

Arboricultural Impact Assessment



Prepared For

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Level 7, Building B, 197-201 Coward Street
MASCOT NSW 2020

Site Address

M6 Motorway Stage 1
197-201 Coward Street
MASCOT NSW 2020

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CDS reference: M6S1-CGU-NWW-CMPR-PLN-024001

Revision 4

February 2022

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1 Introduction

1.1 Project Overview

The subject Project referred to within the Arboricultural Impact Assessment (AIA) comprises a new twin motorway tunnel (around four (4) km in length) between the M8 Motorway at Arncliffe and President Avenue at Kogarah with a tunnel portal and entry and exit ramps connecting the tunnels to the surface Figure 1 below.

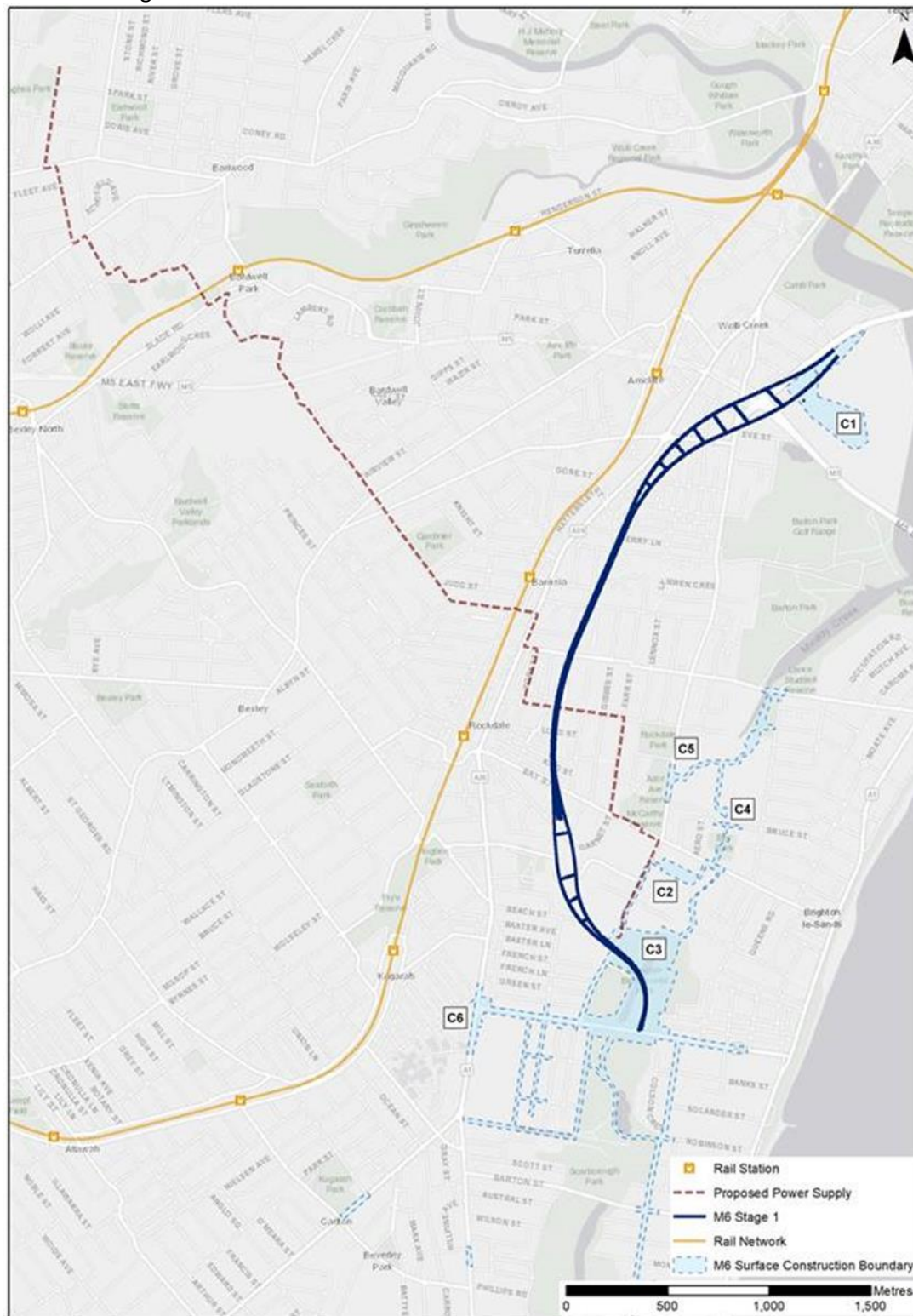


Figure 1 – Works location. Mapping provided by client.

Works will include a connection to the M8 Motorway, line marking of additional travel lanes between the St Peters interchange to the M6 Stage 1 tunnels, an intersection with President Avenue (including widening and raising of President Avenue), and intersection improvements at the President Avenue/Princes Highway intersection. Mainline tunnel stubs would be constructed to allow for connections to future stages of the M6 Extension.

The Project was declared Critical State Significant Infrastructure (CSSI) and was approved by the Minister for Planning and Public Spaces on 18 December 2019.

Key features of the Project include:

- Mainline tunnels approximately 3km in length, sized for three lanes of traffic and line marked for two lanes on opening of the motorway;
- Entry and exit ramp tunnels approximately 1.5km in length and a tunnel portal connecting the tunnels to a surface intersection with President Avenue;
- Provision of a new intersection at President Avenue including the widening and raising of President Avenue at this location;
- Upgrade of the President Avenue and Princes Highway intersection to improve capacity and network integration;
- Provision of a new shared cycle and pedestrian pathways;
- Mainline tunnel stubs for a future connection to extend the Project to the south;
- Two motorway operation complexes (MOCs) as follows:
 - Arncliffe: including mechanical and electrical fit-out of the ventilation facility built by the New M5 Motorway project, and provision of a new water treatment plant and substation.
