia citriodora</i> (Lemon-scented Gum)	20	11	366	132	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
29	<i>Corymbia citriodora</i> (Lemon-scented Gum)	11	5	220	30	SM	Appears stable with sound branching structure. Crown suppressed on the north side due to crowding.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
30	<i>Corymbia citriodora</i> (Lemon-scented Gum)	16	7	236	56	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
31	<i>Corymbia citriodora</i> (Lemon-scented Gum)	12	6	175	30	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
32	<i>Corymbia citriodora</i> (Lemon-scented Gum)	23	9	334	108	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
33	<i>Corymbia citriodora</i> (Lemon-scented Gum)	20	6	239	72	SM	Appears stable with sound branching structure. Crown suppressed on the north-west side due to crowding.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
34	<i>Corymbia citriodora</i> (Lemon-scented Gum)	18	5	245	20	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
35	<i>Corymbia citriodora</i> (Lemon-scented Gum)	16	9	334	54	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
36	<i>Corymbia citriodora</i> (Lemon-scented Gum)	15	8	290	56	SM	Appears stable with sound branching structure. Crown suppressed on the south-east side due to crowding.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
37	<i>Ulmus procera</i> (English Elm)	8	6	258	42	SM	Appears stable with sound branching structure. Exhibits multiple basal epicormic sprouts due to previous pruning.	Crown lifted to 2 metres	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
38	<i>Ulmus procera</i> (English Elm)	6	4	180	20	I	Appears stable with fair branching structure. Exhibits 70% epicormic growth. Located close to existing path.	Crown lifted to 2 metres	Fair with thinning crown	No Evidence	Transient (less than 5 years)	5	Very Low	On-site
39	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	27	12	516	288	M	Appears stable with sound branching structure. Exhibits large woody surface roots for 3 metres radius from trunk.	No Evidence	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
40	<i>Ulmus parvifolia</i> (Chinese Elm)	7	6	239	30	M	Appears stable with sound branching structure.	Crown lifted to 2 metres	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
41	<i>Corymbia citriodora</i> (Lemon-scented Gum)	23	20	717	400	M	Appears stable with fair branching structure. Exhibits multiple co-dominant leaders at 5 metres. Moderate occluded wound at 5 metres.	Deadwooded	Good	No Evidence	Long - more than 40 years	2	High	On-site
42	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	20	16	637	272	M	Appears stable with sound branching structure. Exhibits large woody surface roots for 5 metres radius from trunk.	Deadwooded	Very Good	Low borer infestation	Long - more than 40 years	3	High	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
43	<i>Angophora floribunda</i> (Rough-barked Apple)	9	5	210	25	SM	Appears stable with sound branching structure. Crown suppressed on the south-west side due to crowding.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	Nature strip
44	<i>Angophora floribunda</i> (Rough-barked Apple)	9	5	210	20	SM	Appears stable with sound branching structure. Crown suppressed on the south-west side due to crowding.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	Nature strip
45	<i>Angophora floribunda</i> (Rough-barked Apple)	7	3	162	15	I	Appears stable with sound branching structure. Exhibits a moderate wound on lower trunk due to mechanical injury.	Crown lifted to 2 metres	Very Good	No Evidence	Long - more than 40 years	5	Moderate	Nature strip
46	<i>Angophora floribunda</i> (Rough-barked Apple)	12	6	322	60	M	Appears stable with sound branching structure. Exhibits a prominent lean to the north-east. Crown suppressed on the south-west side due to crowding.	Crown lifted to 2 metres	Very Good	No Evidence	Long - more than 40 years	4	Moderate	Nature strip
47	<i>Ceratopetalum gummiferum</i> (NSW Christmas Bush)	5	4	60 + 70	16	SM	Appears stable with sound branching structure.	Crown lifted to 1 metre	Very Good	No Evidence	Long - more than 40 years	5	Moderate	On-site
48	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	23	9	475	162	SM	Appears stable with sound branching structure. Crown suppressed on the north-east side due to crowding.	Crown lifted to 3 metres	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
49	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	14	6	229	48	I	Appears stable with fair branching structure. Crown suppressed on the north-east side due to overshadowing.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
50	<i>Casuarina glauca</i> (Swamp Oak)	13	7	287	56	M	Appears stable with fair branching structure. Crown suppressed on the north-east side due to overshadowing. Exhibits a low bark inclusion at 6 metres.	Crown lifted to 5 metres	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
51	<i>Casuarina glauca</i> (Swamp Oak)	13	9	389	90	M	Appears stable with sound branching structure.	Crown lifted to 4 metres	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
52	<i>Jacaranda mimosifolia</i> (Jacaranda)	12	10	250 + 310	80	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at GL.	Crown lifted to 4 metres	Good	No Evidence	Long - more than 40 years	3	High	On-site
53	<i>Casuarina glauca</i> (Swamp Oak)	16	8	373	88	M	Appears stable with sound branching structure.	Crown lifted to 5 metres	Very Good	No Evidence	Long - more than 40 years	3	High	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
54	<i>Elaeocarpus reticulatus</i> (Blueberry Ash)	5	4	80	16	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the north.	Crown lifted to 1 metre	Very Good	No Evidence	Long - more than 40 years	5	Moderate	On-site
55	<i>Eucalyptus pilularis</i> (Blackbutt)	30	22	1086	396	M	Appears stable with fair branching structure. Exhibits a prominent lean to the north (self-corrected). Moderate wound at 7 metres due to previous branch loss.	Deadwooded	Good	No Evidence	Medium 15-40 Years	1	High	On-site
56	<i>Eucalyptus pilularis</i> (Blackbutt)	18	24	1306	264	M	Appears stable with fair branching structure. Crown suppressed on the south-east side due to crowding. Exhibits a moderate axial wound at 3 to 5 metres. Moderate bark inclusion at 1 metre at junction of co-dominant PLs.	Previously lopped at 8-10 metres (Crown restored). Deadwooded.	Good	No Evidence	Medium 15-40 Years	1	High	On-site
57	<i>Eucalyptus pilularis</i> (Blackbutt)	18	18	847	234	M	Appears stable with fair branching structure. Exhibits a moderate basal wound and cavity. Moderate wound and cavity at 7, 9 & 10 metres in branch collar/stub. Crown suppressed on SW side due to overshadowing.	Deadwooded	Good	Suspected termite infestation	Medium 15-40 Years	1	High	On-site
58	<i>Eucalyptus paniculata</i> (Grey Ironbark)	12	12	408	108	SM	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
59	<i>Angophora floribunda</i> (Rough-barked Apple)	8	5	207	20	SM	Appears stable with fair branching structure. Exhibits a very prominent lean to the SE. Crown suppressed on the NW side due to overshadowing.	Crown lifted to 4 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	Nature strip
60	<i>Angophora floribunda</i> (Rough-barked Apple)	9	4	207	24	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the NE. Crown suppressed on the SW side due to overshadowing. 10% deadwood.	Crown lifted to 3 metres	Fair	No Evidence	Long - more than 40 years	4	Moderate	Nature strip
61	<i>Casuarina glauca</i> (Swamp Oak)	12	4	223	40	SM	Appears stable with sound branching structure. Crown suppressed on the SE side due to crowding.	Crown lifted to 3 metres	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
62	<i>Casuarina glauca</i> (Swamp Oak)	12	6	264	54	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
63	<i>Callitris rhomboidea</i> (Port Jackson Pine)	10	4.5	220 + 140x3	40.5	M	Appears stable with fair branching structure. Exhibits multiple high bark inclusions at GL.	Crown lifted to 1.5 metres	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
64	<i>Casuarina glauca</i> (Swamp Oak)	14	7	306	77	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
65	<i>Casuarina glauca</i> (Swamp Oak)	14	5	223	65	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
66	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	20	12	471	204	SM	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	3	High	On-site
67	<i>Angophora floribunda</i> (Rough-barked Apple)	10	5	261	35	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the NE. Crown suppressed on the SW side due to overshadowing.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	Nature strip
68	<i>Eucalyptus sp.</i> (Gum)	16	20	774	280	M	Appears stable with fair branching structure. Exhibits multiple low bark inclusions at 3-4 metres. 10% interior crown deadwood.	Selectively pruned	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
69	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	17	11	532	143	M	Appears stable with sound branching structure. Crown suppressed on the north side due to crowding.	Deadwooded	Good	No Evidence	Long - more than 40 years	3	High	On-site
70	<i>Eucalyptus robusta</i> (Swamp Mahogany)	17	16	452	208	M	Appears stable with sound branching structure. Exhibits large woody surface roots for 6-7 metres radius from trunk.	Deadwooded	Good	No Evidence	Long - more than 40 years	3	High	On-site
71	<i>Banksia serrata</i> (Old Man Banksia)	7	5	239	30	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
72	<i>Eucalyptus grandis</i> (Flooded Gum)	35	16	898	432	M	Appears stable with sound branching structure. Exhibits multiple extended lateral PLs (typical for species).	Deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	On-site

		APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE												
Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
73	<i>Eucalyptus crebra</i> (Narrow-leaved Ironbark)	14	8	299	96	SM	Appears stable with sound branching structure. 10% deadwood.	No Evidence	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	4	Moderate	On-site
74	<i>Callitris rhomboidea</i> (Port Jackson Pine)	12	4	450	44	M	Appears stable with fair branching structure. Exhibits multiple high bark inclusions from GL - 1 metre.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
75	<i>Toona ciliata</i> (Red Cedar)	13	11	484	110	M	Appears stable with sound branching structure.	Selectively pruned	Good	No Evidence	Long - more than 40 years	3	High	On-site
76	<i>Tristaniopsis laurina</i> (Water Gum)	5	4	100x2	16	I	Appears stable with fair branching structure. Exhibits a high bark inclusion at GL. 10% deadwood.	Crown lifted to 2 metres	Good	No Evidence	Long - more than 40 years	5	Moderate	Nature strip
77	<i>Angophora floribunda</i> (Rough-barked Apple)	11	7	376	56	M	Appears stable with sound branching structure. Exhibits a prominent lean to the east. Crown suppressed on the south-west side due to overshadowing.	Crown lifted to 5 metres	Very Good	No Evidence	Long - more than 40 years	4	Moderate	Nature strip
78	<i>Angophora floribunda</i> (Rough-barked Apple)	11	11	328	88	M	Appears stable with sound branching structure. Exhibits a prominent lean to the north-east. Crown suppressed on the south-west side due to overshadowing.10% interior crown deadwood.	Crown lifted to 5 metres. Deadwooded.	Good	No Evidence	Long - more than 40 years	4	Moderate	Nature strip
79	<i>Casuarina glauca</i> (Swamp Oak)	12	6	248	54	SM	Appears stable with fair branching structure. Exhibits a very prominent lean to the east. 10% deadwood.	Crown lifted to 4 metres	Fair	No Evidence	Short 5-15 Years	6	Low	On-site
80	<i>Casuarina glauca</i> (Swamp Oak)	16	10	446	130	M	Appears stable with poor branching structure. Exhibits a high bark inclusion at 3 metres at junction of co-dominant PLs.	Crown lifted to 5 metres	Good	No Evidence	Medium 15-40 Years	6	Low	On-site
81	<i>Casuarina glauca</i> (Swamp Oak)	15	8	330 + 160	96	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at GL.	Crown lifted to 3 metres	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	6	Low	On-site
82	<i>Casuarina glauca</i> (Swamp Oak)	15	8	334	96	M	Appears stable with sound branching structure.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	6	Low	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
83	<i>Casuarina glauca</i> (Swamp Oak)	16	9	497	108	M	Appears stable with poor branching structure. Exhibits a severe bark inclusion at 3 metres. Located close to retaining wall. Prominent lean to the north-west.	Crown lifted to 4 metres	Good	No Evidence	Short 5-15 Years	4	Low	On-site
84	<i>Eucalyptus nicholii</i> (New England Peppermint)	13	12	570	108	M	Appears stable with fair branching structure. Exhibits a high bark inclusion at 2 metres. Prominent lean to the north. Some dieback with 10% deadwood and 10% epicormic growth.	Crown lifted to 5 metres. Deadwooded.	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	4	Moderate	On-site
85	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	22	23	1357	391	M	Appears stable with fair branching structure. Exhibits a moderate basal wound. Moderate wound and cavity at 8 metres and large wound and cavity at 7 and 11 metres. Slightly enlarged bole (possible internal cavity in lower trunk)	Previously lopped at 8-10 metres (Crown restored). Deadwooded.	Good	No Evidence	Short 5-15 Years	1	High	On-site
86	<i>Rhododendron sp.</i> (Rhododendron)	5	3	140	12	OM	Appears stable with poor branching structure.	No Evidence	Dead	No Evidence	Nil	7	Very Low	On-site
87	<i>Camellia japonica</i> (Camellia)	5	6	300	24	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	Moderate	On-site
88	<i>Callistemon viminalis</i> (Weeping Bottlebrush)	7	7	220 + 180	28	OM	Appears stable with poor branching structure.	Crown lifted to 3 metres. Selectively pruned	Poor with sparse crown	No Evidence	Transient (less than 5 years)	6	Very Low	On-site
89	<i>Casuarina glauca</i> (Swamp Oak)	14	9	424	90	M	Appears stable with sound branching structure.	No Evidence	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	4	Moderate	On-site
90	<i>Populus nigra</i> 'Italica' (Lombardy Poplar)	23	8	750	144	OM	Appears stable with poor branching structure. Substantial dieback with 80% deadwood and multiple large dead sections.	No Evidence	Poor with sparse crown	No Evidence	Transient (less than 5 years)	6	Very Low	On-site
91	<i>Morus nigra</i> (Mulberry tree)	8	9	300	63	M	Appears stable with sound branching structure.	selectively pruned	Very Good	No Evidence	Medium 15-40 Years	6	Low	On-site
92	<i>Lophostemon confertus</i> (Brushbox)	17	11	627	143	M	Appears stable with fair branching structure. Exhibits multiple low bark inclusions at 3 metres.	Crown lifted to 3 metres. Deadwooded.	Good	No Evidence	Long - more than 40 years	3	High	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
93	<i>Glochidion ferdinandi</i> (Cheese Tree)	8	6	200	36	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres. Selectively pruned	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
94	<i>Casuarina cunninghamiana</i> (River Oak)	18	16	650x2	224	M	Appears stable with fair branching structure. Exhibits a high bark inclusion at 5 metres. 15% deadwood.	Crown lifted to 4 metres	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	3	Moderate	On-site
95	<i>Banksia integrifolia</i> (Coast Banksia)	11	7	382	56	M	Appears stable with sound branching structure. Located close to existing building awning (50mm clearance to trunk)	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	6	Low	On-site
96	<i>Callistemon viminalis</i> (Weeping Bottlebrush)	7	4	100	16	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres	Fair	No Evidence	Short 5-15 Years	6	Very Low	On-site
97	<i>Banksia integrifolia</i> (Coast Banksia)	8	4	200	16	SM	Appears stable with fair branching structure. Poor form and habit. Prominent lean to the north-east. Located close to existing building.	Crown lifted to 3 metres	Fair	No Evidence	Short 5-15 Years	6	Very Low	On-site
98	<i>Callistemon viminalis</i> (Weeping Bottlebrush)	8	5	150	25	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres	Good	No Evidence	Short 5-15 Years	6	Very Low	On-site
99	<i>Banksia integrifolia</i> (Coast Banksia)	13	6	392	48	M	Appears stable with sound branching structure. Located close to existing building (contacting eave).	Crown lifted to 4 metres	Good	No Evidence	Medium 15-40 Years	6	Low	On-site
100	<i>Banksia integrifolia</i> (Coast Banksia)	11	5	287	40	M	Appears stable with sound branching structure. Exhibits a prominent lean to the south-west.	Crown lifted to 4 metres	Good	No Evidence	Long - more than 40 years	6	Low	On-site
101	<i>Melia azedarach</i> (White Cedar)	12	12	385	120	M	Appears stable with sound branching structure. Exhibits a prominent lean to the west.	selectively pruned	Very Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
102	<i>Casuarina glauca</i> (Swamp Oak)	11	4	140	32	I	Appears stable with poor branching structure. Upper crown suppressed with distorted leader.	Crown lifted to 3 metres	Fair with thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site
103	<i>Casuarina glauca</i> (Swamp Oak)	13	5	217	50	SM	Appears stable with poor branching structure. Upper crown suppressed with distorted leader.	Crown lifted to 3 metres	Fair with thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
104	<i>Angophora costata</i> (Sydney Red Gum)	13	8	363	80	SM	Appears stable with sound branching structure. Crown suppressed on the north-east side due to crowding.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
105	<i>Angophora floribunda</i> (Rough-barked Apple)	9	6	303	42	SM	Appears stable with sound branching structure. Crown suppressed on the south-west side due to crowding. Prominent lean to the NE.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	Moderate	Nature strip
106	<i>Casuarina glauca</i> (Swamp Oak)	9	5	207	45	SM	Appears stable with sound branching structure. Crown suppressed on the north-west side due to crowding. Prominent lean to the SE.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	Low	On-site
107	<i>Casuarina glauca</i> (Swamp Oak)	16	8	322	128	M	Appears stable with sound branching structure. Crown suppressed on the north-west side due to crowding.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
108	<i>Casuarina glauca</i> (Swamp Oak)	13	7	264	80.5	SM	Appears stable with sound branching structure. Located close to edge of driveway.	No Evidence	Good	No Evidence	Short 5-15 Years	4	Low	On-site
109	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	20	20	700	300	M	Appears stable with poor branching structure. Exhibits multiple moderate wounds due previous branch loss (storm damage) on north-east side. Moderate basal wound due to previous borer damage.	No Evidence	Fair	Former borer infestation	Short 5-15 Years	3	Low	On-site
110	<i>Eucalyptus pilularis</i> (Blackbutt)	10	7	250	56	SM	Stability suspect with sound branching structure. Crown suppressed on the south-west side due to crowding. Prominent lean to the NE.	No Evidence	Good	No Evidence	Short 5-15 Years	5	Low	On-site
111	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	20	10	350	170	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
112	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	18	9	450	108	SM	Appears stable with fair branching structure. Exhibits a large wound on the lower trunk due to borer damage.	No Evidence	Fair with thinning crown	Severe borer infestation	Transient (less than 5 years)	4	Very Low	On-site
113	<i>Syncarpia glomulifera</i> (Turpentine)	13	14	700 + 340 + 300	154	M	Appears stable with fair branching structure. Exhibits old fire injury to trunk.	No Evidence	Good	No Evidence	Long - more than 40 years	2	High	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
114	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	17	9	290	99	SM	Appears stable with sound branching structure. Exhibits co-dominant leaders at 4 metres with poor form and habit.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
115	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	20	8	340	120	SM	Appears stable with sound branching structure. Exhibits dieback in main leader at 11 metres with poor form and habit.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
116	<i>Syncarpia glomulifera</i> (Turpentine)	7	4	170	28	I	Appears stable with sound branching structure. Main leader broken out at 3 metres (crown restored).	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	On-site
117	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	16	5	210	65	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
118	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	14	9	497	72	M	Appears stable with poor branching structure. Exhibits a large basal wound and decay with poor form and habit.	No Evidence	Fair with thinning crown	No Evidence	Transient (less than 5 years)	4	Very Low	On-site
119	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	18	6	255	72	SM	Appears stable with sound branching structure. Crown suppressed on the south-west side due to crowding. Prominent lean to the NE.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
120	<i>Angophora costata</i> (Sydney Red Gum)	18	10	369	100	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	2	High	On-site
121	<i>Eucalyptus acmenioides</i> (White Mahogany)	15	7	341	70	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
122	<i>Angophora costata</i> (Sydney Red Gum)	16	7	280	56	SM	Appears stable with sound branching structure. Crown suppressed on the north-west side due to crowding.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
123	<i>Corymbia gummifera</i> (Red Bloodwood)	15	9	390	63	M	Appears stable with sound branching structure. Crown suppressed on the west side due to crowding	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
124	<i>Syncarpia glomulifera</i> (Turpentine)	11	13	500 + 280	143	M	Appears stable with sound branching structure. Located close to the edge of a sandstone 'cliff'.	No Evidence	Good	No Evidence	Long - more than 40 years	2	High	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
125	<i>Angophora costata</i> (Sydney Red Gum)	11	8	300	40	SM	Appears stable with sound branching structure. Prominent lean to the north-west.	No Evidence	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
126	<i>Angophora costata</i> (Sydney Red Gum)	15	8	306	56	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
127	<i>Angophora costata</i> (Sydney Red Gum)	12	18	430 + 270	180	M	Appears stable with sound branching structure. Located close to the edge of a sandstone 'cliff'.	No Evidence	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
128	<i>Eucalyptus pilularis</i> (Blackbutt)	16	13	450 + 500	143	M	Appears stable with fair branching structure. Exhibits multiple high bark inclusions at GL at junctions of co-dominant leaders.	No Evidence	Fair	High borer infestation	Short 5-15 Years	2	High	On-site
129	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	16	5	210	55	I	Appears stable with fair branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
130	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	18	14	600	168	M	Appears stable with sound branching structure. Exhibits multiple moderate wounds on lower trunk due to borer damage from GL to 3 metres. Fill placed around trunk associated with rail access road.	No Evidence	Fair	Severe borer infestation	Transient (less than 5 years)	3	Low	On-site
131	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	16	13	700	143	M	Appears stable with sound branching structure. Exhibits a large wound on the lower trunk due to borer damage. Prominent lean to the south-west. Fill placed around trunk associated with rail access road.	No Evidence	Fair	High borer infestation	Medium 15-40 Years	3	Moderate	On-site
132	<i>Olea europaea subsp. africana</i> (African Olive)	7	10	200x3	70	M	Appears stable with fair branching structure. Exhibits multiple moderate bark inclusions at GL. Located close to the edge of a sandstone 'cliff'.	No Evidence	Fair with slightly thinning crown	No Evidence	Short 5-15 Years	6	Very Low	On-site
133	<i>Pittosporum undulatum</i> (Native Daphne)	9	8	200 + 270	64	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
134	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	20	16	500 + 450 + 200	224	M	Appears stable with fair branching structure. Exhibits a low bark inclusion at GL at junction of co-dominant leaders.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
135	<i>Ficus rubiginosa</i> (Port Jackson Fig)	15	22	700	330	M	Appears stable with fair branching structure. Exhibits multiple co-dominant PLs. Multiple Prop Roots descending from PLs.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site
136	<i>Eucalyptus pilularis</i> (Blackbutt)	12	10	334	70	SM	Appears stable with fair branching structure. Crown suppressed on the north-west side due to overshadowing. Poor form and habit.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
137	<i>Ligustrum lucidum</i> (Broad Leaf Privet)	10	11	200x2	99	M	Appears stable with fair branching structure. Located close to the edge of a sandstone 'cliff'.	No Evidence	Good	No Evidence	Short 5-15 Years	7	Very Low	On-site
138	<i>Ficus rubiginosa</i> (Port Jackson Fig)	8	14	400	112	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
139	<i>Pittosporum undulatum</i> (Native Daphne)	8	9	150x2	63	SM	Appears stable with sound branching structure. Located close to the edge of a sandstone 'cliff'.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
140	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	20	500	340	M	Appears stable with sound branching structure. Crown suppressed on the south-east side due to crowding.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site
141	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	30	14	666	280	M	Appears stable with sound branching structure.	No Evidence	Good	Moderate borer infestation	Long - more than 40 years	3	High	On-site
142	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	13	554	221	M	Appears stable with sound branching structure. Crown suppressed on the NE and SW side due to crowding.	No Evidence	Good	Moderate borer infestation	Medium 15-40 Years	3	Moderate	On-site
143	<i>Ligustrum lucidum</i> (Broad Leaf Privet)	9	7	120x4	42	M	Appears stable with sound branching structure. Exhibits a moderate wound on the lower trunk due to borer damage with decay evident.	No Evidence	Good	No Evidence	Medium 15-40 Years	7	Very Low	On-site
144	<i>Pittosporum undulatum</i> (Native Daphne)	9	9	180x2	72	M	Appears stable with sound branching structure. Growing on rock-shelf.	No Evidence	Fair with thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
145	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	10	6	497	24	M	Appears stable with fair branching structure. Exhibits a prominent lean to the north-east. Multiple wounds on lower trunk. Large axial wound from GL to 4 metres with decay evident. Crown suppressed on south-west side due to overshadowing.	No Evidence	Fair with thinning crown	High Phellinus sp. (Bracket Fungus) infection in lower trunk.	Transient (less than 5 years)	4	Very Low	On-site
146	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	12	8	341	48	SM	Appears stable with sound branching structure. Exhibits multiple small wounds on lower trunk due to borer damage. Prominent lean to the north-east.	No Evidence	Fair	Low borer infestation	Long - more than 40 years	4	Moderate	On-site
147	<i>Ficus rubiginosa</i> (Port Jackson Fig)	9	6	172	36	SM	Appears stable with sound branching structure.	No Evidence	Fair	No Evidence	Long - more than 40 years	5	Moderate	On-site
148	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	30	15	631	315	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site
149	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	15	6	462	18	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the north-east (self corrected). Growing at toe of embankment.	Previously lopped at 10-12 metres (Crown restored).	Good	No Evidence	Short 5-15 Years	4	Low	On-site
150	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	9	4	175	12	I	Appears stable with sound branching structure. Upper crown suppressed and distorted due to overshadowing. Poor form and habit.	No Evidence	Fair	Low borer infestation	Short 5-15 Years	4	Low	On-site
151	<i>Syzygium paniculatum</i> (Magenta Cherry)	6	5	121	25	SM	Appears stable with sound branching structure.	No Evidence	Good	Moderate foliar insect infestation	Long - more than 40 years	5	Moderate	On-site
152	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	22	11	580	132	M	Stability suspect with sound branching structure. Large and moderate basal wounds with decay evident.	No Evidence	Fair	Suspected heartrot/butt rot infection (Gymnopilus sp)	Short 5-15 Years	3	Low	On-site
153	<i>Syzygium paniculatum</i> (Magenta Cherry)	11	6	185	54	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	Moderate foliar insect infestation	Long - more than 40 years	4	Moderate	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
154	<i>Syzygium paniculatum</i> (Magenta Cherry)	9	7	175	49	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	Moderate foliar insect infestation	Long - more than 40 years	4	Moderate	On-site
155	<i>Syzygium paniculatum</i> (Magenta Cherry)	8	5	178	30	SM	Appears stable with sound branching structure. Crown suppressed on the north-east side due to crowding.	Crown lifted to 2 metres	Good	Moderate foliar insect infestation	Long - more than 40 years	4	Moderate	On-site
156	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	30	13	580	260	M	Appears stable with sound branching structure. Crown suppressed on the east side due to crowding.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site
157	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	30	13	630	260	M	Appears stable with sound branching structure. Crown suppressed on the west side due to crowding.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
158	<i>Quercus robur</i> (English Oak)	9	7	261	42	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
159	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	7	5	293	25	SM	Appears stable with fair branching structure. Exhibits a low bark inclusion at 1.5 metres.	Crown lifted to 3 metres	Very Good	No Evidence	Long - more than 40 years	1	High	On-site
160	<i>Flindersia australis</i> (Crows Foot Ash)	8	5	204	30	SM	Appears stable with sound branching structure. Exhibits a low bark inclusion at 2 metres.	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	Moderate	On-site
161	<i>Melia azedarach</i> (White Cedar)	9	11	303	77	SM	Appears stable with sound branching structure. Exhibits a small basal wound.	Crown lifted to 3 metres	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
162	<i>Eucalyptus sp.</i> (Gum)	5	5	166	0	SM	Stability suspect with poor branching structure. Exhibits a very prominent lean to the north.	Crown lifted to 3 metres	Dead	High borer infestation	Transient (less than 5 years)	7	Very Low	On-site
163	<i>Melaleuca styphelioides</i> (Prickly Paperbark)	8	6	207	36	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
164	<i>Casuarina glauca</i> (Swamp Oak)	16	13	440	156	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
165	<i>Casuarina glauca</i> (Swamp Oak)	13	3	150	21	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres	Good	No Evidence	Medium 15-40 Years	5	Low	On-site
166	<i>Syzygium paniculatum</i> (Magenta Cherry)	12	8	223	88	SM	Appears stable with sound branching structure. Crown suppressed on the south-east side due to crowding.	Crown lifted to 3 metres	Very Good	Low foliar insect infestation	Long - more than 40 years	4	Moderate	On-site
167	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	13	538	195	M	Appears stable with fair branching structure. Exhibits co-dominant PLs/trunks at 3 metres.	No Evidence	Very Good	No Evidence	Medium 15-40 Years	3	Moderate	On-site
168	<i>Tristaniopsis laurina</i> (Water Gum)	8	7	170x2	21	SM	Appears stable with poor branching structure. Exhibits a high bark inclusion at GL.	No Evidence	Good	No Evidence	Short 5-15 Years	4	Low	On-site
169	<i>Syzygium paniculatum</i> (Magenta Cherry)	12	11	296	77	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
170	<i>Pittosporum undulatum</i> (Native Daphne)	10	7	180 + 200	63	M	Appears stable with fair branching structure.	selectively pruned	Fair with thinning crown	Low English Ivy infestation	Short 5-15 Years	4	Low	On-site
171	<i>Cinnamomum camphora</i> (Camphor Laurel)	4	4	60	16	I	Appears stable with poor branching structure. Exhibits multiple epicormic arising from old stump.	Previously cut to GL (crown restored)	Good	No Evidence	Short 5-15 Years	7	Very Low	On-site
172	<i>Callistemon salignus</i> (Willow Bottlebrush)	7	3	90 + 80 + 70	16.5	SM	Appears stable with sound branching structure. Crown suppressed on north-east side due to overshadowing.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	Low	On-site
173	<i>Callistemon salignus</i> (Willow Bottlebrush)	7	5	200	27.5	SM	Appears stable with fair branching structure. Crown suppressed on north-east side due to overshadowing. Exhibits multiple low bark inclusions at GL	No Evidence	Good	No Evidence	Medium 15-40 Years	5	Low	On-site
174	<i>Corymbia citriodora</i> (Lemon-scented Gum)	16	16	550 + 300 + 240	192	M	Appears stable with poor branching structure. Exhibits multiple high bark inclusions at GL. Very prominent lean to the north (self-corrected).	No Evidence	Very Good	No Evidence	Short 5-15 Years	3	Moderate	On-site
175	<i>Lophostemon confertus</i> (Brushbox)	14	6	270	84	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
176	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	12	7	217	35	I	Appears stable with fair branching structure. Crown suppressed on north-east side due to overshadowing. Prominent lean to the south-west.	No Evidence	Good	No Evidence	Short 5-15 Years	5	Low	On-site
177	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	22	14	550	252	M	Appears stable with fair branching structure. Exhibits a low bark inclusion at 6 metres. Main leader broken out at 15 metres (storm damage).	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
178	<i>Eucalyptus paniculata</i> (Grey Ironbark)	17	7	229	70	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
179	<i>Eucalyptus paniculata</i> (Grey Ironbark)	15	8	325	104	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
180	<i>Eucalyptus pilularis</i> (Blackbutt)	18	8	427	80	SM	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at 4.5 metres at junction of co-dominant leaders. Small wound due branch loss at 4.5 metres.	No Evidence	Very Good	Moderate borer infestation	Medium 15-40 Years	3	Moderate	On-site
181	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	19	9	400	144	SM	Appears stable with sound branching structure. Crown suppressed on the south-west side due to crowding.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
182	<i>Jacaranda mimosifolia</i> (Jacaranda)	12	14	573	112	M	Appears stable with sound branching structure. Exhibits woody surface roots for 5 metres radius. Prominent lean to the north-east.	Selectively pruned & deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
183	<i>Podocarpus elatus</i> (Brown Pine)	14	12	576	132	M	Appears stable with fair branching structure.	Selectively pruned.	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
184	<i>Jacaranda mimosifolia</i> (Jacaranda)	15	16	752	160	M	Appears stable with sound branching structure.	Selectively crown thinned & deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
185	<i>Malus floribunda</i> (Japanese Crab Apple)	4.5	4	160	14	I	Appears stable with fair branching structure. Exhibits a large axial wound with decay from GL to 5 metres.	Crown lifted to 2 metres	Fair	No Evidence	Short 5-15 Years	5	Low	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
186	<i>Malus floribunda</i> (Japanese Crab Apple)	4	3	110	9	I	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	No Evidence	Short 5-15 Years	5	Low	On-site
187	<i>Malus floribunda</i> (Japanese Crab Apple)	4	3	160	9	I	Appears stable with fair branching structure.	Crown lifted to 2 metres	Very Good	No Evidence	Short 5-15 Years	5	Low	On-site
188	<i>Jacaranda mimosifolia</i> (Jacaranda)	14	17	691	204	M	Appears stable with sound branching structure.	Selectively crown thinned & deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
189	<i>Jacaranda mimosifolia</i> (Jacaranda)	12	14	468	126	M	Appears stable with sound branching structure. Crown suppressed on the north-east side due to crowding.	Selectively crown thinned & deadwooded	Good	No Evidence	Long - more than 40 years	2	High	On-site
190	<i>Jacaranda mimosifolia</i> (Jacaranda)	9	7	239	49	SM	Appears stable with fair branching structure. Crown suppressed on the south-west side due to overshadowing.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
191	<i>Eucalyptus sideroxylon</i> (Mugga Ironbark)	16	10	460	110	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at 3 metres. Multiple small to moderate wounds in trunk and PLs due borer damage.	Deadwooded	Fair	High borer infestation	Short 5-15 Years	3	Moderate	On-site
192	<i>Eucalyptus sideroxylon</i> (Mugga Ironbark)	16	15	653	165	M	Appears stable with sound branching structure.	Deadwooded	Good	Moderate borer infestation	Long - more than 40 years	3	High	On-site
193	<i>Corymbia maculata</i> (Spotted Gum)	20	10	550	120	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
194	<i>Casuarina glauca</i> (Swamp Oak)	18	9	379	135	M	Appears stable with sound branching structure.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	3	High	On-site
195	<i>Casuarina glauca</i> (Swamp Oak)	18	7	433	91	M	Stability suspect with sound branching structure. Exhibits substantial dieback with 70% deadwood. Decay in lower trunk.	Crown lifted to 3 metres	Poor with sparse crown	High Phellinus sp. (Bracket Fungus) infection in lower trunk.	Transient (less than 5 years)	5	Very Low	On-site