 - Rockdale (south): including a ventilation building, Disaster Recover Site (DRS), substation and power supply, deluge tanks.
- A tunnel ventilation system, including ventilation facilities located at Marsh Street, Arncliffe and West Botany Street, Rockdale, and in-tunnel ventilation systems (jet fans and ventilation ducts);
- New Utility Services, and modifications and connections to existing Utility Services;
- A permanent power supply connection to the Rockdale Ventilation Facility Site MOC from Ausgrid's Canterbury Sub-Transmission Substation.
- Emergency access and evacuation facilities, including pedestrian and vehicular cross, long passages, fire and safety life systems;
- Ancillary infrastructure for motorway operations including operations management and control systems, permanent power supply, communications, lighting, electronic toll collection system, toll gantries and traffic control and signage (both fixed and variable signage);
- Drainage infrastructure to collect surface water and groundwater inflows for treatment;
- Reinstatement of Bicentennial Park and recreation facilities;
- Reinstatement and rehabilitation of construction leased areas within the Arncliffe Site;
- Minor adjustments to local roads in the Project area;
- Development and implementation of systems integration and operating procedures with WestConnex Motorways to ensure safe operation of the interfaces between the Project and the WestConnex Motorways; and
- Any other works as required under the D&C Deed and the SWTC.

The following six surface compounds will facilitate construction of the Project:

- Arncliffe construction ancillary facility (C1), an existing construction site which was used for the construction of the M8 Motorway;

- Rockdale construction ancillary facility (C2), within an existing Transport for New South Wales (TfNSW) depot;
- President Avenue construction ancillary facility (C3) at Rockdale, within Rockdale Bicentennial Park and an industrial area west of West Botany Street;
- Construction ancillary facilities (C4 and C5) near Muddy Creek to support construction of the Active Transport Corridor; and
- Princes Highway construction ancillary facility (C6) on the corner of Princes Highway and President Avenue, Kogarah to support the intersection surface works.