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Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
196	<i>Eucalyptus sp.</i> (Gum)	25	16	659	336	M	Appears stable with sound branching structure. Crown suppressed on the SE side due to crowding. Prominent lean to the north-west. Moderate wound at 5 metres due branch loss.	Selectively pruned.	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
197	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	30	20	680 + 620 + 500	400	M	Appears stable with fair branching structure. Exhibits a moderate wound at 2 metres in PL with decay evident. Moderate wound at 10 metres due to Cockatoo damage (possible cavity). 3 x co-dominant leaders from 3 metres.	Selectively pruned.	Very Good	High Phellinus sp. (Bracket Fungus) infection in lower trunk.	Medium 15-40 Years	2	High	On-site
198	<i>Eucalyptus botryoides</i> (Bangalay)	20	17	631	255	M	Appears stable with sound branching structure.	Crown lifted to 3 metres	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
199	<i>Melaleuca armillaris</i> (Bracelet Honey Myrtle)	7	7	230 + 180	21	OM	Stability suspect with poor branching structure. Crown suppressed on the south side due to overshadowing. Exhibits a large basal wound and cavity due previous branch loss. Multiple severe bark inclusions at GL.	Crown lifted to 3 metres	Poor with sparse crown	No Evidence	Transient (less than 5 years)	5	Very Low	On-site
200	<i>Melaleuca armillaris</i> (Bracelet Honey Myrtle)	10	12	370 + 280	72	OM	Stability suspect with poor branching structure. Crown suppressed on the south-east side due to overshadowing. Exhibits multiple severe bark inclusions at GL. Large wound and fracture at 0.5 metres. 30% deadwood.	Crown lifted to 3 metres	Fair with thinning crown	No Evidence	Transient (less than 5 years)	4	Very Low	On-site
201	<i>Eucalyptus botryoides</i> (Bangalay)	13	16	446	144	M	Appears stable with sound branching structure. Exhibits multiple large woody surface roots for 6 metres radius.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
202	<i>Araucaria heterophylla</i> (Norfolk Island Pine)	11	7	223	63	I	Appears stable with sound branching structure. Located close to existing kerb.	Crown lifted to 2 metres	Very Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
203	<i>Eucalyptus botryoides</i> (Bangalay)	15	15	525	135	M	Appears stable with sound branching structure. Crown suppressed on the west side due to overshadowing. Exhibits a prominent lean to the east.	Crown lifted to 2 metres	Very Good	No Evidence	Long - more than 40 years	3	High	On-site

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Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
204	<i>Eucalyptus botryoides</i> (Bangalay)	16	14	611	182	M	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
205	<i>Corymbia citriodora</i> (Lemon-scented Gum)	16	12	363	96	M	Appears stable with poor branching structure. Exhibits multiple large wounds to trunk due to borer damage.	No Evidence	Fair	Severe borer infestation	Transient (less than 5 years)	3	Very Low	On-site
206	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	27	18	650	360	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
207	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	10	500	150	SM	Appears stable with sound branching structure. Crown suppressed on the north side due to crowding.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site
208	<i>Corymbia citriodora</i> (Lemon-scented Gum)	20	9	350	117	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
209	<i>Eucalyptus botryoides</i> (Bangalay)	18	11	433	143	M	Appears stable with fair branching structure. Crown suppressed on the west side due to overshadowing. Exhibits a prominent lean to the east. 20% epicormic growth.	Crown lifted to 3 metres	Good	No Evidence	Long - more than 40 years	3	High	On-site
210	<i>Eucalyptus botryoides</i> (Bangalay)	14	10	363	90	M	Appears stable with fair branching structure. Crown suppressed on the west side due to overshadowing. Exhibits a prominent lean to the east. 20% epicormic growth.	Crown lifted to 4 metres	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
211	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	14	600	252	M	Appears stable with fair branching structure. Exhibits a large axial wound with decay from 3 to 5 metres.	No Evidence	Good	High <i>Phellinus</i> sp. (Bracket Fungus) infection at 3 to 5 metres.	Medium 15-40 Years	3	Moderate	On-site
212	<i>Eucalyptus botryoides</i> (Bangalay)	20	20	630	240	M	Appears stable with sound branching structure. Exhibits a prominent lean to the east.	Selectively pruned	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
213	<i>Eucalyptus botryoides</i> (Bangalay)	22	16	605	272	M	Appears stable with sound branching structure. Crown suppressed on the west side due to crowding. Exhibits a small axial wound at 5 metres.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
214	<i>Eucalyptus paniculata</i> (Grey Ironbark)	13	11	380 + 250	110	SM	Appears stable with fair branching structure. Located within a small traffic island within carpark. Roots lifting kerb and asphalt pavement. Moderate wound at 5 metres due branch loss. Crown suppressed south side due crowding.	Crown lifted to 4 metres	Very Good	Moderate <i>Phellinus</i> sp. (Bracket Fungus) infection at 5 metres.	Short 5-15 Years	3	Low	On-site
215	<i>Eucalyptus paniculata</i> (Grey Ironbark)	15	12	392	132	SM	Appears stable with sound branching structure. Located within a small traffic island within carpark. Roots lifting kerb and asphalt pavement.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	On-site
216	<i>Eucalyptus botryoides</i> (Bangalay)	15	12	446	120	M	Appears stable with sound branching structure. Crown suppressed on the south side due to overshadowing. Exhibits a prominent lean to the north (self-corrected).	Crown lifted to 4 metres	Very Good	High <i>Phellinus</i> sp. (Bracket Fungus) infection in PL at 3 to 4 metres.	Medium 15-40 Years	3	Moderate	On-site
217	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	22	11	484	154	M	Appears stable with sound branching structure. Crown suppressed on the south side due to overshadowing. Poor (contorted) form and habit.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site
218	<i>Eucalyptus botryoides</i> (Bangalay)	15	11	401	88	SM	Appears stable with sound branching structure. Crown suppressed on the east side due to crowding. Prominent lean to the north.	Crown lifted to 4 metres	Fair	No Evidence	Medium 15-40 Years	3	Moderate	On-site
219	<i>Eucalyptus acmenioides</i> (White Mahogany)	17	8	322	96	SM	Appears stable with sound branching structure. 30% epicormic growth.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
220	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	35	20	650 + 300	600	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
221	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	12	710	192	M	Appears stable with sound branching structure. Crown suppressed on the east side due to crowding. Slight lean to the west.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site
222	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	27	11	688	165	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site

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Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
223	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	18	8	427	48	SM	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	3	High	On-site
224	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	10	554	130	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	2	High	On-site
225	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	10	8	255	40	SM	Appears stable with fair branching structure. Exhibits multiple co-dominant leaders. Poor form and habit. Upper crown suppressed and distorted due to overshadowing.	Deadwooded	Fair	No Evidence	Short 5-15 Years	4	Low	On-site
226	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	18	9	414	99	SM	Appears stable with sound branching structure. Crown suppressed on the south side due to crowding.	Deadwooded	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
227	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	30	13	742	234	M	Appears stable with fair branching structure. Exhibits a moderate wound at 10 metres at junction of PL due Cockatoo damage with suspected cavity.	Deadwooded	Good	No Evidence	Long - more than 40 years	2	High	On-site
228	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	16	799	288	M	Appears stable with sound branching structure. Exhibits a prominent lean to the north.	Deadwooded	Good	No Evidence	Long - more than 40 years	2	High	On-site
229	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	15	599	285	M	Appears stable with sound branching structure. Crown suppressed on the south side due to crowding.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site
230	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	14	500 + 330	280	M	Appears stable with sound branching structure. Crown suppressed on the west side due to crowding.	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	On-site
231	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	17	8	330	72	SM	Appears stable with fair branching structure. Exhibits a prominent lean to the north.	No Evidence	Fair	High borer infestation (lower trunk)	Short 5-15 Years	4	Low	On-site
232	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	20	17	950	272	M	Appears stable with sound branching structure. Exhibits a prominent lean to the north. Co-dominant leaders at 2 metres.	Deadwooded	Good	High borer infestation (lower trunk)	Medium 15-40 Years	2	High	On-site
233	<i>Allocasuarina torulosa</i> (Forest Oak)	7	4	264	20	M	Appears stable with sound branching structure.	Crown lifted to 2 metres.	Good	No Evidence	Short 5-15 Years	5	Low	On-site