1.2 Brief

This Arboricultural Impact Assessment (AIA) was prepared by Treeism Arboricultural Services Priority Limited and was commissioned by Ms Mikaela Malcolm of CPB Contractors, Ghella and UGL Joint Venture (CDS-JV). A copy of this AIA will be submitted to the Planning Secretary for approval prior to the removal of any trees. All recommendations of the AIA will be implemented, unless otherwise approved by the Planning Secretary.

The purpose of this report is to identify, locate, assess the vigour, condition, dimension, Safe Useful Life expectancy (SULE), landscape prominence and ascribe a Retention Value to each tree.

The Structural Root Zone (SRZ) and the Tree Protection Zone (TPZ) of each tree is established using the formula provided within the Australian Standard 4970-2009 Protection of trees on development sites (AS4970).

This report is not intended to be a comprehensive tree risk assessment; however, the report may make recommendations, where appropriate, for further assessment, treatment or testing of trees where potential structural problems have been identified, or where below ground investigation may be required.

This report identifies the potential impacts the proposal will have on the retention or long-term viability of each tree, one area of the project (Group 16, Map 13) was inaccessible, should trees be found these will be managed with the supervision of the Project Arborist during works.

Care has been taken to obtain all information from reliable sources. All data has been verified as far as possible; however, I can neither guarantee nor be responsible for the accuracy of information provided by others.

The author of this report holds an AQF Level 5 Diploma of Horticulture (Arboriculture) and has 28 years in the horticultural industry. 23 of these 28 years have been specifically within the field of arboriculture.

Previous roles varied from working actively as a tree climber in private contracting companies to Tree Management Officer at several local Councils and working with independent Consultants. The author is independent from the project.

1.3 Methodology

In preparation for this report, ground-level, visual tree assessment (VTA) ¹, or limited VTA (e.g. where access was limited), were completed by Treeism Arboricultural Services Pty Ltd during September, October and November 2021. Inspection details of these trees are provided in Appendix H —Schedule of Assessed Trees.

Tree height was visually estimated, and unless otherwise noted in Appendix H, the trunk Diameter at Breast Height were measured at 1.4 metres above ground level (DBH) using a diameter tape. Tree canopy spread was stepped out with field observations captured utilising a Trimble TDC600 with data managed through Terraflex and Trimble Connect.

Photographs of the trees were taken using an iPhone SE and/or the Trimble TDC600. Locations of trees were captured with a Trimble Catalyst Digital Antenna.

No aerial inspections, root mapping or woody tissue testing were undertaken as part of this tree assessment. Information contained in this report only reflects the condition of the trees at the time of inspection.

Trees are dynamic, living things which can be subject to change without notice in certain circumstances.

Plans and documents referenced for the preparation of this report include:

- AS4970-2009 Protection of trees on development sites, Standards Australia.
- Marked up aerial mapping of areas of interest, SOW Clear and Grubbing Plans, provided by client.
- Site Layout Plan, provided by client.
- Site Environment Plan, provided by client.
- Threatened Ecological Communities Mapping, provided by client.
- Area 1 Overview Plan, provided by client.
- Area 2 Overview Plan, provided by client.

1.4 Tree Preservation and Management Guidelines

The proposed works form part of the Critical State Significant Infrastructure (SSI 8931) and was approved by the Minister for Planning and Public Spaces, this overrides any Local Government Local Environment Policy (LEP).

What constitutes a 'tree' as per planning approval is any tree that:

- is equal to or greater than three (3) metres in height; or

¹ Visual Tree Assessment (VTA) is a procedure of defect analysis developed by Mattheck and Breloer (1994) that uses the growth response and form of trees to detect defects.

- for a single trunk species, a trunk circumference of 300 millimetres at a height of one metre above ground level; or
- for a multi-trunk species, a trunk circumference exceeding 100 millimetres at a height of one metre above ground level.

However, this excludes any species listed under the Biosecurity Act 2015 (this Act overrules Noxious Weed Act 1993).