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									Vigour	Pest & Disease				
234	<i>Allocasuarina torulosa</i> (Forest Oak)	8	5	274	30	M	Appears stable with fair branching structure. Located within small traffic island and close to stormwater drain. Multiple moderate bark inclusions at 1.2 metres. Moderate wound at 2 metres due branch loss.	Crown lifted to 2 metres.	Good	No Evidence	Short 5-15 Years	5	Low	On-site
235	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	12	11	325	88	SM	Appears stable with fair branching structure. Exhibits a large axial wound at 1-2 metres with decay evident.	No Evidence	Fair	Low borer infestation (lower trunk). Low Phellinus sp. (Bracket Fungus infection.	Short 5-15 Years	4	Low	On-site
236	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	8	4	287	20	SM	Appears stable with fair branching structure. Located within a narrow traffic island. Exhibits a prominent lean to the north. Crown suppressed south side due to crowding.	Crown lifted to 2 metres.	Fair with slightly thinning crown	No Evidence	Short 5-15 Years	4	Low	On-site
237	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	7	3	175	15	I	Appears stable with sound branching structure. Located within a narrow traffic island.	Crown lifted to 2 metres.	Fair with slightly thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site
238	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	7	5	248	25	SM	Appears stable with sound branching structure. Located within a narrow traffic island.	Crown lifted to 2 metres.	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
239	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	8	5	245	30	SM	Appears stable with sound branching structure. Located within a narrow traffic island.	Crown lifted to 2 metres.	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
240	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	9	6	478	48	M	Appears stable with fair branching structure. Located within a narrow traffic island. Exhibits a moderate bark inclusion at 1.2 metres.	Crown lifted to 2 metres.	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
241	<i>Allocasuarina torulosa</i> (Forest Oak)	6	3	127	12	SM	Appears stable with poor branching structure. Exhibits multiple moderate bark inclusions at 2 metres.	Crown lifted to 2 metres.	Poor with sparse crown	No Evidence	Transient (less than 5 years)	5	Very Low	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
242	<i>Araucaria bidwillii</i> (Bunya-bunya Pine)	7	5	226	25	i	Appears stable with sound branching structure. Crown suppressed on north-west side due to crowding	Crown lifted to 3 metres.	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
243	<i>Jacaranda mimosifolia</i> (Jacaranda)	9	9	328	54	SM	Appears stable with sound branching structure. Prominent lean to the north. Co-dominant leaders at 1.5 metres.	Crown lifted to 3 metres.	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
244	<i>Allocasuarina torulosa</i> (Forest Oak)	9	3	200	15	SM	Appears stable with fair branching structure. Exhibits a high bark inclusion at 0.5 metres.	Crown lifted to 4 metres.	Fair with thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site
245	<i>Allocasuarina torulosa</i> (Forest Oak)	7	4	200	16	SM	Appears stable with fair branching structure. Exhibits a high bark inclusion at 0.7 metres.	Crown lifted to 3 metres.	Fair with thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site
246	<i>Allocasuarina torulosa</i> (Forest Oak)	7	5	230	20	SM	Appears stable with fair branching structure.	Crown lifted to 3 metres.	Fair with thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site
247	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	13	13	330	117	SM	Appears stable with fair branching structure.	Crown lifted to 3 metres.	Good	No Evidence	Medium 15-40 Years	3	Moderate	On-site
248	<i>Glochidion ferdinandi</i> (Cheese Tree)	5	5	213	15	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres.	Very Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
249	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	7	4	309	12	SM	Appears stable with fair branching structure. Located within a narrow traffic island.	Crown lifted to 3 metres.	Good	No Evidence	Medium 15-40 Years	5	Low	On-site
250	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	9	5	299	30	SM	Appears stable with sound branching structure. Located within a narrow traffic island.	Crown lifted to 3 metres.	Very Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
251	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	7	6	280	24	SM	Appears stable with sound branching structure. Located within a narrow traffic island.	Crown lifted to 3 metres.	Very Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
252	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	6	2	159	6	i	Appears stable with sound branching structure. Located within a narrow traffic island.	Crown lifted to 3 metres.	Fair	No Evidence	Short 5-15 Years	5	Low	On-site
253	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	8	3	217	15	i	Appears stable with sound branching structure. Crown suppressed on the north side due to crowding. Located within a narrow traffic island.	Crown lifted to 3 metres.	Good	No Evidence	Medium 15-40 Years	5	Low	On-site
254	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	10	6	344	42	SM	Appears stable with sound branching structure. Located within a narrow traffic island.	Crown lifted to 3 metres.	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	4	Moderate	On-site
255	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	5	3	210	6	i	Appears stable with fair branching structure. Located within a narrow traffic island.	Crown lifted to 3 metres.	Fair with thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site
256	<i>Allocasuarina torulosa</i> (Forest Oak)	7	3	204	15	SM	Appears stable with fair branching structure. Located within a narrow traffic island.	Crown lifted to 3 metres.	Fair	No Evidence	Short 5-15 Years	5	Low	On-site
257	<i>Allocasuarina torulosa</i> (Forest Oak)	6	3	159	12	SM	Appears stable with fair branching structure. Located within a narrow traffic island.	Crown lifted to 3 metres.	Fair with slightly thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site
258	<i>Allocasuarina torulosa</i> (Forest Oak)	6	3	111	12	i	Appears stable with sound branching structure. Located within a narrow traffic island.	Crown lifted to 2 metres.	Fair with thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site
259	<i>Allocasuarina torulosa</i> (Forest Oak)	8	3	159	18	SM	Appears stable with sound branching structure. Located within a narrow traffic island.	Crown lifted to 2 metres.	Fair with thinning crown	No Evidence	Short 5-15 Years	5	Low	On-site
260	<i>Allocasuarina torulosa</i> (Forest Oak)	6	4	185	16	SM	Appears stable with sound branching structure. Located within a narrow traffic island.	Crown lifted to 2 metres.	Good	No Evidence	Short 5-15 Years	5	Low	On-site
261	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	10	9	306	54	SM	Appears stable with fair branching structure. Exhibits multiple moderate bark inclusions at 3 metres.	Crown lifted to 3 metres.	Very Good	Low borer infestation	Medium 15-40 Years	4	Moderate	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
262	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	18	14	450 + 570	182	M	Appears stable with fair branching structure. Co-dominant leaders at GL. Small cavities in branch collars at 4 & 5 metres.	Crown lifted to 4 metres.	Fair with thinning crown	No Evidence	Medium 15-40 Years	4	Moderate	On-site
263	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	10	7	330	42	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres.	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
264	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	10	6	400	42	SM	Appears stable with sound branching structure. Exhibits multiple moderate bark inclusions at 2 to 3 metres.	Crown lifted to 3 metres.	Good	No Evidence	Long - more than 40 years	4	Moderate	On-site
265	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	20	13	525	182	SM	Appears stable with sound branching structure. Exhibits multiple small wounds on lower trunk due to borer damage.	No Evidence	Very Good	Low borer infestation (lower trunk).	Long - more than 40 years	3	High	On-site
266	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	21	847	357	M	Appears stable with sound branching structure. Exhibits multiple extended lateral PLs.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
267	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	18	16	630	176	M	Appears stable with sound branching structure. Exhibits multiple moderate wounds on lower trunk due to borer damage. Surrounded by asphalt pavement.	Deadwooded	Fair	No Evidence	Short 5-15 Years	3	Low	On-site
268	<i>Eucalyptus botryoides</i> (Bangalay)	8	8	331	32	SM	Appears stable with fair branching structure. Exhibits multiple small wounds due to borer damage.	Crown lifted to 3 metres.	Good	High borer infestation	Short 5-15 Years	4	Low	On-site
269	<i>Eucalyptus botryoides</i> (Bangalay)	9	10	312	50	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres.	Good	No Evidence	Medium 15-40 Years	4	Moderate	On-site
270	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	25	20	1000	380	M	Appears stable with sound branching structure. Exhibits multiple co-dominant leaders at 2 to 4 metres.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	On-site
271	<i>Sapium sebiferum</i> (Chinese Tallow tree)	5	5	220	20	I	Appears stable with sound branching structure. Located within small raised planter box.	Crown lifted to 1 metre.	Very Good	No Evidence	Medium 15-40 Years	5	Low	On-site

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
272	<i>Sapium sebiferum</i> (Chinese Tallow tree)	5	4	150	16	I	Appears stable with sound branching structure. Located within small raised planter box.	Crown lifted to 1 metre.	Very Good	No Evidence	Medium 15-40 Years	5	Low	On-site
273	<i>Sapium sebiferum</i> (Chinese Tallow tree)	5	5	220	20	I	Appears stable with sound branching structure. Located within small raised planter box.	Crown lifted to 1 metre.	Very Good	No Evidence	Medium 15-40 Years	5	Low	On-site
274	<i>Sapium sebiferum</i> (Chinese Tallow tree)	4	4	150	12	I	Appears stable with sound branching structure. Located within small raised planter box.	Crown lifted to 1 metre.	Very Good	No Evidence	Medium 15-40 Years	5	Low	On-site
275	<i>Casuarina glauca</i> (Swamp Oak)	15	6	309	72	M	Appears stable with sound branching structure. Located close to building.	Crown lifted to 3 metres.	Good	No Evidence	Medium 15-40 Years	6	Low	On-site

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
1	<i>Fraxinus Raywood</i> (Claret Ash)	M	4.2	2.1	55.5	Located within footprint of proposed paved forecourt	Proposed works will necessitate removal.	Remove tree (poor specimen)
2	<i>Fraxinus Raywood</i> (Claret Ash)	M	3.1	1.9	29.4	Located within small seating area within footprint of proposed paved forecourt. Excavations for pavement sub-grade within TPZ/SRZ (within footprint of existing concrete pavement to be demolished).	Decrease in present encroachment. No adverse impact provided that all works within TPZ are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing pavement in accordance with Section 10.5. Undertake all excavations for pavement sub-grade within TPZ in accordance with Section 10.6.
3	<i>Fraxinus Raywood</i> (Claret Ash)	M	3.6	2.0	40.7	Located within small seating area within footprint of proposed paved forecourt. Excavations for pavement sub-grade within TPZ/SRZ (within footprint of existing concrete pavement to be demolished).	Decrease in present encroachment. No adverse impact provided that all works within TPZ are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing pavement in accordance with Section 10.5. Undertake all excavations for pavement sub-grade within TPZ in accordance with Section 10.6.
4	<i>Fraxinus Raywood</i> (Claret Ash)	M	3.9	2.1	47.7	Located within small seating area within footprint of proposed paved forecourt. Excavations for pavement sub-grade within TPZ/SRZ (within footprint of existing concrete pavement to be demolished).	Decrease in present encroachment. No adverse impact provided that all works within TPZ are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing pavement in accordance with Section 10.5. Undertake all excavations for pavement sub-grade within TPZ in accordance with Section 10.6.
5	<i>Fraxinus Raywood</i> (Claret Ash)	M	3.5	1.9	38.5	Located within footprint of proposed paved forecourt	Proposed works will necessitate removal.	Remove tree.
6	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	8.0	2.7	201.0	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to north-west to be maintained intact.	No adverse impact.	To be retained - no special Tree Protection Measures required.
7	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	6.0	2.3	113.0	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to north-west to be maintained intact.	No adverse impact.	To be retained - no special Tree Protection Measures required.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
8	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	6.0	2.3	113.0	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to north-west to be maintained intact.	No adverse impact.	To be retained - no special Tree Protection Measures required.
9	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	8.3	2.6	213.7	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to north-west to be maintained intact.	No adverse impact.	To be retained - no special Tree Protection Measures required.
10	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	6.0	2.3	113.0	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to north-west to be maintained intact.	No adverse impact.	To be retained - no special Tree Protection Measures required.
11	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	3.0	1.7	28.3	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to north-west to be maintained intact.	No adverse impact.	To be retained - no special Tree Protection Measures required.
12	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	2.9	1.6	25.5	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to north-west to be maintained intact.	No adverse impact.	To be retained - no special Tree Protection Measures required.
13	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	4.1	1.9	51.5	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to north-west to be maintained intact.	No adverse impact.	To be retained - no special Tree Protection Measures required.
14	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	5.4	2.2	91.6	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to south-east and existing footpath to north-west within TPZ to be maintained intact. Existing masonry retaining wall offset 2.7 metres north and 1 metre SW to be demolished within TPZ. New retaining wall offset 2.8 metres NW (beyond line of existing wall)	No adverse impact provided that all demolition works and all excavations for new wall foundations are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection fence in accordance with Section 10.3. Demolish existing walls within TPZ in accordance with Section 10.5. Undertake all excavations for new retaining wall foundations within TPZ in accordance with Section 10.6.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
15	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	3.3	1.8	34.2	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to south-east and existing footpath to north-west within TPZ to be maintained intact. Existing masonry retaining wall offset 2.5 metres NW to be demolished within TPZ. New retaining wall offset 2.9 metres NW (beyond line of existing wall). No actual incursion to root zone due to barrier created by existing wall.	No adverse impact provided that all demolition works and all excavations for new wall foundations are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection fence in accordance with Section 10.3. Demolish existing walls within TPZ in accordance with Section 10.5. Undertake all excavations for new retaining wall foundations within TPZ in accordance with Section 10.6.
16	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	3.8	1.8	44.2	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to south-east and existing footpath to north-west within TPZ to be maintained intact. Existing masonry retaining wall offset 2.4 metres NW to be demolished within TPZ. New retaining wall offset 3.0 metres NW (beyond line of existing wall). No actual incursion to root zone due to barrier created by existing wall.	No adverse impact provided that all demolition works and all excavations for new wall foundations are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection fence in accordance with Section 10.3. Demolish existing walls within TPZ in accordance with Section 10.5. Undertake all excavations for new retaining wall foundations within TPZ in accordance with Section 10.6.
17	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	3.8	1.8	44.2	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to south-east and existing footpath to north-west within TPZ to be maintained intact. Existing masonry retaining wall offset 2.3 metres NW to be demolished within TPZ. New retaining wall offset 3.0 metres NW (beyond line of existing wall). No actual incursion to root zone due to barrier created by existing wall.	No adverse impact provided that all demolition works and all excavations for new wall foundations are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection fence in accordance with Section 10.3. Demolish existing walls within TPZ in accordance with Section 10.5. Undertake all excavations for new retaining wall foundations within TPZ in accordance with Section 10.6.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
18	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	3.8	1.8	44.2	Located within existing garden area to be maintained. Existing entry path, stairs and associated retaining walls to south-east and existing footpath to north-west within TPZ to be maintained intact. Existing masonry retaining wall offset 2.7 metres NW to be demolished within TPZ. New retaining wall offset 3.6 metres NW (beyond line of existing wall). No actual incursion to root zone due to barrier created by existing wall.	No adverse impact provided that all demolition works and all excavations for new wall foundations are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection fence in accordance with Section 10.3. Demolish existing walls within TPZ in accordance with Section 10.5. Undertake all excavations for new retaining wall foundations within TPZ in accordance with Section 10.6.
19	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	6.0	2.3	113.0	Existing entry path, stairs and associated retaining walls to south-east within TPZ to be maintained intact. Proposed new paved area offset 1.2 metres north-west at RL? (partly within footprint of existing pathway). Excavations/engineered fill for pavement sub-grade within TPZ/SRZ. Encroachment to TPZ = 36% (increase of 15% from present situation).	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Excavations/fill for new pavement sub-grade are likely to result in an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection fence in accordance with Section 10.3. Demolish existing path & walls within TPZ in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6. Install new pavement within TPZ in accordance with Sections 10.8 & 10.9.
20	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	4.5	2.0	63.6	Existing entry path, stairs and associated retaining walls to south-east within TPZ to be maintained intact. Proposed new paved area offset 1.6 metres north-west at RL? Excavations/engineered fill for pavement subgrade within TPZ/SRZ. Encroachment to TPZ = 27%.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Excavations/fill for new pavement sub-grade are likely to result in an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection fence in accordance with Section 10.3. Demolish existing path & walls within TPZ in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6. Install new pavement within TPZ in accordance with Sections 10.8 & 10.9.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
21	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	6.3	2.3	124.6	Existing entry path, stairs and associated retaining walls to south-east within TPZ to be maintained intact. Proposed new paved area offset 1.6 metres north-west at RL? Excavations/engineered fill for pavement subgrade within TPZ/SRZ. Encroachment to TPZ = 38%.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works are likely to result in a significant adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection fence in accordance with Section 10.3. Demolish existing path & walls within TPZ in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6. Install new pavement within TPZ in accordance with Sections 10.8 & 10.9.
22	<i>Eucalyptus cinerea</i> (Argyle Apple)	P	7.2	2.7	162.8	Surrounded by new pavement with small pavement opening. Excavations for pavement subgrade within TPZ/SRZ. Encroachment to TPZ = <70%	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works are likely to result in a significant adverse impact.	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
23	<i>Prunus cerasifera</i> 'Nigra' (Ornamental Flowering Plum)	M	2.2	1.6	14.6	Located within footprint of proposed entry pavement/deck at RL16.30 (800mm below existing grade)	Proposed works will necessitate removal.	Remove tree.
24	<i>Malus x purpurea</i> 'Eleyi' (Crabapple)	M	3.0	1.7	28.3	Located within footprint of proposed entry pavement at RL 16.30 (800mm below existing grade)	Proposed works will necessitate removal.	Remove tree.
25	<i>Banksia serrata</i> (Old Man Banksia)	M	4.2	2.1	55.4	Located within footprint of proposed building.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
26	<i>Banksia serrata</i> (Old Man Banksia)	M	4.2	2.1	55.4	Located within footprint of proposed building.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
27	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	4.0	2.1	50.6	Located within footprint of proposed building.	Proposed works will necessitate removal (High Retention Value). There are no feasible options that can be recommended that would permit the preservation of this tree.	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
28	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	5.5	2.2	94.8	Located within footprint of proposed building.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
29	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	3.3	1.8	34.1	Located within footprint of proposed building/basement.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
30	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	3.5	1.8	39.2	Located within footprint of proposed building/basement.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
31	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	3.5	1.6	38.5	Located within footprint of proposed building/basement.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
32	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	5.0	2.1	79.0	Located within footprint of proposed building/basement.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
33	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	3.6	1.8	40.3	Located within footprint of proposed building/deck.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
34	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	3.7	1.8	42.5	Located within footprint of proposed building/deck.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
35	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	5.0	2.1	79.0	Located within footprint of proposed building/basement.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
36	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	6.0	2.0	113.0	Existing building to be demolished offset 1.1 metres west to be demolished within TPZ/SRZ. Located within footprint of proposed new deck at RL 16.30 (2.0 metres above grade, suspended on piers). Excavations for pier footings within TPZ/SRZ. Perforation to deck proposed around trunk.	Excavations for proposed deck footings have the potential to result in severance and damage to woody roots. No adverse impact, provided that all works within are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Trunk Protection boarding to 4 metres from GL in accordance with Section 10.4. Demolish existing buildings within TPZ in accordance with Section 10.5. Undertake all excavations for deck footings within TPZ in accordance with Section 10.6. Maintain a minimum of 1 metre clearance between the trunk and any part of the deck (including sub-frame). Avoid placement of pier footings within SRZ.
37	<i>Ulmus procera</i> (English Elm)	M	3.1	1.9	30.1	Existing building and retaining wall to be demolished within TPZ. Located within footprint of proposed pathway.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
38	<i>Ulmus procera</i> (English Elm)	M	2.5	1.6	19.6	Existing building and retaining wall to be demolished within TPZ. Located within footprint of proposed pathway.	Proposed works will necessitate removal.	Remove tree.
39	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	6.2	2.5	120.4	Proposed new deck offset 2.2 metres south at RL16.30 (1.3 metres above grade, suspended on piers). Excavations for pier footings within TPZ. No actual incursion to root zone. Proposed footpath offset 5.2 metres north-east at RL? (assumed close to existing grade). Excavations for pavement sub-grade within TPZ. Encroachment to TPZ = 7%.	Extent of encroachment to root zone is less than 10% of the TPZ, which is considered within acceptable limits under AS 4970:2009. No adverse impact, provided that all proposed works within TPZ are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing pathways within TPZ in accordance with Section 10.5. Undertake all excavations for deck pier footings and pavement sub-grade in accordance with Section 10.6. Proposed pedestrian ramp to be supported by piers within TPZ, with void beneath (no perimeter retaining walls or engineered fill).
40	<i>Ulmus parvifolia</i> (Chinese Elm)	M	3.5	1.8	38.5	Existing footpath offset 2.1 metres north-east to be demolished and replaced with new footpath in similar footprint. Excavations and engineered fill for pavement sub-grade within TPZ. decrease from present encroachment. Proposed semi-circular seating area (deck?) offset 1 metre north at RL? (assumed above grade). Excavations for post footings within TPZ/SRZ. No encroachment to TPZ.	Excavation for post footings for deck within SRZ has the potential to result in severance and damage to woody roots, leading to an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing pathways within TPZ in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade and deck footings in accordance with Section 10.6.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
41	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	11.0	2.9	379.9	Proposed new pathway and ramp offset 6.4 metres south/south-west at RL16.30 (1.8 metres above grade, suspended on piers). Excavations for pier footings within TPZ. No actual incursion to root zone. Proposed new footpath offset 5.0 metres north-east at RL? (close to existing grade). Excavations for and pavement sub-grade within TPZ (partially within footprint of existing footpath). Encroachment to TPZ = 23% (minor increase from present encroachment). Proposed semi-circular deck seating area offset 2.4 metres north at RL? (assumed above grade). Excavations for post within TPZ/SRZ. No encroachment to TPZ.	Excavations for semi-circular paved area within TPZ are likely to result in severance and damage to woody roots, leading to an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing pathways within TPZ in accordance with Section 10.5. Undertake all excavations for pavement sub-grade and pier footings for ramp & deck in accordance with Section 10.6. Proposed pedestrian ramp to be supported by piers within TPZ, with void beneath (no perimeter retaining walls or engineered fill).
42	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.6	2.7	183.4	Proposed new footpath offset 3.1 metres north-east at RL? (close to existing grade). Excavations for pavement sub-grade within TPZ (partially within footprint of existing footpath). Encroachment to TPZ = 22% Proposed semi-circular paved seating area offset 1.1 metres east at RL? (assumed above grade). Excavations for post footings within TPZ/SRZ. No encroachment to TPZ, assuming deck and sub-frame are placed above grade and supported by post footings. Proposed electrical substation offset 6.9 metres north-west. Excavations for pavement sub-grade within TPZ. Encroachment to TPZ = 2% (cumulative 24%).	Extent of encroachment to TPZ from footpath exceeds acceptable limits under AS 4970:2009. However, this tree will tolerate the extent of encroachment proposed, provided all proposed works within TPZ are undertaken as recommended. Excavations for semi-circular seating area within the SRZ have the potential to result in severance and damage to woody roots, leading to an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake all excavations for pavement sub-grade and pier footings for ramp in accordance with Section 10.6. Consider eliminating semi-circular seating area or relocating outside SRZ.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
43	<i>Angophora floribunda</i> (Rough-barked Apple)	P	3.2	1.7	31.2	Located within footprint of proposed new footpath.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
44	<i>Angophora floribunda</i> (Rough-barked Apple)	P	3.2	1.7	31.2	Located within footprint of proposed new footpath.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
45	<i>Angophora floribunda</i> (Rough-barked Apple)	P	2.4	1.5	18.6	Located within footprint of proposed new footpath. Proposed to be retained within pavement opening. Placement of engineered fill within TPZ.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works are likely to result in a significant adverse impact.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
46	<i>Angophora floribunda</i> (Rough-barked Apple)	P	4.8	2.1	73.1	Located within footprint of proposed new footpath. Proposed to be retained within pavement opening. Placement of engineered fill within TPZ.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works are likely to result in a significant adverse impact.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
47	<i>Ceratopetalum gummiferum</i> (NSW Christmas Bush)	M	2.0	1.4	12.6	Located within footprint of proposed new semi-circular paved seating area	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
48	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	5.7	2.4	101.8	Existing concrete pathways within SRZ/TPZ to be demolished. Located within Primary School Outdoor Play Area (soft landscape maintained at existing grade.	No adverse impact provided that all demolition works within TPZ are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing pathways within TPZ in accordance with Section 10.5. Maintain existing ground levels within TPZ.
49	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	4.0	1.8	50.2	Existing concrete pathways within SRZ/TPZ to be demolished. Located within Primary School Outdoor Play Area (soft landscape maintained at existing grade. Some canopy pruning may be required to accommodate temporary scaffolding.	No adverse impact provided that all demolition works within TPZ are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing pathways within TPZ in accordance with Section 10.5. Maintain existing ground levels within TPZ. Erect temporary scaffolding within TPZ in accordance with Section 10.14. Undertake any required canopy pruning in accordance with Section 10.11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
50	<i>Casuarina glauca</i> (Swamp Oak)	M	4.0	2.0	50.2	Existing concrete pathways within SRZ/TPZ to be demolished. Located within Primary School Outdoor Play Area (soft landscape maintained at existing grade. Proposed new building and basement offset 2.4 metres south-west. Excavations for building/basement foundations within TPZ. Encroachment to TPZ = 14% (assuming no over-excavation required to construct basement). Some canopy pruning may be required to accomodate temporary scaffolding. Proposed 300mmØ stormwater pipeline offset 1.4 metres south at IL? Open trenching for pipeline within SRZ.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. However, this tree will tolerate the extent of the encroachment proposed, provided that all works within TPZ are undertaken as recommended. Open trenching for stormwater may result in severance of woody roots leading to a significant adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing pathways within TPZ in accordance with Section 10.5. Maintain existing ground levels within TPZ. Undertake all excavations for building and basement in accordance with Section 10.6. Limit excavation to facilitate construction of basement wall to no more than 200mm from basement footprint. Erect temporary scaffolding within TPZ in accordance with Section 10.14. Undertake any required canopy pruning in accordance with Section 10.11. Install stormwater pipeline by Horizontal Directional Drilling (HDD) in accordance with Section 10.7.
51	<i>Casuarina glauca</i> (Swamp Oak)	M	5.0	2.2	78.5	Located within footprint of proposed building.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
52	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	6.0	2.3	113.0	Located within footprint of proposed building.	Proposed works will necessitate removal (High Retention Value). There are no feasible options that can be recommended that would permit the preservation of this tree.	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
53	<i>Casuarina glauca</i> (Swamp Oak)	M	5.0	2.2	78.5	Located within footprint of proposed building.	Proposed works will necessitate removal (High Retention Value). There are no feasible options that can be recommended that would permit the preservation of this tree.	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
54	<i>Elaeocarpus reticulatus</i> (Blueberry Ash)	M	3.0	1.1	28.3	No proposed works within TPZ	Proposed to be removed to accommodate new landscape works.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
55	<i>Eucalyptus pilularis</i> (Blackbutt)	P	13.0	3.4	533.3	Proposed building/basement offset 12.6 metres south-west at RL 13.00 (close to existing grade). Minor encroachment to TPZ (<5%). Some canopy pruning required to clear temporary scaffolding. Within footprint of proposed Outdoor Play Area (soft landscape at existng grade). Proposed seating deck offset 3.8 metres north-east. Excavations for deck post footings within TPZ. No encroachment to TPZ. Proposed new footpath offset 8.4 metres north-east at RL? (close to existing grade). Excavations for pavement sub-grade within TPZ (partially within footprint of existing footpath). Encroachment to TPZ = 12%. Some canopy pruning may be required to accomodate temporary scaffolding.	Extent of encroachment to root zone marginally exceeds acceptable limits under AS 4970:2009. No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Install Tree Protection Fencing in accordance with Section 10.3. Limit over-excavation for basement to no greater than 1 metre from basement wall. Undertake all excavations for deck post footings and pavement sub-grade within TPZ in accordance with Section 10.6. Avoid placement of post footings for decking within SRZ. Erect temporary scaffolding within TPZ in accordance with Section 10.14. Undertake any required canopy pruning in accordance with Section 10.11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
56	<i>Eucalyptus pilularis</i> (Blackbutt)	P	15.0	3.7	706.5	Proposed building offset 12.0 metres south-west at RL 13.00 (600mm above grade). Excavations & placement of engineered fill for building foundations within TPZ. Encroachment to TPZ = 5%. Minor canopy pruning may be required to clear temporary scaffolding. Proposed new footpath offset 8.8 metres north-east (partially within footprint of existing pathway). No increase to present encroachment. Proposed seating deck offset 5.7 metres east. Excavations for deck post footings within TPZ. No encroachment to TPZ. Proposed new driveway offset 12.6 metres west at RL? (assumed close to existing grade). Excavations for pavement sub-grade within TPZ. Cumulative encroachment = 9%. Some canopy pruning may be required to accomodate temporary scaffolding.	Extent of encroachment to root zone is less than 10% of the TPZ, which is considered within acceptable limits under AS 4970:2009. No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Install Tree Protection Fencing in accordance with Section 10.3. Limit over-excavation for basement to no greater than 1 metre from basement wall. Undertake all excavations for deck post footings and pavement sub-grade within TPZ in accordance with Section 10.6. Avoid placement of post footings for decking within SRZ. Erect temporary scaffolding within TPZ in accordance with Section 10.14. Undertake any required canopy pruning in accordance with Section 10.11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
57	<i>Eucalyptus pilularis</i> (Blackbutt)	P	10.2	3.1	324.5	Existing concrete pathways within SRZ/TPZ to be demolished. Proposed new footpath offset 2.4 metres north-east (partially within footprint of existing pathway). Excavations and engineered fill for pavement sub-grade within SRZ/TPZ. Encroachment to TPZ = 20%. Proposed seating deck offset 1.0 metres east. Excavations for deck post footings within TPZ/SRZ. No encroachment to TPZ	Extent of encroachment to root zone is less than 10% of the TPZ, which is considered within acceptable limits under AS 4970:2009. No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained. Excavations for deck footings within the SRZ have the potential to result in severance and damage to woody roots, leading to an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Install Tree Protection Fencing in accordance with Section 10.3. Undertake all excavations for pavement sub-grade within TPZ in accordance with Section 10.6. Install new footpath in accordance with Section 10.8 & 10.9. Undertake all excavations for deck post footings within TPZ in accordance with Section 10.6. Avoid placement of post footings for decking within SRZ. Provide a minimum of 1 metre clearance between deck (including any sub-frame member) and trunk to permit future growth and movement under wind loading.
58	<i>Eucalyptus paniculata</i> (Grey Ironbark)	P	7.0	2.3	153.9	Located within Primary School Outdoor Play area. Existing concrete pathways within SRZ/TPZ to be demolished. Proposed new footpath offset 3.3 metres north-east (partially within footprint of existing pathway). Excavations and engineered fill for pavement sub-grade within SRZ/TPZ. Encroachment to TPZ = 20%.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Install Tree Protection Fencing in accordance with Section 10.3. Undertake all excavations for pavement sub-grade within TPZ in accordance with Section 10.6. Install new footpath in accordance with Section 10.8 & 10.9.
59	<i>Angophora floribunda</i> (Rough-barked Apple)	P	3.5	1.7	38.5	Located within footprint of proposed new footpath. Proposed to be retained within pavement opening. Placement of engineered fill within TPZ.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works are likely to result in a significant adverse impact.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
60	<i>Angophora floribunda</i> (Rough-barked Apple)	P	3.5	1.7	38.5	Located within footprint of proposed new footpath. Proposed to be retained within pavement opening. Placement of engineered fill within TPZ.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works are likely to result in a significant adverse impact.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
61	<i>Casuarina glauca</i> (Swamp Oak)	M	3.3	1.8	35.1	Existing footpath offset 2.0 metres north-east to be demolished and replaced with new footpath in same footprint (offset 2.8 metres). Excavations and engineered fill for pavement sub-grade within TPZ. No increase from present encroachment. Proposed new driveway offset 2.1 metres north-west at RL? (assumed close to existing grade). Excavations for driveway foundations within TPZ. Encroachment to TPZ = 11%.	Extent of encroachment to root zone marginally exceeds acceptable limits under AS 4970:2009. No adverse impact, provided all excavations within TPZ are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake all excavations for pavement sub-grade in accordance with Section 10.6. Install new footpath in accordance with Sections 10.8 & 10.9.
62	<i>Casuarina glauca</i> (Swamp Oak)	M	4.0	1.9	49.4	Proposed new driveway offset 2.0 metres north-west at RL? (assumed close to existing grade). Excavations for driveway foundations within TPZ. Encroachment to TPZ = 19%.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. However, this tree will tolerate the extent of the encroachment proposed, provided that all works within TPZ are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake all excavations for new driveway sub-grade in accordance with Section 10.6.
63	<i>Callitris rhomboidea</i> (Port Jackson Pine)	M	4.2	2.1	55.4	Located within footprint of proposed driveway.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
64	<i>Casuarina glauca</i> (Swamp Oak)	M	4.5	2.0	63.6	Located within footprint of proposed driveway.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
65	<i>Casuarina glauca</i> (Swamp Oak)	M	3.5	1.8	38.5	Located within footprint of proposed driveway.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
66	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.1	2.4	157.0	Proposed driveway offset 3.7 metres south-east at RL? (assumed close to existing grade) Excavations for pavement sub-grade within TPZ. Encroachment to TPZ = 18%.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. However, this tree will tolerate the extent of the encroachment proposed, provided that all works within TPZ are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake all excavations for driveway sub-grade in accordance with Section 10.6. Install pavement slightly above grade to minimise excavations within TPZ in accordance with Sections 10.8 & 10.9.
67	<i>Angophora floribunda</i> (Rough-barked Apple)	P	3.5	1.9	38.5	Located within footprint of proposed new footpath.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
68	<i>Eucalyptus sp.</i> (Gum)	P	11.6	3.0	423.1	Existing footpath offset 1.7 metres north-east to be demolished and replaced with new footpath (extending to kerb) in similar footprint (2.5 metres NE). No increase from present encroachment. Excavations and engineered fill for pavement sub-grade within TPZ. Proposed driveway offset 11.3 metres south-east at RL? (assumed close to existing grade) Excavations for pavement sub-grade within TPZ. Encroachment to TPZ = 1%.	Extent of encroachment to root zone is less than 10% of the TPZ, which is considered within acceptable limits under AS 4970:2009. No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install trunk Protection Boarding in accordance with Section 10.4. Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake all excavations for pavement sub-grade in accordance with Section 10.6. Install pavement slightly above grade to minimise excavations within TPZ in accordance with Sections 10.8 & 10.9.
69	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.0	2.5	153.9	Located within footprint of proposed building	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.
70	<i>Eucalyptus robusta</i> (Swamp Mahogany)	P	8.0	2.4	201.0	Located within footprint of proposed building	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
71	<i>Banksia serrata</i> (Old Man Banksia)	P	2.9	1.8	25.8	Located within footprint of proposed building	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
72	<i>Eucalyptus grandis</i> (Flooded Gum)	P	10.8	3.2	364.7	Located within footprint of proposed building	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.
73	<i>Eucalyptus crebra</i> (Narrow-leaved Ironbark)	P	5.0	2.0	78.5	Located within footprint of proposed new lawn area. Proposed new building offset 3.7 metres SW and ramp/landing ofst 2.4 metres west at RL? (assumed above grade). Excavations for building foundations within TPZ. Encroachment to TPZ = 13%	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. However, this tree will tolerate the extent of the encroachment proposed, provided that all works within TPZ are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Maintain existing ground levels within TPZ. Undertake all excaavtions for building foundations within TPZ in accordance with Section 10.6.
74	<i>Callitris rhomboidea</i> (Port Jackson Pine)	M	5.4	2.4	91.6	Located within footprint of proposed new lawn area.	No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Maintain existing ground levels within TPZ.
75	<i>Toona ciliata</i> (Red Cedar)	M	5.8	2.4	106.0	Existing pavements surrounding and building 3.8 metres north-west to be demolished within TPZ. Located within footprint of proposed new lawn area. Proposed new pedestrian pathway and ramp offset 2.5 metres west (partially within footprint of existing path and building to be demolished). Encroachment to TPZ = 23% (less than present situation)	No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Maintain existing ground levels within TPZ .Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake all excavations for pavement sub-grade within TPZ in accordance with Section 10.6.
76	<i>Tristaniopsis laurina</i> (Water Gum)	M	2.5	1.5	19.6	Located within footprint of proposed new footpath. Proposed to be retained within pavement opening. Placement of engineered fill within TPZ.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works are likely to result in a significant adverse impact.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
77	<i>Angophora floribunda</i> (Rough-barked Apple)	P	5.6	2.2	99.8	Located within footprint of proposed new footpath. Proposed to be retained within pavement opening. Placement of engineered fill within TPZ.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works are likely to result in a significant adverse impact.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
78	<i>Angophora floribunda</i> (Rough-barked Apple)	P	6.0	2.1	113.0	Located within footprint of proposed new footpath. Proposed to be retained within pavement opening. Placement of engineered fill within TPZ.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works are likely to result in a significant adverse impact.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
79	<i>Casuarina glauca</i> (Swamp Oak)	M	4.0	1.8	50.2	Existing building and retaining wall to be demolished within TPZ. Proposed new pathway offset 3.1 metres north-east at RL? (assumed close to existing grade, within footprint of existing path) and 2.3 metres east (beyond existing retaining wall. No increase to present encroachment.	No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Maintain existing ground levels within TPZ. Undertake all demolition works within TPZ in accordance with Section 10.5. Supply any required fill material (for new landscape areas surrounding) in accordance with Section 10.9.
80	<i>Casuarina glauca</i> (Swamp Oak)	M	5.4	2.4	89.9	Existing building and retaining wall to be demolished within TPZ. Proposed new pathway offset 2.6 metres north-east at RL? (assumed close to existing grade, within footprint of existing path) and 4.1 metres east (beyond existing retaining wall. No increase to present encroachment.	No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Maintain existing ground levels within TPZ. Undertake all demolition works within TPZ in accordance with Section 10.5. Supply any required fill material (for new landscape areas surrounding) in accordance with Section 10.9.
81	<i>Casuarina glauca</i> (Swamp Oak)	M	4.8	2.3	72.3	Existing building and retaining wall to be demolished within TPZ. Proposed new pathway offset 2.2 metres north-east at RL? (assumed close to existing grade, within footprint of existing path). No increase to present encroachment. Located within footprint of new landscape area at RL 8.05 (150mm above grade)	No adverse impact, provided tree is adequately protected as recommended and assuming any required fill material within TPZ is supplied and placed as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Maintain existing ground levels within TPZ. Undertake all demolition works within TPZ in accordance with Section 10.5. Supply any required fill material (for new landscape areas surrounding) in accordance with Section 10.9. Depth of any fill not to exceed 150mm.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
82	<i>Casuarina glauca</i> (Swamp Oak)	M	4.5	2.1	63.6	Existing building and retaining wall to be demolished within TPZ. Proposed new pathway offset 2.0 metres north-east at RL? (assumed close to existing grade, within footprint of existing path). No increase to present encroachment. Located within footprint of new landscape area at RL 7.80 (close to existing grade)	No adverse impact, provided tree is adequately protected as recommended and assuming any required fill material within TPZ is supplied and placed as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Maintain existing ground levels within TPZ. Undertake all demolition works within TPZ in accordance with Section 10.5. Supply any required fill material (for new landscape areas surrounding) in accordance with Section 10.9. Depth of any fill not to exceed 150mm.
83	<i>Casuarina glauca</i> (Swamp Oak)	M	6.0	2.5	111.6	Existing building and retaining wall to be demolished within TPZ. Proposed new pathway offset 1.7 metres north-east at RL? (assumed close to existing grade, within footprint of existing path). No increase to present encroachment. Located within footprint of new landscape area at RL 7.60 (close to existing grade)	No adverse impact, provided tree is adequately protected as recommended and assuming any required fill material within TPZ is supplied and placed as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Maintain existing ground levels within TPZ. Undertake all demolition works within TPZ in accordance with Section 10.5. Supply any required fill material (for new landscape areas surrounding) in accordance with Section 10.9. Depth of any fill not to exceed 150mm.
84	<i>Eucalyptus nicholii</i> (New England Peppermint)	P	8.6	2.6	229.6	Located within footprint of existing building/sports court	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
85	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	15.0	3.8	706.5	Located within footprint of existing building/sports court	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.
86	<i>Rhododendron sp.</i> (Rhododendron)	M	2.0	1.4	12.6	Located within footprint of existing building.	Proposed works will necessitate removal.	Remove tree.
87	<i>Camellia japonica</i> (Camellia)	M	3.6	2.0	40.7	Located within footprint of existing building.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
88	<i>Callistemon viminalis</i> (Weeping Bottlebrush)	M	4.0	2.0	50.2	Located within footprint of existing building.	Proposed works will necessitate removal.	Remove tree.
89	<i>Casuarina glauca</i> (Swamp Oak)	M	5.1	2.3	81.1	Located close to footprint of proposed footpath.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
90	<i>Populus nigra</i> 'Italica' (Lombardy Poplar)	M	9.0	2.9	254.3	Proposed hard court and associated retaining wall offset 1.3 metre south-west at RL 8.50 (0.5 metres below grade). Excavations for pavement sub-grade & retaining wall foundations within SRZ/TPZ. Located within footprint of proposed new pathway.	Proposed works will necessitate removal.	Remove tree.
91	<i>Morus nigra</i> (Mulberry tree)	M	5.0	2.0	78.5	Proposed hard court and associated retaining wall offset 1.7 metres south-west at RL 8.50 (0.5 metres below grade). Excavations for pavement sub-grade & retaining wall foundations within SRZ/TPZ. Located within footprint of proposed new pathway.	Proposed works will necessitate removal.	Remove tree.
92	<i>Lophostemon confertus</i> (Brushbox)	M	7.5	2.7	178.0	Proposed hard court and associated retaining wall offset 0.5 metres south-west at RL 8.50 1.0 metre below grade). Excavations for pavement sub-grade & retaining wall foundations within SRZ/TPZ. Located within footprint of proposed new pathway.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.
93	<i>Glochidion ferdinandi</i> (Cheese Tree)	M	4.0	1.7	50.2	Proposed hard court and associated retaining wall offset 1.9 metres south-west at RL 8.50 (1.0 metre below grade). Excavations for pavement sub-grade & retaining wall foundations within SRZ/TPZ. Located within footprint of proposed new pathway.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
94	<i>Casuarina cunninghamiana</i> (River Oak)	M	9.6	3.0	289.4	Proposed hard court and associated retaining wall offset 1.5 metres south-west at RL 8.50 (1.0 metre below grade). Excavations for pavement sub-grade & retaining wall foundations within SRZ/TPZ. Located within footprint of proposed new pathway.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
95	<i>Banksia integrifolia</i> (Coast Banksia)	P	4.6	2.2	66.0	Located within footprint of proposed sports courts.	Proposed works will necessitate removal.	Remove tree.
96	<i>Callistemon viminalis</i> (Weeping Bottlebrush)	M	3.0	1.3	28.3	Located within footprint of proposed sports courts.	Proposed works will necessitate removal.	Remove tree.
97	<i>Banksia integrifolia</i> (Coast Banksia)	P	3.0	1.7	28.3	Located within footprint of proposed sports courts.	Proposed works will necessitate removal.	Remove tree.
98	<i>Callistemon viminalis</i> (Weeping Bottlebrush)	M	3.0	1.5	28.3	Located within footprint of proposed sports courts.	Proposed works will necessitate removal.	Remove tree.
99	<i>Banksia integrifolia</i> (Coast Banksia)	P	4.7	2.2	69.4	Located within footprint of proposed sports courts.	Proposed works will necessitate removal.	Remove tree.
100	<i>Banksia integrifolia</i> (Coast Banksia)	P	3.4	2.0	37.1	Located within footprint of proposed sports courts.	Proposed works will necessitate removal.	Remove tree.
101	<i>Melia azedarach</i> (White Cedar)	M	7.0	2.2	153.9	Proposed hard court and associated retaining wall offset 1.2 metres south-west at RL 8.50 (1.5 metre below grade). Excavations for pavement sub-grade & retaining wall foundations within SRZ/TPZ. Located within footprint of proposed new pathway.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
102	<i>Casuarina glauca</i> (Swamp Oak)	M	2.5	1.4	19.6	Proposed hard court and associated retaining wall offset 1.8 metres south-west at RL 8.50 (1.5 metres below grade). Excavations for pavement sub-grade & retaining wall foundations within SRZ/TPZ. Located within footprint of proposed new pathway.	Proposed works will necessitate removal.	Remove tree.
103	<i>Casuarina glauca</i> (Swamp Oak)	M	3.0	1.7	28.3	Proposed hard court and associated retaining wall offset 1.6 metres south-west at RL 8.50 (1.5 metres below grade). Excavations for pavement sub-grade & retaining wall foundations within SRZ/TPZ. Located within footprint of proposed new pathway.	Proposed works will necessitate removal.	Remove tree.
104	<i>Angophora costata</i> (Sydney Red Gum)	P	5.0	2.2	78.5	Proposed hard court and associated retaining wall offset 2.2 metres south-west at RL 8.50 (1.6 metres below grade). Excavations for pavement sub-grade & retaining wall foundations within SRZ/TPZ. Located within footprint of proposed new pathway.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.
105	<i>Angophora floribunda</i> (Rough-barked Apple)	P	4.5	2.0	64.7	Located within footprint of proposed new footpath. Proposed to be retained within pavement opening. Placement of engineered fill within TPZ.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works are likely to result in a significant adverse impact.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
106	<i>Casuarina glauca</i> (Swamp Oak)	M	3.5	1.7	38.5	Proposed sports court and associated retaining wall offset 1.1 metres south-west at RL 8.50 (2.0 metres below grade). Excavations for retaining wall foundations within TPZ/SRZ.	Proposed works will necessitate removal.	Remove tree.
107	<i>Casuarina glauca</i> (Swamp Oak)	M	5.0	2.1	78.5	Proposed sports court and associated retaining wall offset 1.0 metres south-west at RL 8.50 (2.0 metres below grade). Excavations for retaining wall foundations within TPZ/SRZ.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
108	<i>Casuarina glauca</i> (Swamp Oak)	M	4.0	1.9	50.2	Proposed sports court and associated retaining wall offset 1.0 metres south-west at RL 8.50 (2.0 metres below grade). Excavations for retaining wall foundations within TPZ/SRZ.	Proposed works will necessitate removal.	Remove tree.
109	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	10.5	2.8	346.2	Proposed sports court and associated retaining wall offset 2.1 metres south-west at RL 8.50 (2.0 metres below grade). Excavations for retaining wall foundations within TPZ/SRZ.	Proposed works will necessitate removal.	Remove tree.
110	<i>Eucalyptus pilularis</i> (Blackbutt)	P	4.5	1.8	63.6	Proposed sports court offset 2.2 metres south at 8.50 (2.0 metres below grade, beyond existing retaining wall). No actual encroachment to root zone.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within remainder of TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10).
111	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	5.3	2.1	86.5	Proposed sports court offset 1.1 metres south-west at RL8.50 (1.5 metres below grade). Excavations for retaining wall foundations within TPZ/SRZ (beyond existing retaining wall. No actual encroachment to root zone.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within remainder of TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing timber retaining wall in accordance with Section 10.5. Undertake all excavations for new sports court within TPZ in accordance with Section 10.6.
112	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	5.4	2.4	91.6	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
113	<i>Syncarpia glomulifera</i> (Turpentine)	M	10.0	3.3	314.0	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
114	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	5.0	2.0	78.5	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
115	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	5.1	2.1	81.7	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
116	<i>Syncarpia glomulifera</i> (Turpentine)	M	3.0	1.6	28.3	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
117	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	3.0	1.7	28.3	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
118	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	6.0	2.5	111.6	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
119	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	5.0	1.9	78.5	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
120	<i>Angophora costata</i> (Sydney Red Gum)	P	6.0	2.2	113.0	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
121	<i>Eucalyptus acmenioides</i> (White Mahogany)	P	4.5	2.1	63.6	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
122	<i>Angophora costata</i> (Sydney Red Gum)	P	4.5	1.9	63.6	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
123	<i>Corymbia gummifera</i> (Red Bloodwood)	P	5.0	2.2	78.5	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
124	<i>Syncarpia glomulifera</i> (Turpentine)	M	7.8	2.8	191.0	Proposed sports court offset 4.0 metres south-east at RL8.50 (beyond existing cliff line). No actual encroachment to root zone.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
125	<i>Angophora costata</i> (Sydney Red Gum)	P	6.0	2.0	113.0	Proposed sports court offset 3.7 metres south-east at RL8.50 (beyond existing cliff line). No actual encroachment to root zone.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
126	<i>Angophora costata</i> (Sydney Red Gum)	P	5.0	2.0	78.5	Proposed sports court offset 4.4 metres south-east at RL8.50 (beyond existing cliff line). No actual encroachment to root zone.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
127	<i>Angophora costata</i> (Sydney Red Gum)	P	10.0	2.6	314.0	Proposed sports court offset 2 metres south-east at RL8.50. Excavations for new retaining wall foundations within SRZ/TPZ.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
128	<i>Eucalyptus pilularis</i> (Blackbutt)	P	8.4	2.8	221.6	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
129	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	3.0	1.7	28.3	No proposed works within TPZ (soft landscape works only)	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
130	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.2	2.7	162.8	No proposed works within TPZ (soft landscape works only).	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
131	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	8.4	2.8	221.6	No proposed works within TPZ (soft landscape works only).	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
132	<i>Olea europaea subsp. africana</i> (African Olive)	M	5.0	2.3	78.5	Proposed stairs offset 2.9 metres north-east. Excavations for stair and wall foundations within TPZ. Encroachment to TPZ = 7%	Extent of encroachment to root zone is less than 10% of the TPZ, which is considered within acceptable limits under AS 4970:2009. No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Remove tree (Noxious Weed)
133	<i>Pittosporum undulatum</i> (Native Daphne)	M	4.2	2.1	55.4	Proposed sports court offset 3.7 metres south-east at RL8.50 (beyond existing cliff line). No actual encroachment to root zone.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
134	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	9.6	3.0	289.4	Proposed sports court offset 6.9 metres south-east at RL8.5 (beyond existing cliff line). No actual encroachment to root zone.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all excavations for retaining wall foundations within TPZ in accordance with Section 10.6.
135	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	12.0	2.8	452.2	Proposed sports court offset 7.4 metres south-east at RL8.5 (beyond existing cliff line). No actual encroachment to root zone.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all excavations for retaining wall foundations within TPZ in accordance with Section 10.6.
136	<i>Eucalyptus pilularis</i> (Blackbutt)	P	6.0	2.1	113.0	Proposed sports court offset 4.7 metres south-east at RL8.5 (beyond existing cliff line). No actual encroachment to root zone.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained intact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all excavations for retaining wall foundations within TPZ in accordance with Section 10.6.
137	<i>Ligustrum lucidum</i> (Broad Leaf Privet)	M	5.0	2.0	78.5	Proposed sports court & associated retaining wall offset 0.7 metres north-east at RL8.50 (4 metres below grade. Excavations for wall foundations within SRZ.	Proposed works will necessitate removal.	Remove tree (Noxious Weed)

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
138	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	7.0	2.3	153.9	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
139	<i>Pittosporum undulatum</i> (Native Daphne)	M	4.5	1.8	63.6	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
140	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	9.0	2.5	254.3	Proposed sports court offset 6.5 metres north-east at RL8.50 (2.0 metres below grade, within footprint of existing building. Excavations for pavement sub-grade (& associated retaining wall, TBC) within TPZ. Potential encroachment to TPZ = 8%. Position of any proposed retaining wall to be confirmed.	Extent of encroachment to root zone is less than 10% of the TPZ, which is considered within acceptable limits under AS 4970:2009. No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are ma	Retain in accordance with recommended Tree Protection Measures (Section 10). Place retaining wall at edge of court pavement to minimise encroachment to TPZ. Undertake all excavations for retaining wall foundations within TPZ in accordance with Section 10.6.
141	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	8.0	2.8	200.3	Proposed sports court offset 6.8 metres north-east at RL8.50 (2.0 metres below grade, within footprint of existing building. Excavations for pavement sub-grade within TPZ. Potential encroachment to TPZ = 6%. Position of any proposed retaining wall to be confirmed.	Extent of encroachment to root zone is less than 10% of the TPZ, which is considered within acceptable limits under AS 4970:2009. No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are ma	Retain in accordance with recommended Tree Protection Measures (Section 10). Place retaining wall at edge of court pavement to minimise encroachment to TPZ. Undertake all excavations for retaining wall foundations within TPZ in accordance with Section 10.6.
142	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.0	2.6	153.9	Proposed sports court offset 7.3 metres north-east at RL8.50 (2.0 metres below grade, within footprint of existing building. Excavations for pavement sub-grade within TPZ. No encroachment to TPZ. Position of any proposed retaining wall to be confirmed.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within remainder of TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Place retaining wall at edge of court pavement to minimise encroachment to TPZ. Undertake all excavations for retaining wall foundations within TPZ in accordance with Section 10.6.
143	<i>Ligustrum lucidum</i> (Broad Leaf Privet)	M	4.0	1.8	50.2	No proposed works within TPZ	No adverse impact.	Remove tree (Noxious Weed)
144	<i>Pittosporum undulatum</i> (Native Daphne)	M	4.0	1.9	50.2	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
145	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	6.0	2.5	111.6	No proposed works within TPZ	No adverse impact.	Remove tree (poor specimen)
146	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	6.0	2.1	113.0	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
147	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	3.5	1.6	38.5	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
148	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.6	2.7	179.8	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
149	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	5.5	2.4	96.4	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
150	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	2.5	1.6	19.6	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
151	<i>Syzygium paniculatum</i> (Magenta Cherry)	M	3.0	1.4	28.3	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
152	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.0	2.6	151.9	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
153	<i>Syzygium paniculatum</i> (Magenta Cherry)	M	4.0	1.6	50.2	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
154	<i>Syzygium paniculatum</i> (Magenta Cherry)	M	4.0	1.6	50.2	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
155	<i>Syzygium paniculatum</i> (Magenta Cherry)	M	3.0	1.6	28.3	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
156	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.0	2.6	152.1	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
157	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.6	2.7	179.5	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
158	<i>Quercus robur</i> (English Oak)	M	4.0	1.9	50.2	Located within footprint of proposed sports courts.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
159	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	3.5	2.0	38.8	Located within footprint of proposed sports courts.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.
160	<i>Flindersia australis</i> (Crows Foot Ash)	M	3.0	1.7	28.3	Located within footprint of proposed sports courts.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
161	<i>Melia azedarach</i> (White Cedar)	M	6.0	2.0	113.0	Located within footprint of proposed sports courts.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
162	<i>Eucalyptus sp.</i> (Gum)	P	3.0	1.6	28.3	Located within footprint of proposed sports courts.	Proposed works will necessitate removal.	Remove tree.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
163	<i>Melaleuca styphelioides</i> (Prickly Paperbark)	M	3.5	1.7	38.5	Located within footprint of proposed sports courts.	Proposed works will necessitate removal.	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
164	<i>Casuarina glauca</i> (Swamp Oak)	M	7.0	2.3	153.9	Proposed sports court & associated retaining wall offset 4.8 metres north-east at RL8.00 (2 metres below grade, within footprint of existing building. Excavations for pavement sub-grade within TPZ. Potential encroachment to TPZ = 9%. Position of any proposed retaining wall to be confirmed.	Extent of encroachment to root zone is less than 10% of the TPZ, which is considered within acceptable limits under AS 4970:2009. No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are ma	Retain in accordance with recommended Tree Protection Measures (Section 10). Place retaining wall at edge of court pavement to minimise encroachment to TPZ. Undertake all excavations for retaining wall foundations within TPZ in accordance with Section 10.6. Demolish existing building and floor slab in accordance with Section 10.5.
165	<i>Casuarina glauca</i> (Swamp Oak)	M	2.0	1.5	12.6	No proposed works within TPZ (existing bridge to be maintained intact).	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
166	<i>Syzygium paniculatum</i> (Magenta Cherry)	M	4.5	1.8	63.6	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
167	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	6.5	2.6	131.0	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
168	<i>Tristaniopsis laurina</i> (Water Gum)	M	3.0	1.8	28.3	Proposed sports court & associated retaining wall offset 2.9 metres north-east at RL8.00 (2 metres below grade, within footprint of existing building. Excavations for pavement sub-grade within TPZ. Potential encroachment to TPZ = 1%. Position of any proposed retaining wall to be confirmed.	Extent of encroachment to root zone is less than 10% of the TPZ, which is considered within acceptable limits under AS 4970:2009. No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are ma	Retain in accordance with recommended Tree Protection Measures (Section 10). Place retaining wall at edge of court pavement to minimise encroachment to TPZ. Undertake all excavations for retaining wall foundations within TPZ in accordance with Section 10.6. Demolish existing building and floor slab in accordance with Section 10.5.
169	<i>Syzygium paniculatum</i> (Magenta Cherry)	M	6.0	2.0	113.0	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
170	<i>Pittosporum undulatum</i> (Native Daphne)	M	4.0	1.9	50.2	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
171	<i>Cinnamomum camphora</i> (Camphor Laurel)	M	2.5	1.0	19.6	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
172	<i>Callistemon salignus</i> (Willow Bottlebrush)	M	2.5	1.5	19.6	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
173	<i>Callistemon salignus</i> (Willow Bottlebrush)	M	2.5	1.7	19.6	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
174	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	9.0	2.9	254.3	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
175	<i>Lophostemon confertus</i> (Brushbox)	M	3.2	1.9	33.0	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
176	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	5.0	1.7	78.5	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
177	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	9.0	2.6	254.3	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
178	<i>Eucalyptus paniculata</i> (Grey Ironbark)	P	5.0	1.8	78.5	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
179	<i>Eucalyptus paniculata</i> (Grey Ironbark)	P	5.0	2.1	78.5	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
180	<i>Eucalyptus pilularis</i> (Blackbutt)	P	5.5	2.3	95.0	Proposed sports court offset 4.4 metres south at RL8.42 (approx. 1.3 below grade). Excavations for pavement sub-grade and associated batter within TPZ. Encroachment to TPZ = 23%	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Excavations for new pavement sub-grade and batter are likely to result in an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Place retaining wall at edge of court pavement to minimise encroachment to TPZ. Undertake all excavations for retaining wall foundations within TPZ in accordance with Section 10.6. Demolish existing building and floor slab and path in accordance with Section 10.5. Place retaining wall at edge of court pavement or reduce extent of batter (steepen) to limit encroachment to TPZ if possible.
181	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	6.0	2.3	113.0	Proposed sports court offset 4.6 metres south at RL9.16 (approx. 1.3 below grade). Excavations for pavement sub-grade and associated batter within TPZ. Encroachment to TPZ = 22%	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Excavations for new pavement sub-grade and batter are likely to result in an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Place retaining wall at edge of court pavement to minimise encroachment to TPZ. Undertake all excavations for retaining wall foundations within TPZ in accordance with Section 10.6. Demolish existing building and floor slab and path in accordance with Section 10.5. Place retaining wall at edge of court pavement or reduce extent of batter (steepen) to limit encroachment to TPZ if possible.
182	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	8.0	2.6	201.0	Located within footprint of proposed sports courts.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.
183	<i>Podocarpus elatus</i> (Brown Pine)	M	6.9	2.6	150.2	Located within footprint of proposed sports courts.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
184	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	10.0	2.9	314.0	Located within footprint of proposed sports courts.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.
185	<i>Malus floribunda</i> (Japanese Crab Apple)	M	2.5	1.5	19.6	Located within footprint of proposed sports courts.	Proposed works will necessitate removal	Remove tree.
186	<i>Malus floribunda</i> (Japanese Crab Apple)	M	2.5	1.3	19.6	Located within footprint of proposed sports courts.	Proposed works will necessitate removal	Remove tree.
187	<i>Malus floribunda</i> (Japanese Crab Apple)	M	2.5	1.5	19.6	Located within footprint of proposed sports courts.	Proposed works will necessitate removal	Remove tree.
188	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	10.0	2.8	314.0	Existing pavements (road to NW & car park to SE) to be demolished within TPZ. Existing concrete stairs offset 2.1 metres SW to be retained. Proposed new footpath offset 1.0 metres NW at RL8.10 (100 mm below grade). Excavations for pavement sub-grade within SRZ/TPZ (partly within footprint of existing roadway. Proposed new oval with concrete path surround offset 7.1 metres SE at RL 6.40 (0.5 metres below grade). Proposed sports courts offset 7.4 metres NW at RL8.50 (200mm above grade). Less than present encroachment.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Excavations for new path have the potential to result in severance & damage to woody roots, leading to an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing asphalt pavements within TPZ in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6. Consider relocating pathway to within footprint of existing road alignment. Install tree protection fence in accordance with Section 10.3.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
189	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	8.0	2.4	201.0	Existing pavements (road to NW & car park to SE) to be demolished within TPZ. Existing concrete stairs offset 2.5 metres NE to be retained intact within TPZ. Proposed new path offset 0.7 metres NW at RL8.00 (close to ex. grade). Excavations for pavement sub-grade within SRZ/TPZ (partly within footprint of existing roadway). Proposed new oval with concrete path surround offset 6.5 metres east at RL 6.40 (0.4 metres below grade). Proposed sports courts offset 7 metres NW at RL8.50 (200mm above grade). Less than present encroachment.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Excavations for new path have the potential to result in severance & damage to woody roots, leading to an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing asphalt pavements within TPZ in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6. Consider relocating pathway to within footprint of existing road alignment. Install tree protection fence in accordance with Section 10.3.
190	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	4.0	1.8	50.2	Proposed new path offset 3.4 metres NW at RL8.00 (close to ex. grade). Excavations for pavement sub-grade within SRZ/TPZ (partly within footprint of existing roadway). Minor encroachment to TPZ (<5%)	Extent of encroachment to root zone is less than 10% of the TPZ, which is considered within acceptable limits under AS 4970:2009. No adverse impact	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing asphalt pavements within TPZ in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6. Consider relocating pathway to within footprint of existing road alignment. Install tree protection fence in accordance with Section 10.3.
191	<i>Eucalyptus sideroxylon</i> (Mugga Ironbark)	P	5.5	2.4	95.7	Located within footprint of proposed pedestrian pathway.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
192	<i>Eucalyptus sideroxylon</i> (Mugga Ironbark)	P	8.5	2.8	226.9	Existing pavements (road to NW & car park to SE) to be demolished within TPZ. Proposed new path offset 3.5 metres NW at RL7.70 to 8.00 (close to ex. grade) and 5 metres SW (within footprint of existing pavement. Excavations for pavement sub-grade within SRZ/TPZ (partly within footprint of existing roadway). Proposed new oval with concrete path surround offset 7.8 metres east at RL 6.40 (0.4 metres below grade). Less than present encroachment.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Excavations for new path have the potential to result in severance & damage to woody roots, leading to an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing asphalt pavements within TPZ in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6. Consider relocating pathway to within footprint of existing road alignment. Install tree protection fence in accordance with Section 10.3.
193	<i>Corymbia maculata</i> (Spotted Gum)	P	6.6	2.6	136.8	Located within footprint of existing sports court.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.
194	<i>Casuarina glauca</i> (Swamp Oak)	M	6.0	2.2	113.0	Located within footprint of new lawn area, regraded to meet level of new sports court to west.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.
195	<i>Casuarina glauca</i> (Swamp Oak)	M	5.2	2.3	84.8	Located within footprint of new lawn area, regraded to meet level of new sports court to west.	Proposed works will necessitate removal	Remove tree (poor specimen)
196	<i>Eucalyptus sp.</i> (Gum)	P	9.0	2.8	254.3	Existing hard court offset 5.9 metres south to be demolished within TPZ. Proposed 300mmØ stormwater pipeline offset 0.8 metres south at IL? Open trenching for pipeline within SRZ.	No adverse impact, provided that all demolition works are undertaken as recommended. Open trenching for stormwater may result in severance of woody roots leading to a significant adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install tree Protection Fence in accordance with Section 10.3. Demolish existing pavements within TPZ in accordance with Section 10.5. Install stormwater pipeline by Horizontal Directional Drilling (HDD) in accordance with Section 10.7.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
197	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	14.4	3.6	651.1	Existing hard court offset 5.8 metres west to be demolished within TPZ. Existing asphalt car park offset 4.8 metres south-east to be demolished within TPZ. Proposed 300mmØ stormwater pipeline offset 4.1 metres north at IL? Open trenching for pipeline within SRZ/TPZ.	No adverse impact, provided that all demolition works are undertaken as recommended. Open trenching for stormwater may result in severance of woody roots leading to a significant adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install tree Protection Fence in accordance with Section 10.3. Demolish existing pavements within TPZ in accordance with Section 10.5. Install stormwater pipeline by Horizontal Directional Drilling (HDD) in accordance with Section 10.7
198	<i>Eucalyptus botryoides</i> (Bangalay)	P	8.5	2.7	226.9	Existing hard court offset 6.7 metres north-west to be demolished within TPZ. Existing asphalt car park offset 2.9 metres south-east to be demolished within TPZ.	No adverse impact, provided that all demolition works are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install tree Protection Fence in accordance with Section 10.3. Demolish existing pavements within TPZ in accordance with Section 10.5.
199	<i>Melaleuca armillaris</i> (Bracelet Honey Myrtle)	M	5.0	2.1	78.5	Located within footprint of new lawn area.	No adverse impact.	Remove tree (poor specimen)
200	<i>Melaleuca armillaris</i> (Bracelet Honey Myrtle)	M	6.0	2.4	113.0	Existing basketball court offset 2.5 metres north-west to be demolished within TPZ.	No adverse impact, provided that all demolition works are undertaken as recommended.	Remove tree (poor specimen)
201	<i>Eucalyptus botryoides</i> (Bangalay)	P	9.0	2.4	254.3	Existing pavements (road & car park) to be demolished within TPZ.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection Fence in accordance with Section 10.3. Undertake all demolition works within TPZ in accordance with Section 10.5.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
202	<i>Araucaria heterophylla</i> (Norfolk Island Pine)	M	4.0	1.8	50.2	Existing pavements (road & car park) to be demolished within TPZ.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection Fence in accordance with Section 10.3. Undertake all demolition works within TPZ in accordance with Section 10.5.
203	<i>Eucalyptus botryoides</i> (Bangalay)	P	8.0	2.5	201.0	Existing pavements (basketball court & car park) to be demolished within TPZ. Proposed new sports court offset 5.3 metres north at RL 9.12 (200mm below grade). Excavations for pavement subgrade within TPZ (partly within footprint of existing hardcourt). Encroachment to TPZ = 11%.	Extent of encroachment to TPZ marginally exceeds acceptable limits under AS 4970:2009. No adverse impact, provided that all works are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6.
204	<i>Eucalyptus botryoides</i> (Bangalay)	P	7.3	2.7	169.1	Existing pavements (road & car park) to be demolished within TPZ.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.
205	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	6.0	2.2	113.0	Existing pavements (road & car park) to be demolished within TPZ.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.
206	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	9.0	2.8	254.3	Existing pavements (road & car park) to be demolished within TPZ.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.
207	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.0	2.5	153.9	Existing pavements (road & car park) to be demolished within TPZ.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.
208	<i>Corymbia citriodora</i> (Lemon-scented Gum)	P	6.0	2.1	113.0	Existing pavements (road & car park) to be demolished within TPZ.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
209	<i>Eucalyptus botryoides</i> (Bangalay)	P	7.0	2.3	153.9	Existing pavements (road & car park) to be demolished within TPZ.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.
210	<i>Eucalyptus botryoides</i> (Bangalay)	P	7.0	2.2	153.9	Existing pavements (road & car park) to be demolished within TPZ.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.
211	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	9.0	2.7	254.3	Existing pavements (road & car park) to be demolished within TPZ.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.
212	<i>Eucalyptus botryoides</i> (Bangalay)	P	11.0	2.7	379.9	Existing pavements (road & car park) to be demolished within TPZ. Proposed new grass swale offset 3.7 metres east. Excavations for swale within TPZ (within footprint of existing asphalt car park). Encroachment to TPZ is less than present situation.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within soft landscape areas of TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake all excavations associated with grass swale within TPZ in accordance with Section 10.6.
213	<i>Eucalyptus botryoides</i> (Bangalay)	P	9.1	2.7	258.7	Existing pavements (road & car park) to be demolished within TPZ. Proposed new grass swale offset 5.9 metres east. Excavations for swale within TPZ (within footprint of existing asphalt car park). Encroachment to TPZ is less than present situation.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within soft landscape areas of TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake all excavations associated with grass swale within TPZ in accordance with Section 10.6.
214	<i>Eucalyptus paniculata</i> (Grey Ironbark)	P	6.0	2.5	113.0	Existing pavements & surrounding kerb and gutter (road & car park) to be demolished within TPZ. Located within footprint of proposed drainage swale.	Proposed works will necessitate removal	Remove tree.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
215	<i>Eucalyptus paniculata</i> (Grey Ironbark)	P	6.5	2.2	132.7	Existing kerb and gutter within 1 metre east and west to be demolished within SRZ. Proposed drainage swale offset 4.3 metres west. Excavations for drainage swale within TPZ (within footprint of existing pavement). Decrease in present encroachment.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.
216	<i>Eucalyptus botryoides</i> (Bangalay)	P	6.7	2.4	140.4	Located within landscape area and alignment of proposed fence.	Proposed works will necessitate removal	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Adjust fence position slightly to accommodate trunk. Undertake all excavations for fence post footings within TPZ in accordance with Section 10.6.
217	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.3	2.4	165.6	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
218	<i>Eucalyptus botryoides</i> (Bangalay)	P	6.0	2.3	113.8	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
219	<i>Eucalyptus acmenioides</i> (White Mahogany)	P	6.0	2.1	113.0	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
220	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	12.0	3.0	452.2	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
221	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	8.5	2.9	228.1	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
222	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	10.3	2.8	334.3	No proposed works within TPZ	No adverse impact.	To be retained - no special Tree Protection Measures required.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
223	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	6.4	2.3	128.7	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
224	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	6.6	2.6	138.8	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
225	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	5.0	1.9	78.5	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
226	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	6.2	2.3	121.1	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
227	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	11.1	2.9	389.0	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
228	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	12.0	3.0	451.4	No proposed works within TPZ	No adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10).
229	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	9.0	2.7	253.3	No proposed works within TPZ	No adverse impact.	To be retained - no special Tree Protection Measures required.
230	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	9.8	2.8	298.5	No proposed works within TPZ	No adverse impact.	To be retained - no special Tree Protection Measures required.
231	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	5.0	2.1	76.9	No proposed works within TPZ	No adverse impact.	To be retained - no special Tree Protection Measures required.
232	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	11.4	3.2	408.1	Existing maintenance compound to be demolished within TPZ. Proposed new circuit path offset 5 metres north west at RL? (within footprint of existing asphalt pavements.	No adverse impact, provided trees are adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
233	<i>Allocasuarina torulosa</i> (Forest Oak)	M	3.2	1.9	31.6	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.
234	<i>Allocasuarina torulosa</i> (Forest Oak)	M	3.3	1.9	33.9	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.
235	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.0	2.1	153.9	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.
236	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	3.4	2.0	37.1	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.
237	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	3.0	1.6	28.3	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.
238	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	3.0	1.8	27.9	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
239	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	2.9	1.8	27.2	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
240	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	5.7	2.4	103.2	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
241	<i>Allocasuarina torulosa</i> (Forest Oak)	M	2.0	1.4	12.6	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.
242	<i>Araucaria bidwillii</i> (Bunya-bunya Pine)	M	4.0	1.8	50.2	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
243	<i>Jacaranda mimosifolia</i> (Jacaranda)	M	6.0	2.1	113.0	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
244	<i>Allocasuarina torulosa</i> (Forest Oak)	M	2.5	1.7	19.6	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.
245	<i>Allocasuarina torulosa</i> (Forest Oak)	M	2.5	1.7	19.6	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.
246	<i>Allocasuarina torulosa</i> (Forest Oak)	M	2.8	1.8	23.9	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.
247	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	7.0	2.1	153.9	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
248	<i>Glochidion ferdinandi</i> (Cheese Tree)	M	3.0	1.7	28.3	Located within footprint of proposed drainage swale.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
249	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	3.7	2.0	43.1	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
250	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	3.6	2.0	40.5	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
251	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	3.4	1.9	35.5	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
252	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	2.0	1.5	12.6	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.
253	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	2.6	1.7	21.2	Located within footprint of proposed sports oval.	Proposed works will necessitate removal	Remove tree.
254	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	4.1	2.1	53.5	Located within footprint of proposed sports oval & associate circuit path.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.
255	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	2.5	1.7	20.0	Located within footprint of proposed sports court.	Proposed works will necessitate removal	Remove tree.
256	<i>Allocasuarina torulosa</i> (Forest Oak)	M	2.4	1.7	18.8	Located within footprint of proposed sports court.	Proposed works will necessitate removal	Remove tree.
257	<i>Allocasuarina torulosa</i> (Forest Oak)	M	2.0	1.5	12.6	Located within footprint of proposed sports court.	Proposed works will necessitate removal	Remove tree.
258	<i>Allocasuarina torulosa</i> (Forest Oak)	M	2.0	1.3	12.6	Located within footprint of proposed sports court.	Proposed works will necessitate removal	Remove tree.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
259	<i>Allocasuarina torulosa</i> (Forest Oak)	M	1.9	1.5	11.5	Located within footprint of proposed pathway	Proposed works will necessitate removal	Remove tree.
260	<i>Allocasuarina torulosa</i> (Forest Oak)	M	2.2	1.6	15.4	Surrounding asphalt carpark and kerb and gutter to be demolished within TPZ. Located within footprint of proposed pathway.	Proposed works will necessitate removal	Remove tree.
261	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	3.7	2.0	42.3	Surrounding asphalt carpark and kerb and gutter to be demolished within TPZ.	No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.
262	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	9.6	3.0	289.4	Surrounding asphalt carpark and kerb and gutter to be demolished within TPZ. Proposed pathway offset 7.5 metres west at RL? (within footprint of existing car park).	No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5.
263	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	4.0	2.1	49.2	Surrounding asphalt carpark and kerb and gutter to be demolished within TPZ. Proposed new stairway offset 2.9 metres north-east at RL? (suspended above grade) Excavations for pier footings within TPZ. Proposed 300mmØ stormwater pipeline offset 2.1 metres south at IL? Open trenching for pipeline within SRZ.	No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained. Open trenching for stormwater may result in severance of woody roots leading to a significant adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake all excavations for new stair footings within TPZ in accordance with Section 10.6. Install new pathway within TPZ in accordance with Section 10.8 & 10.9. Install stormwater pipeline by Horizontal Directional Drilling (HDD) in accordance with Section 10.7.
264	<i>Melaleuca quinquenervia</i> (Broad-leaved Paperbark)	M	4.8	2.3	72.3	Surrounding asphalt carpark and kerb and gutter to be demolished within TPZ and area re-graded. Proposed new stairway offset 0.9 metres north-east at RL? (suspended above grade). Excavations for pier footings within TPZ. Substantial canopy pruning required to clear pedestrian access. Proposed 300mmØ stormwater pipeline offset 0.7 metres north at IL? Open trenching for pipeline within SRZ.	Proposed works will necessitate removal	Undertake replacement planting with a new tree elsewhere within the property to compensate for loss of amenity in accordance with Section 11.

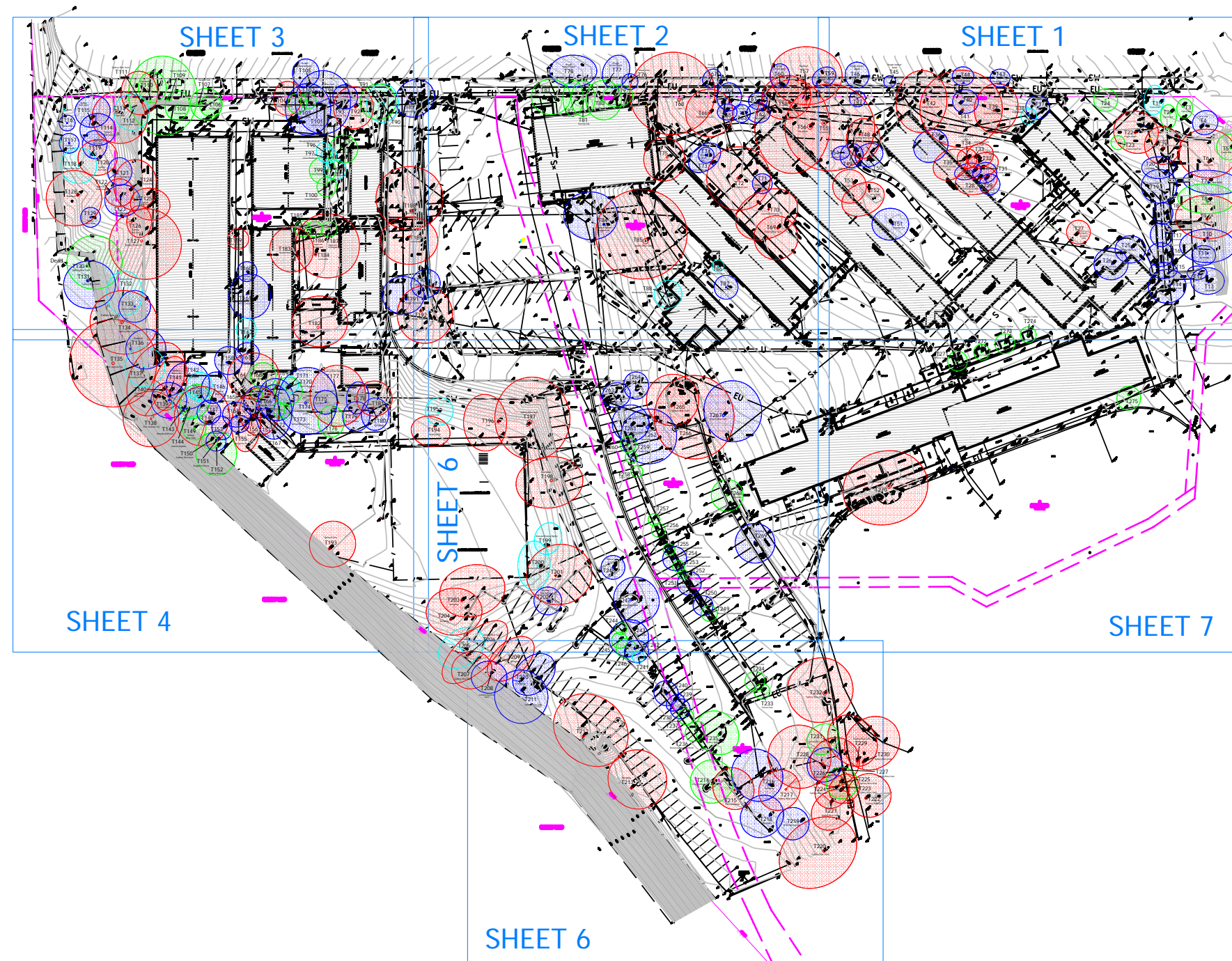
APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
265	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	8.0	2.5	201.0	Surrounding asphalt carpark and kerb and gutter to be demolished within TPZ and area re-graded. Proposed new stairway offset 4.9 metres north-east within TPZ at RL 7 -12.4 (at grade to 5 metres above grade, elevated on piers, within footprint of existing asphalt). No increase in encroachment from present situation). Proposed deck offset 4.2 metres east at RL12.40 (5 metres above grade). Excavations for pier footings within TPZ. No increase in present encroachment.	No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake all excavations for new stair and deck foundations within TPZ in accordance with Section 10.6.
266	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	12.0	3.1	452.2	Surrounding asphalt carpark and kerb and gutter to be demolished within TPZ and area re-graded. Proposed new stairway offset 9.2 metres north-east within TPZ at RL 7 -12.4 (at grade to 5 metres above grade, elevated on piers, within footprint of existing asphalt). No increase in encroachment from present situation. Proposed deck offset 2 metres east at RL12.40 (5 metres above grade). Excavations for pier footings within TPZ. No increase in present encroachment. Proposed sports court and associated retaining wall offset 6.6 metres south west at RL 7.00 (400mm below grade). Encroachment to TPZ = 16% (less than present situation. Proposed 300mmØ stormwater pipeline offset 5.5 metres south at IL? Open trenching for pipeline within TPZ.	No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ (outside sports court) are maintained. Open trenching for stormwater may result in severance of woody roots leading to an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Undertake any required canopy pruning to clear building envelope and temporary scaffolding in accordance with Section 10.11. Erect temporary scaffolding within TPZ in accordance with Section 10.15. Undertake all excavations for sports court and associated retaining wall within TPZ in accordance with Section 10.6. Undertake all excavations for proposed deck footings within TPZ in accordance with Section 10.6. Install stormwater pipeline by non-destructive excavation techniques in accordance with Section 10.7.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
267	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	9.0	2.7	254.3	Surrounding asphalt carpark and kerb and gutter to be demolished within TPZ and area re-graded. Proposed new building offset 5.4 metres south-west within TPZ (elevated on piers). Some canopy pruning may be required to clear building envelope. Proposed stairway offset 3.4 metres north. Excavations for stair foundations within TPZ. Cumulative encroachment = 30%.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works are likely to result in an adverse impact.	Remove tree (poor specimen)
268	<i>Eucalyptus botryoides</i> (Bangalay)	P	5.0	2.1	78.5	Located within footprint of proposed sports court.	Proposed works will necessitate removal	Remove tree.
269	<i>Eucalyptus botryoides</i> (Bangalay)	P	5.0	2.0	78.5	Surrounding asphalt carpark and kerb and gutter to be demolished within TPZ and area re-graded to accommodate new soft landscape works. Proposed 300mmØ stormwater pipeline offset 2.6 metres north-east at IL? Open trenching for pipeline within TPZ.	No adverse impact, provided tree is adequately protected as recommended and assuming existing ground levels within TPZ are maintained. Open trenching for stormwater may result in severance of woody roots leading to a adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Undertake all demolition works within TPZ in accordance with Section 10.5. Install stormwater pipeline by non-destructive excavation techniques in accordance with Section 10.7.
270	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	12.0	3.3	452.2	Existing building and retaining wall to be demolished within TPZ/SRZ. Proposed new building located beyond existing structures to be demolished - no actual incursion to root zone. Substantial canopy pruning required to accommodate new building and temporary scaffolding.	Proposed works will necessitate removal (High Retention Value)	Proposed works will necessitate removal (High Retention Value). Undertake replacement planting with a new tree elsewhere within the property in accordance with Section 11.
271	<i>Sapium sebiferum</i> (Chinese Tallow tree)	M	3.0	1.8	28.3	Located within footprint of proposed building	Proposed works will necessitate removal	Remove tree.
272	<i>Sapium sebiferum</i> (Chinese Tallow tree)	M	2.5	1.5	19.6	Located within footprint of proposed building	Proposed works will necessitate removal	Remove tree.
273	<i>Sapium sebiferum</i> (Chinese Tallow tree)	M	3.0	1.8	28.3	Located within footprint of proposed building	Proposed works will necessitate removal	Remove tree.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Encroachments to TPZ/ Root Zone &/or Canopy	Likely Impact	Implications of proposed development and recommendations for Tree Protection.
274	<i>Sapium sebiferum</i> (Chinese Tallow tree)	M	2.5	1.5	19.6	Located within footprint of proposed building	Proposed works will necessitate removal	Remove tree.
275	<i>Casuarina glauca</i> (Swamp Oak)	M	3.7	2.0	43.1	Located within footprint of proposed building	Proposed works will necessitate removal	Remove tree.



APPENDIX 5 - TREE LOCATION PLAN SHOWING TREE RETENTION VALUES

Meadowbank Schools
2 Rhodes Street, MEADOWBANK, NSW



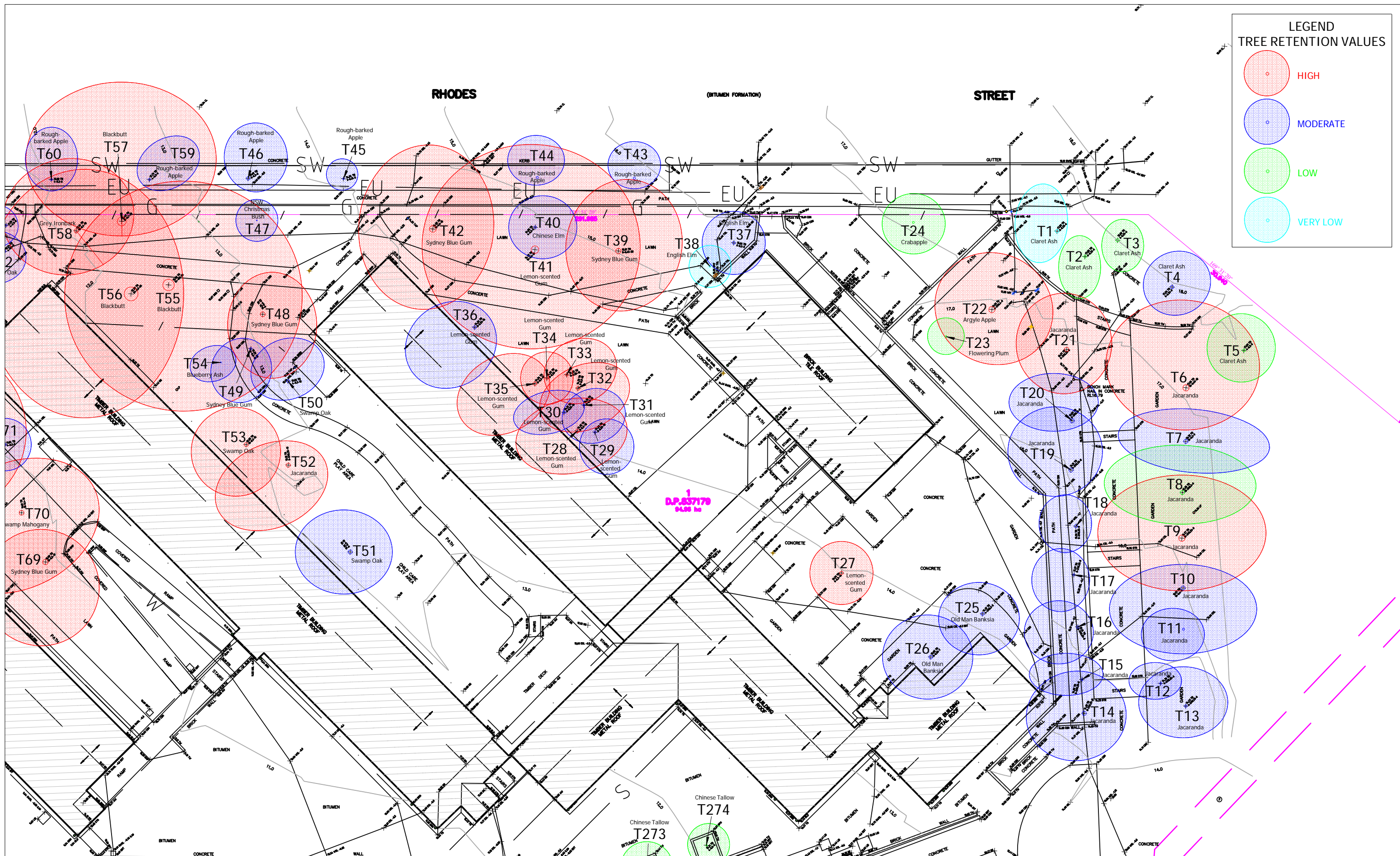
Earthscape Horticultural Services
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Based on the Survey Drawing
prepared by CMS Surveyors Pty Ltd
Dwg Ref No. 17314detail [2]
Dated 16/10/2017

DWG No. T17-121901 [D]

KEY PLAN

DATE: 16/04/2019



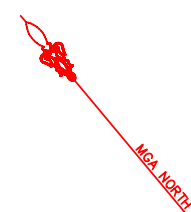
APPENDIX 5 - TREE LOCATION PLAN SHOWING TREE RETENTION VALUES

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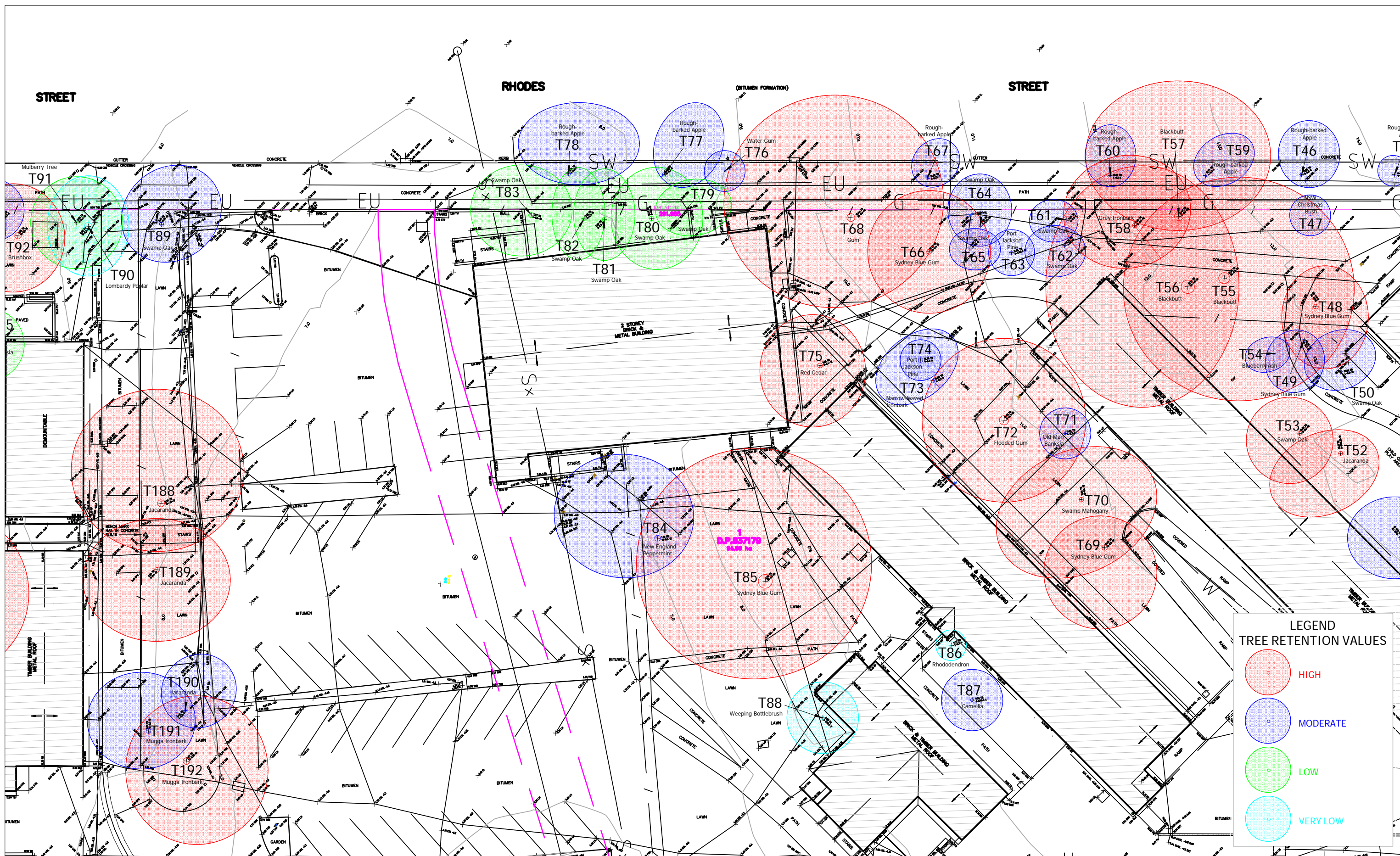
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DWG No. T17-121901 [D]

SHEET 1

DATE: 16/04/2019



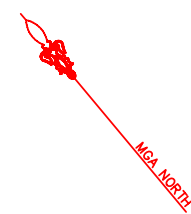
APPENDIX 5 - TREE LOCATION PLAN SHOWING TREE RETENTION VALUES

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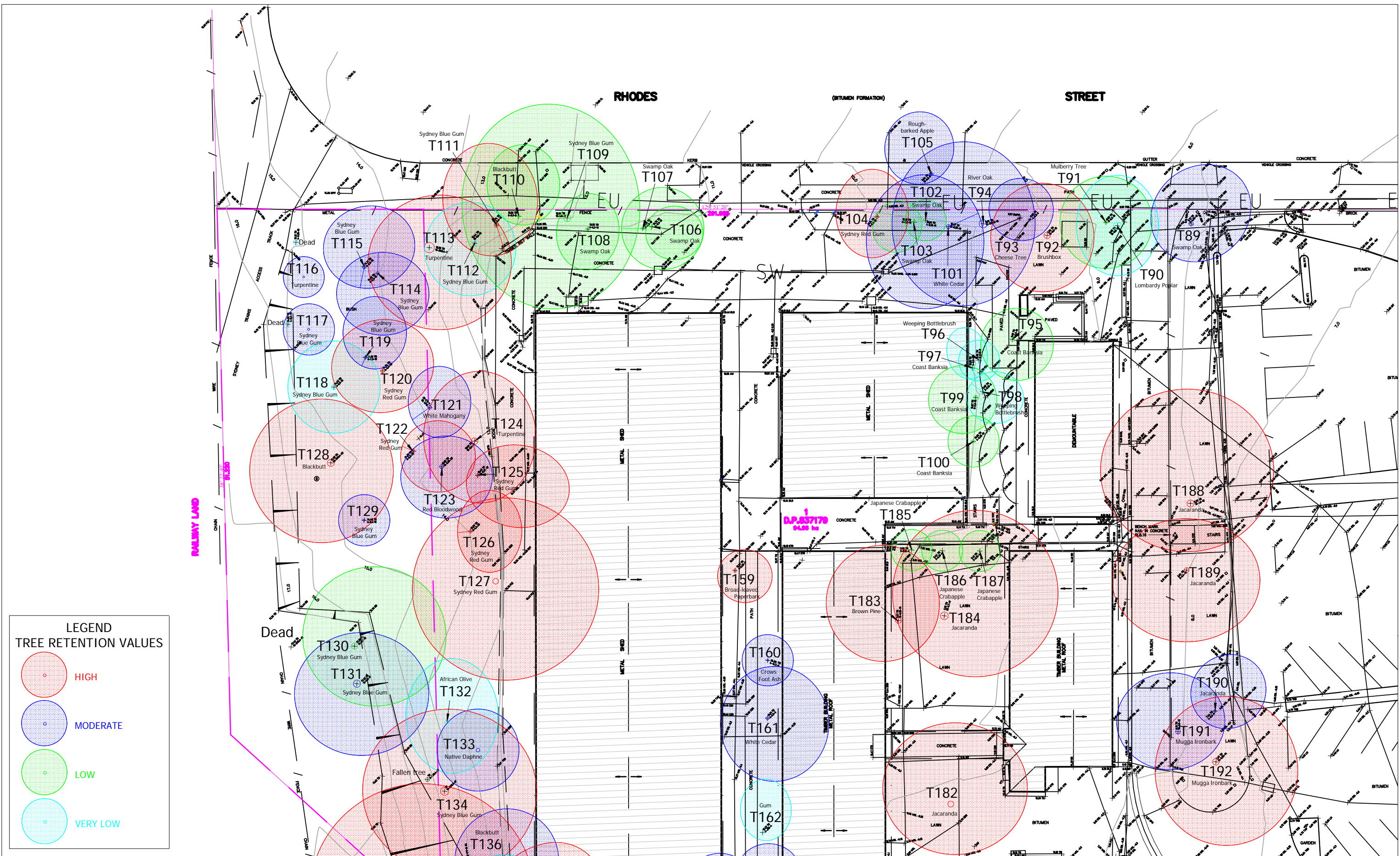
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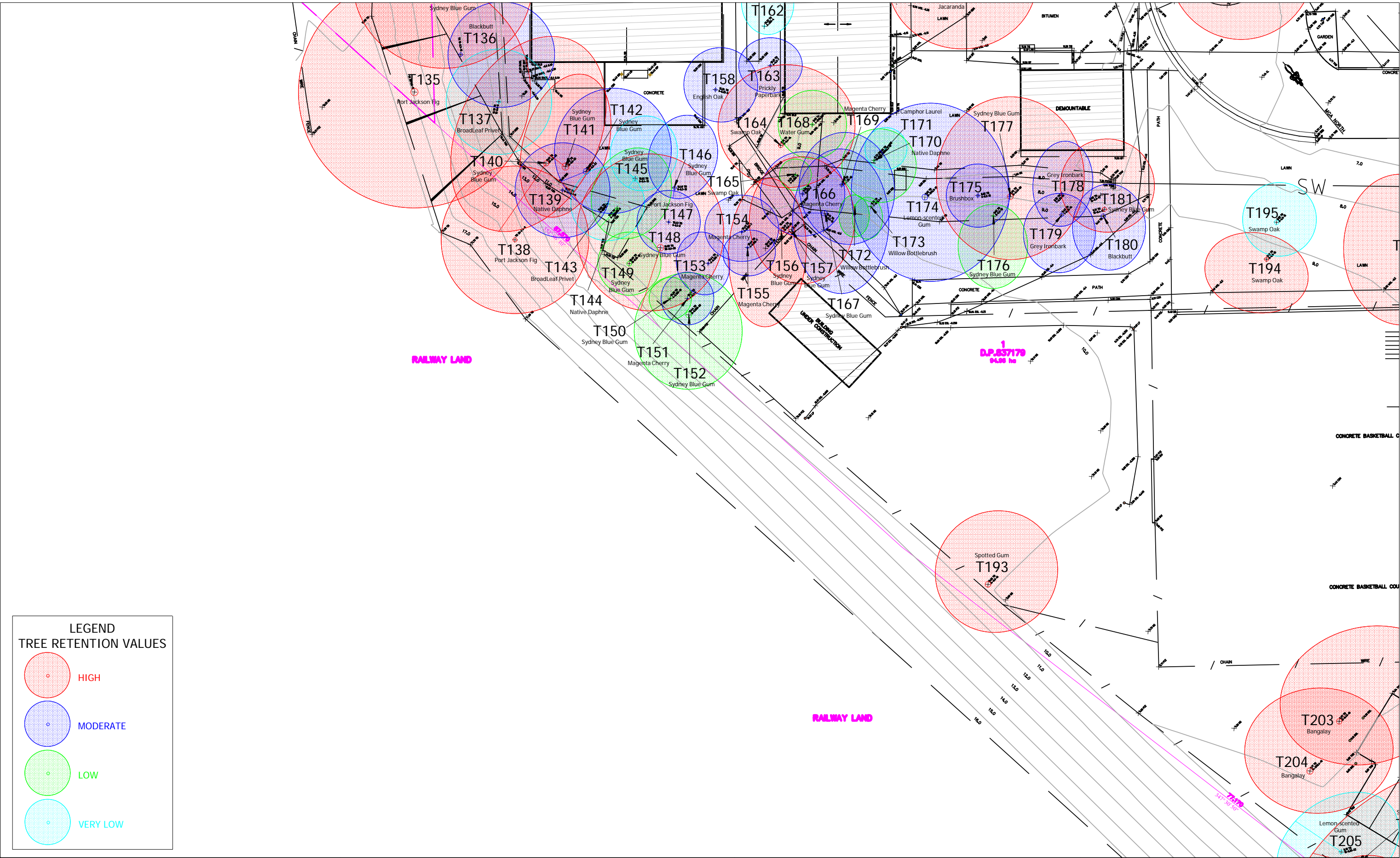


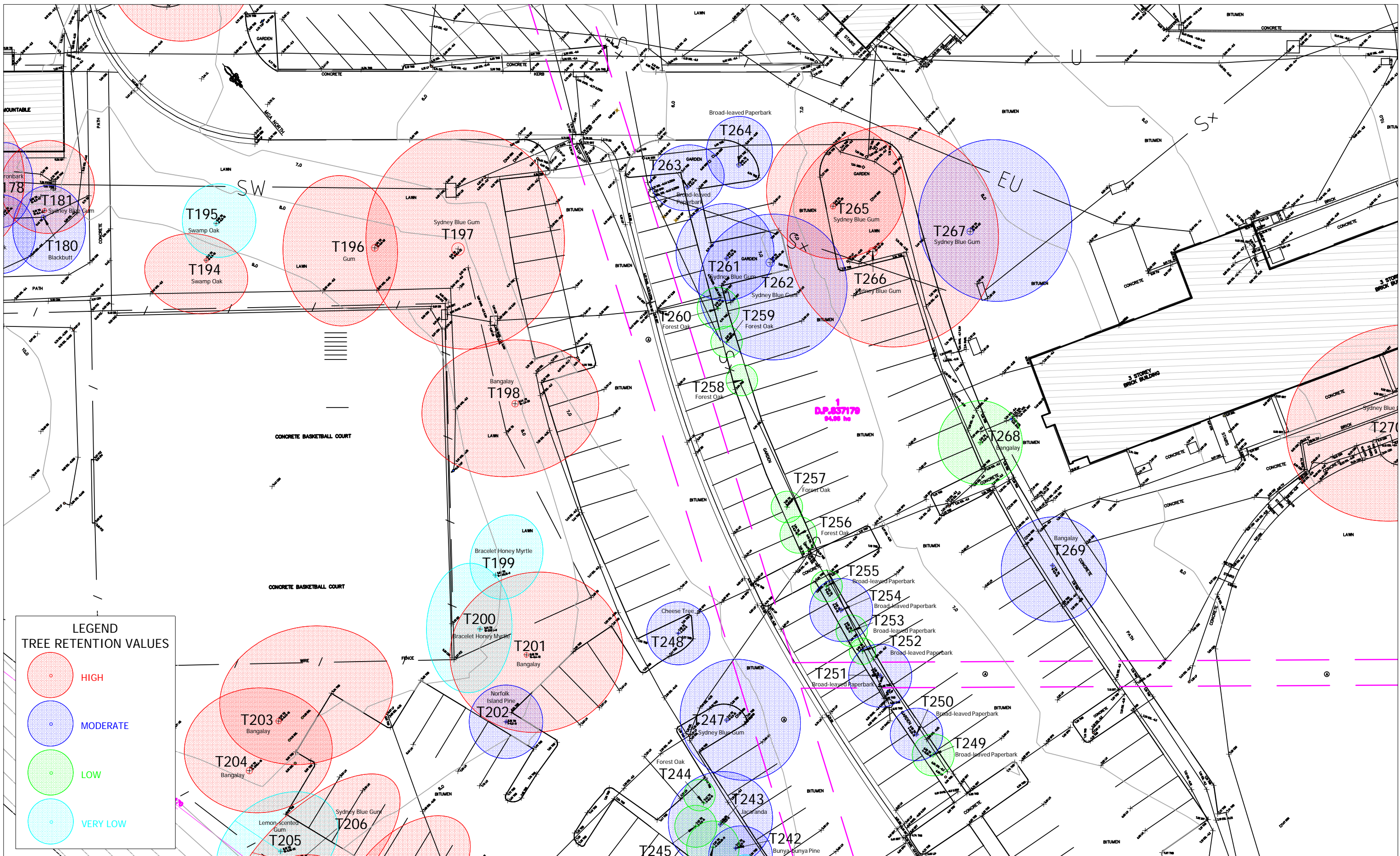
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SHEET 2

DATE: 16/04/2019







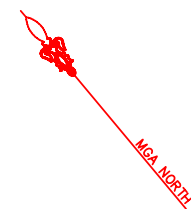
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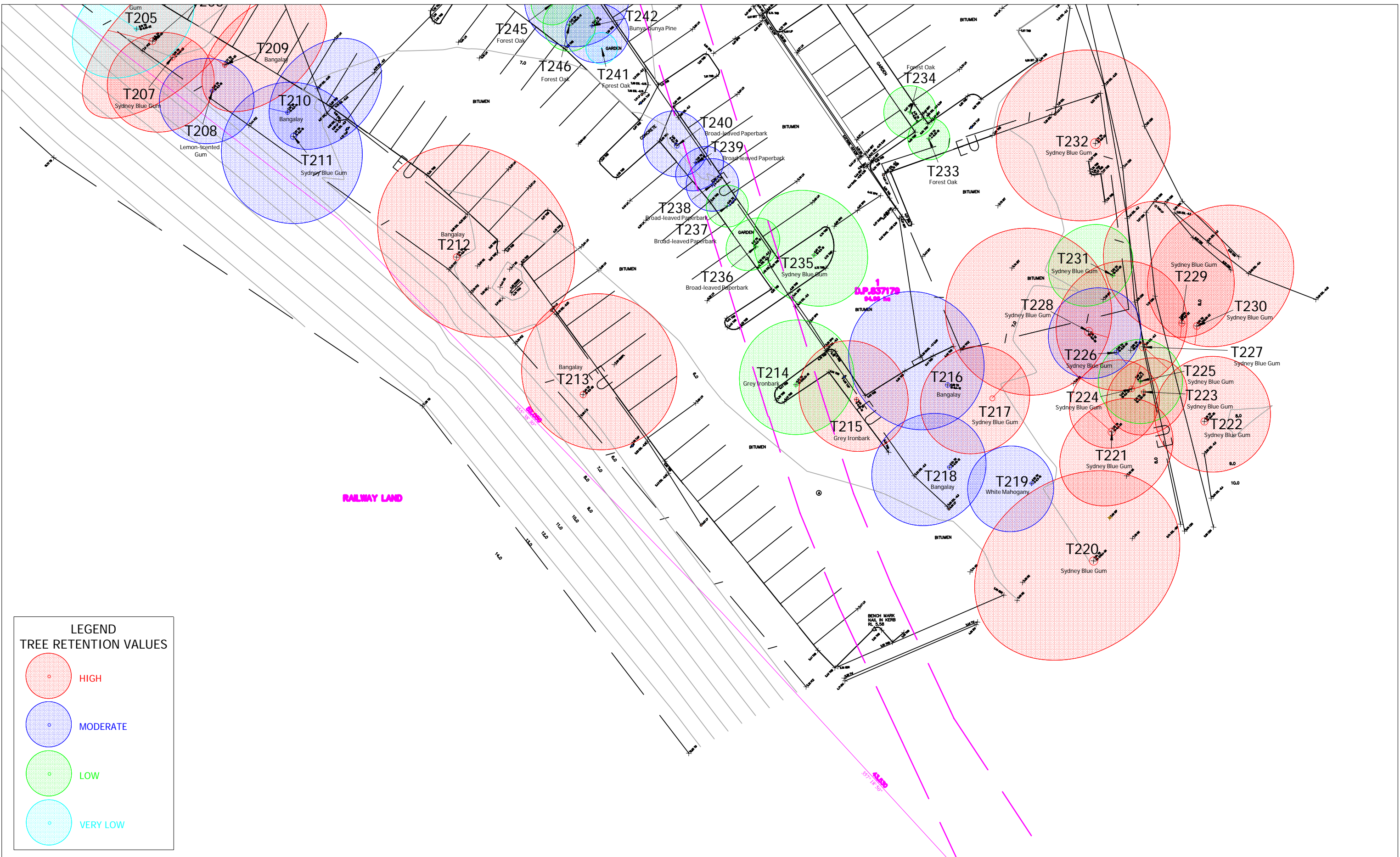
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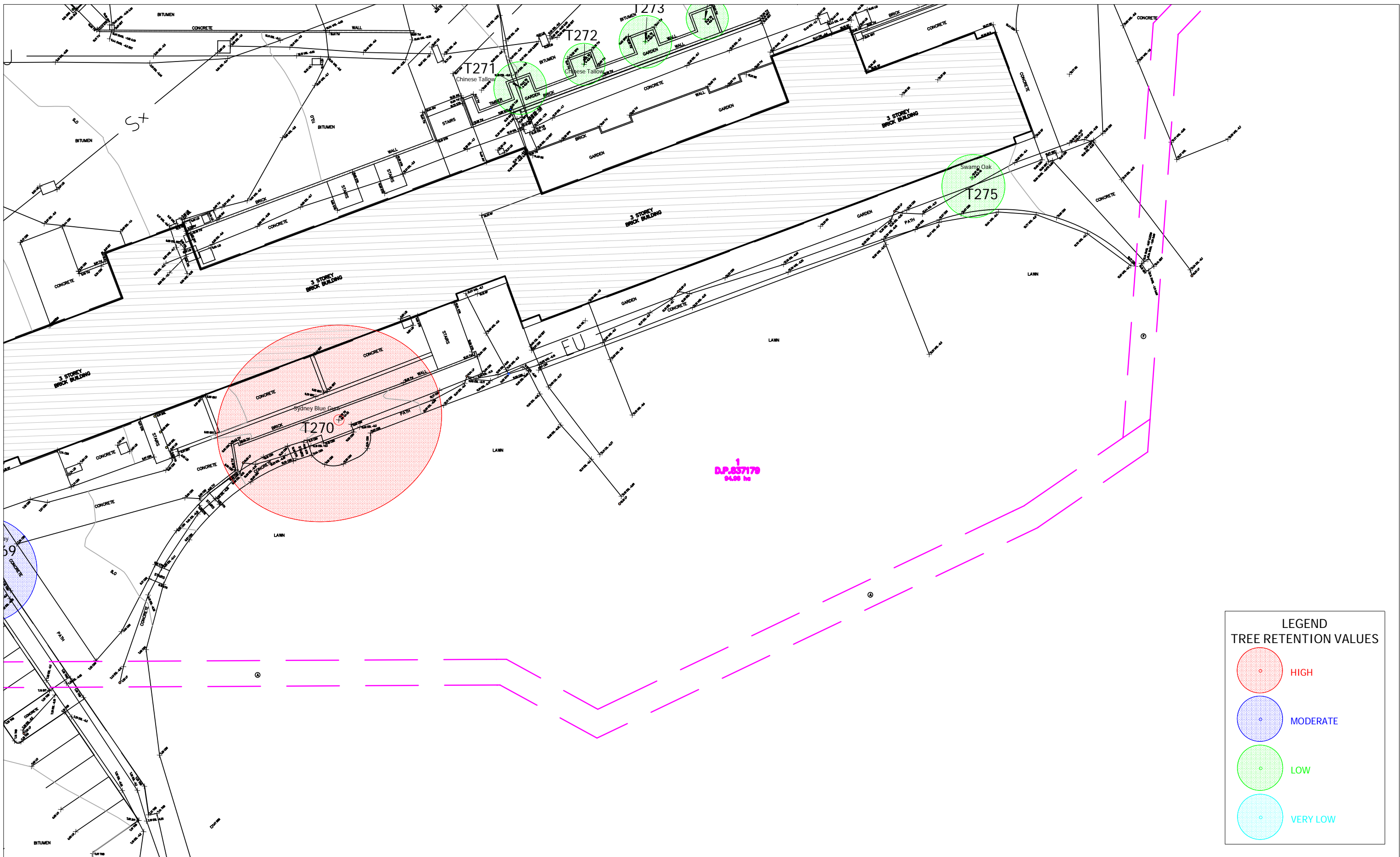


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SHEET 5

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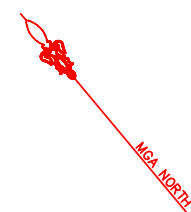
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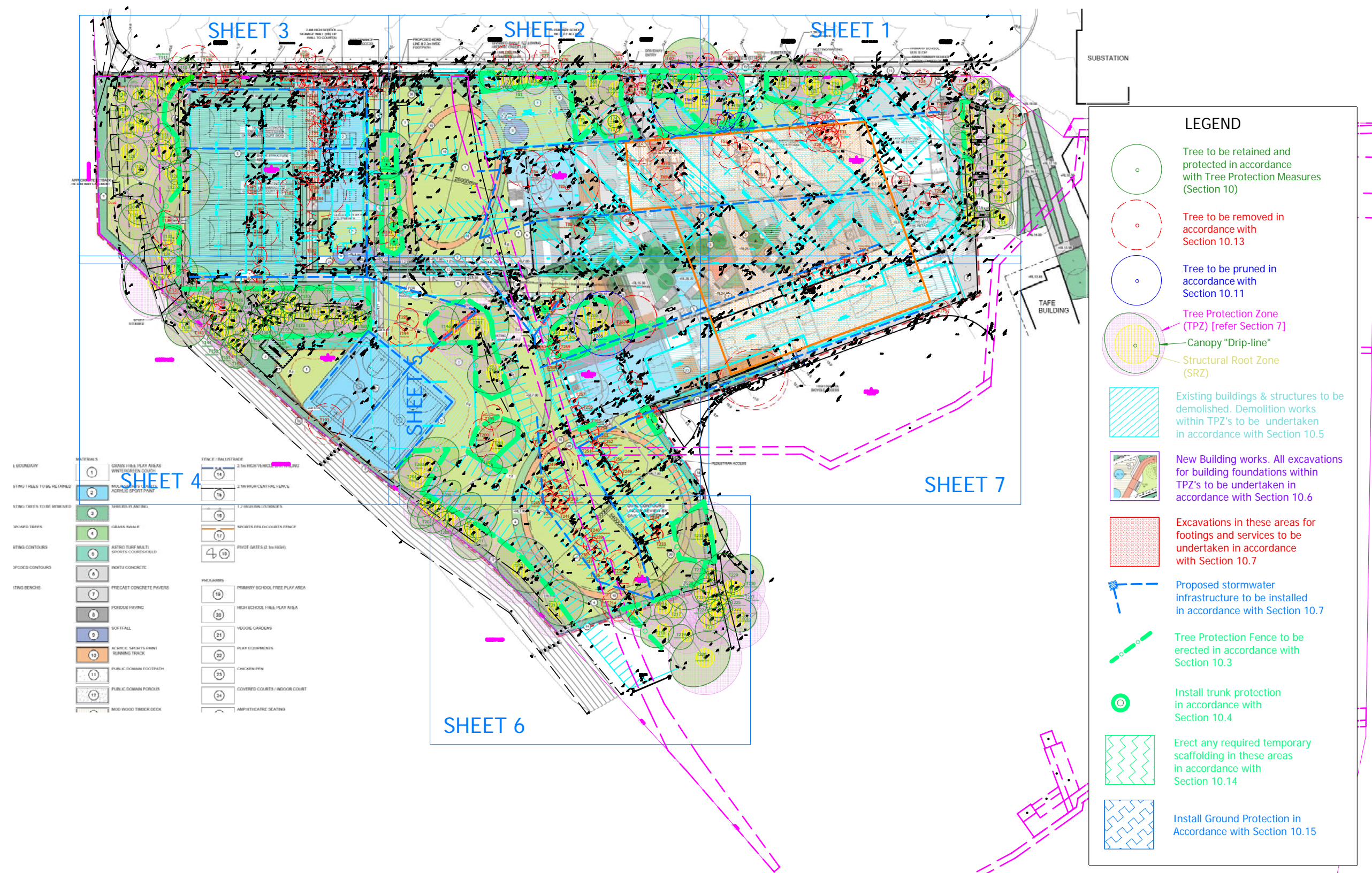
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SHEET 7

DATE: 16/04/2019



APPENDIX 6
TREE PROTECTION PLAN
Meadowbank Schools
2 Rhodes Street, MEADOWBANK, NSW



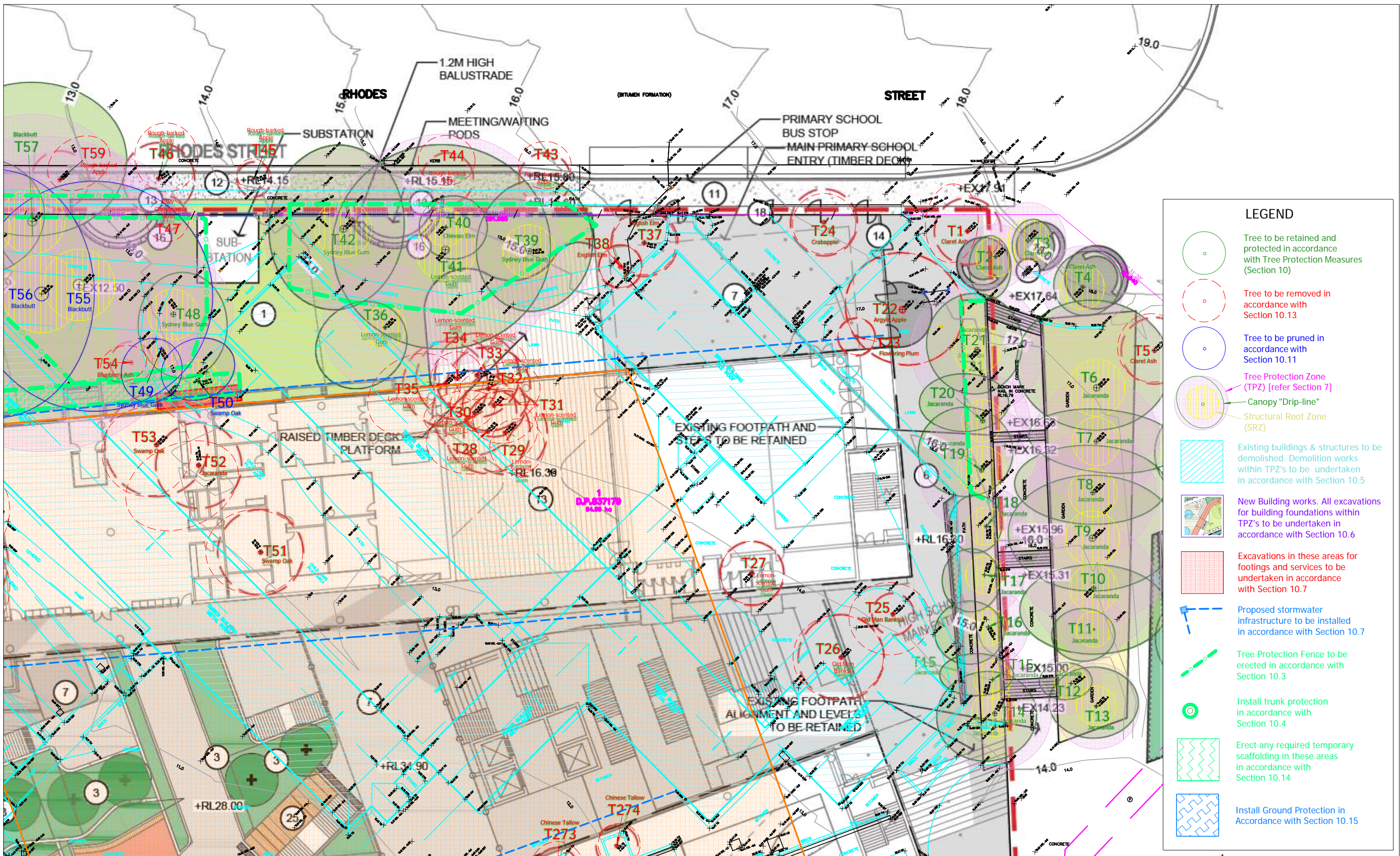
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KEY PLAN

DATE: 03/06/2019



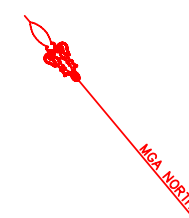
APPENDIX 6 TREE PROTECTION PLAN

Meadowbank Schools
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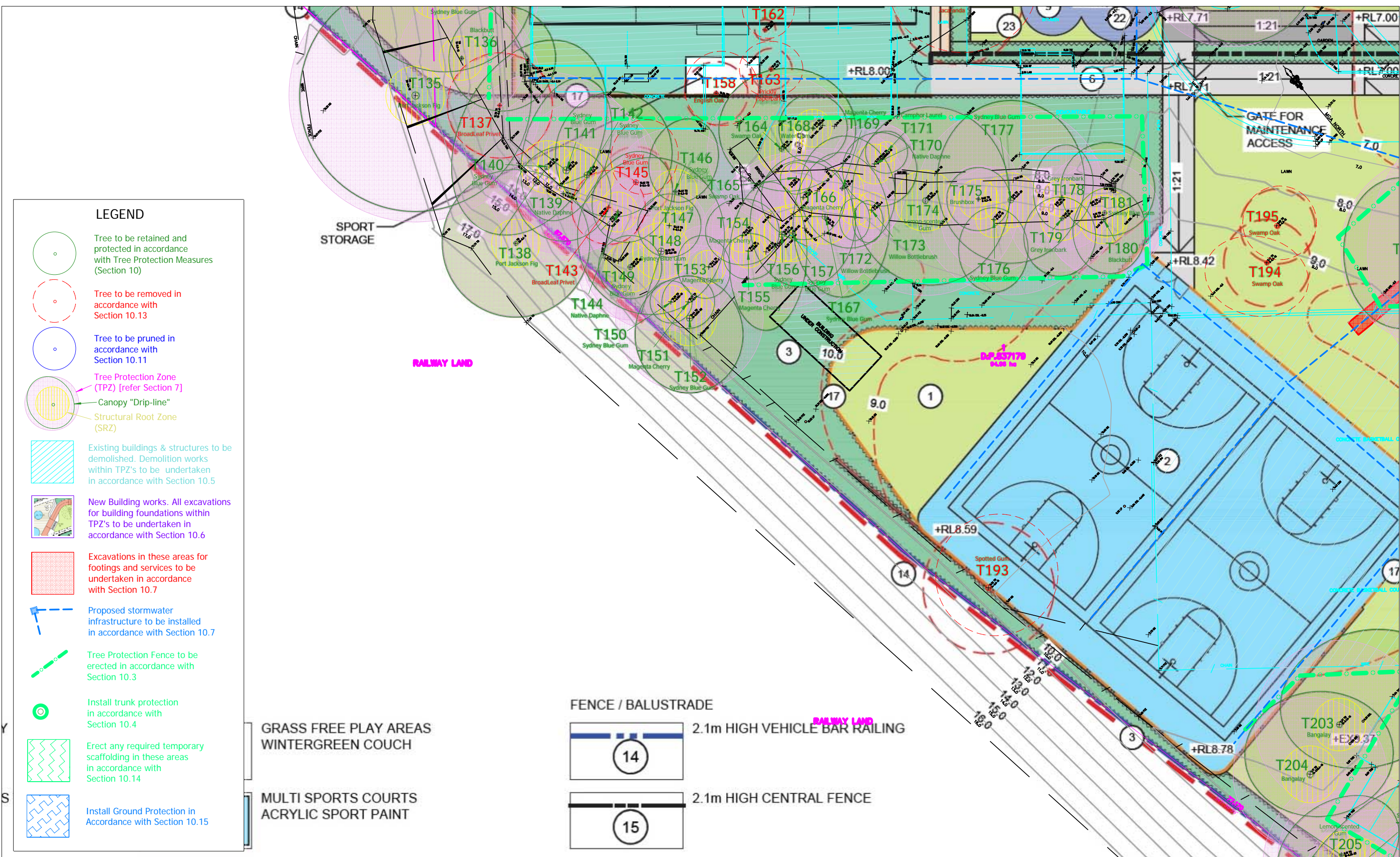
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SHEET 1

DATE: 03/06/2019



<p>APPENDIX 6</p> <p>TREE PROTECTION PLAN</p> <p>Meadowbank Schools</p> <p>2 Rhodes Street, MEADOWBANK, NSW</p>	 <p>Earthscape Horticultural Services Arboricultural and Horticultural Consultants PO Box 364 BEROWRA NSW 2081 Ph: 02 9456 4787 Fax: 02 9456 5757 e: earthscape@iinet.net.au</p>	<p>Based on the Survey Drawing prepared by CMS Surveyors Pty Ltd Dwg Ref No. 17314detail [2] Dated 16/10/2017</p>	<p>DWG No. T17-121902 [M]</p> <p>SHEET 2</p> <p>DATE: 03/06/2019</p>
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APPENDIX 6

TREE PROTECTION PLAN

Meadowbank Schools
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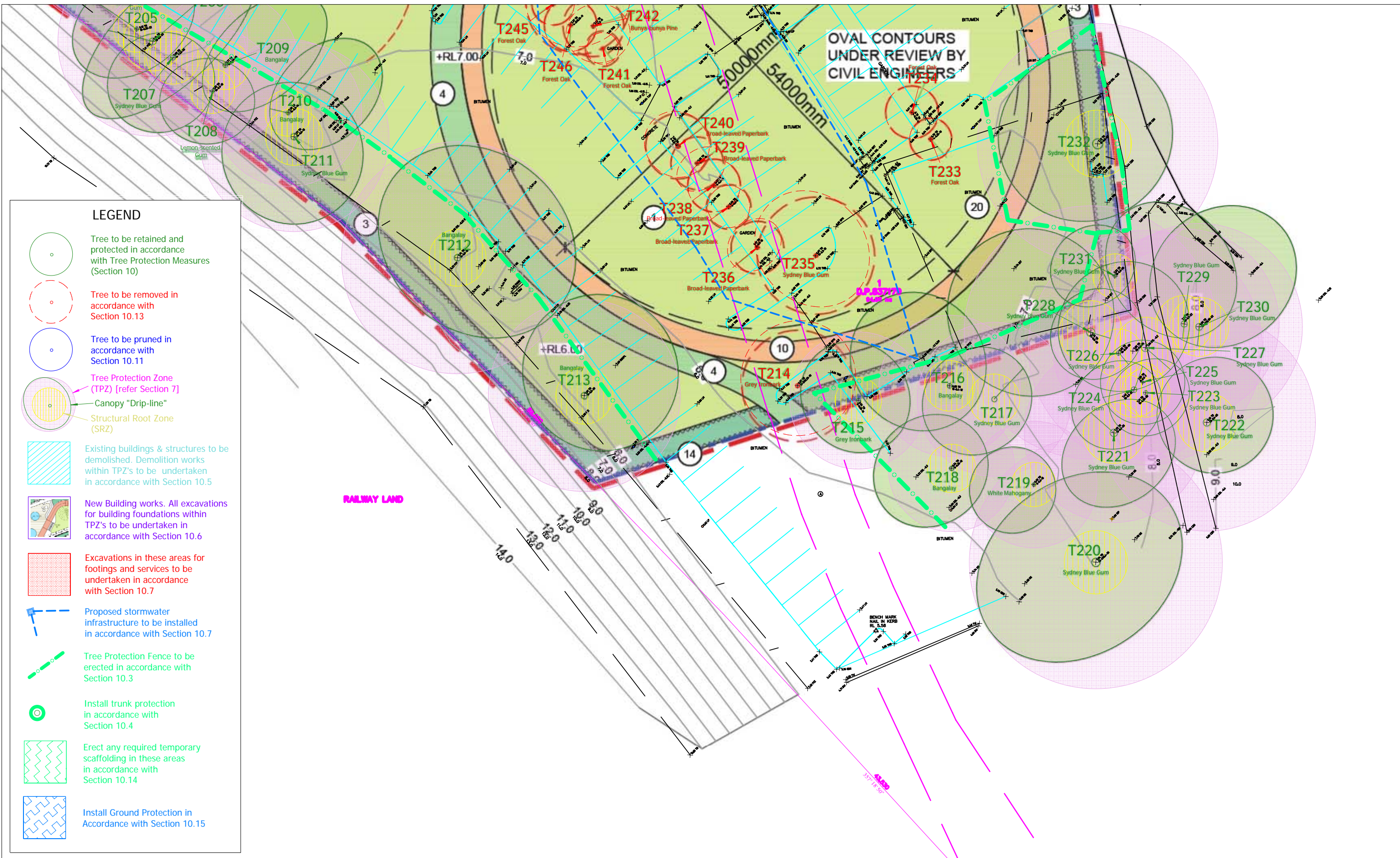
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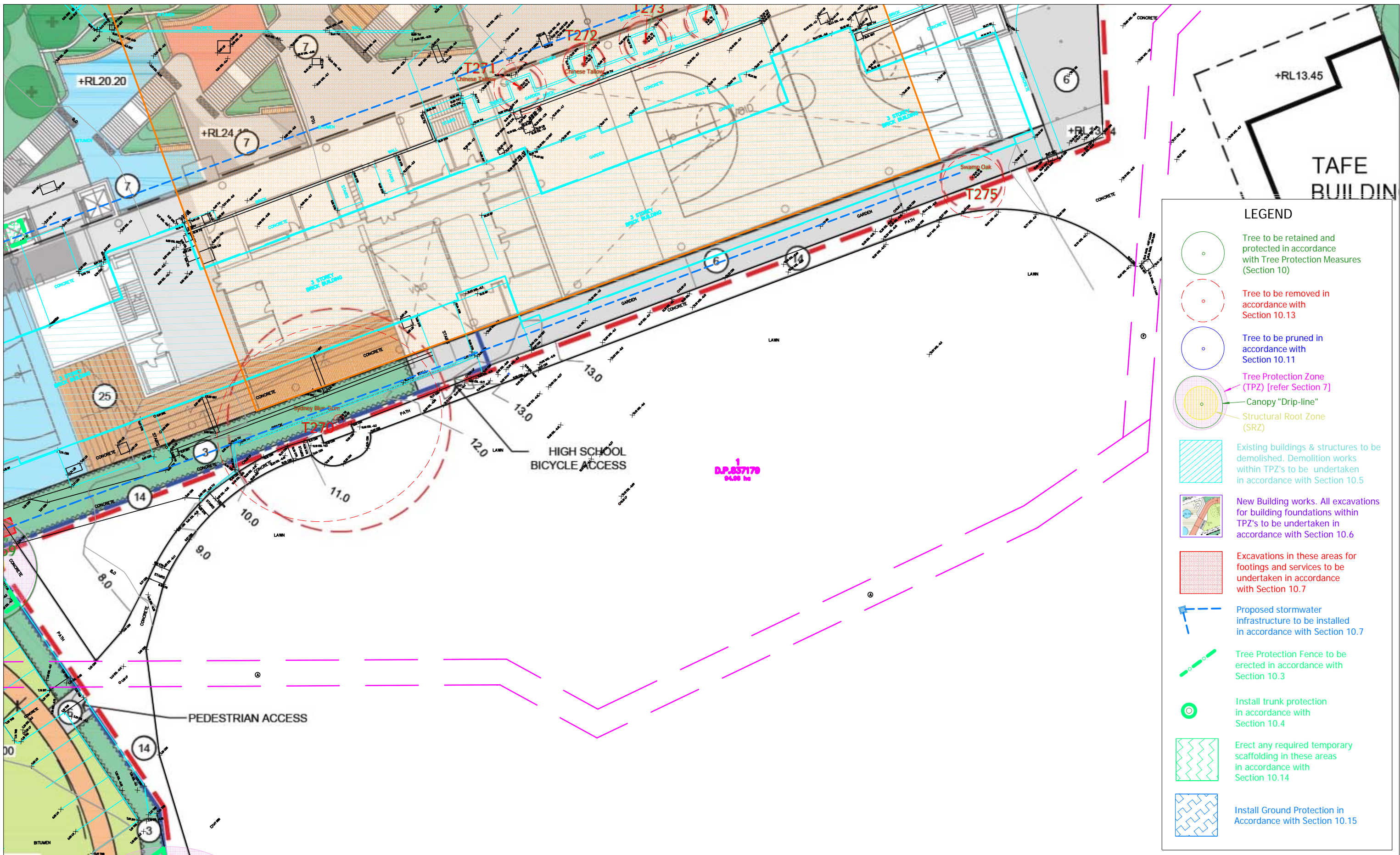
SHEET 4

DATE: 03/06/2019





<p>APPENDIX 6</p> <p>TREE PROTECTION PLAN</p> <p>Meadowbank Schools</p> <p>2 Rhodes Street, MEADOWBANK, NSW</p>	 <p>Earthscape Horticultural Services</p> <p>Arboricultural and Horticultural Consultants</p> <p>PO Box 364</p> <p>BEROWRA NSW 2081</p> <p>Ph: 02 9456 4787</p> <p>Fax: 02 9456 5757 e: earthscape@iinet.net.au</p>	<p>Based on the Survey Drawing</p> <p>prepared by CMS Surveyors Pty Ltd</p> <p>Dwg Ref No. 17314detail [2]</p> <p>Dated 16/10/2017</p>	<p>DWG No. T17-121902 [M]</p> <p>SHEET 6</p> <p>DATE: 03/06/2019</p>
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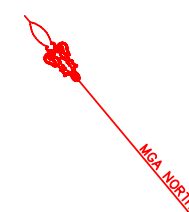


APPENDIX 6 TREE PROTECTION PLAN Meadowbank Schools 2 Rhodes Street, MEADOWBANK, NSW



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SHEET 7

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