1.5 Ministers Conditions of Approval

Conditions of Approval (CoA) relevant to this Plan are shown in Table 1. A reference is included to indicate where the condition is addressed in this Plan or other Project document.

Table 1: CoA

CoA	Condition Requirements	Reference
E38	Any work associated with the CSSI must limit the clearing of native vegetation to the greatest extent practicable.	Section 2.3
E146	Prior to removing any street trees, the Proponent must commission an experienced and suitably qualified arborist independent of the design and construction of the CSSI, to prepare a comprehensive Tree Report(s). The Tree Report may be prepared for all trees that will be removed or separate reports may be prepared for individual areas where trees are required to be removed. The report(s) must include:	Appendix H
	(a) visual tree assessment of the type, stability and health of the tree;	
	(b) consideration of all options to amend the CSSI where a street tree has been identified for removal, including realignment, relocation of services, redesign of or relocation of ancillary components and reduction of standard offsets to underground services; and	Section 3.2, Section 3.3, Section 3.4, Section 3.5
	(c) measures to avoid the removal of trees or minimise damage to existing trees.	Section 3.2, Section 3.3, Section 3.4, Section 3.5, Appendix E
	A copy of the report(s) must be submitted to the Planning Secretary for approval prior to the removal of any trees. All recommendations of the report(s) must be implemented by the Proponent, unless otherwise approved by the Planning Secretary.	Section 1.2
E149	The Proponent must submit to the Planning Secretary a report which details the type, size, number and location of replacement trees. The report must demonstrate how any replacement plantings with a pot size less than 75 litres are consistent with the requirements of Condition E148. The report must be submitted to	Section 2.4

CoA	Condition Requirements	Reference
	the Planning Secretary for information no later than nine months following the commencement of operation.	

1.6 Environmental Management Measures

Environmental Management Measures (EMM) relevant to this Plan are listed in Table 2 which includes reference to outcomes, timing of when the commitment applies, and relevant documents or sections of the environmental assessment which influence the outcome and implementation.

Table 2: EMM relevant to FFMP

Outcome	EMM	Commitment	Timing	Reference
Removal of native vegetation and habitat, including threatened plants	B1	Detailed design will avoid or minimise the need for native vegetation and habitat removal for the construction of the project, where feasible. A plan for the rehabilitation of all areas directly affected by construction, including water bodies, would be included as part of the CFFMP (refer B4 below).	Detailed design	Section 2.3, Section 3.2, Section 3.3, Section 3.4, Section 3.5
Removal of native vegetation and habitat, including threatened plants	LVIA2	Where reasonable and feasible, existing trees will be retained and protected within construction areas.	Detailed design	Section 2.3, Section 3.2, Section 3.3, Section 3.4, Section 3.5

2 Observations and Discussion

2.1 Stage 1 Preliminary Construction Activities Scope

Revision 1 of this Report dated October 2021, addressed potential tree impacts during Stage 1 Preliminary Construction at the C2 Rockdale Depot construction ancillary facility and C3 Bicentennial Park construction ancillary facility. All clearing activities of all areas within the Stage 1 Preliminary Construction compound areas have been completed, excluding the removal of Plant Community Types, *Syzygium paniculatum* and vegetation within the Environmental Exclusion Zone. No Street Trees were removed during Stage 1 Preliminary Construction activities. Refer to Revision 1 of this Report for further detail on this activity.

Revision 2 (this Report) will address potential tree impacts during Stage 2 Construction activities within:

- the remaining C3 Bicentennial Park construction ancillary facility;
- the Active Transport Corridor alignment;
- President Avenue and Princes Highway alignment;
- West Botany Road alignment; and
- Other associated local roads.

2.2 Threatened Species

Syzygium paniculatum (Magenta Lilly Pilly) were identified on site. This tree species is subject to Endangered conservation status State Government legislation i.e. NSW Biodiversity Conservation Act 2016 and Vulnerable status under Australian Government legislation, the Environment Protection and Biodiversity Conservation Act 1999.

CGU and the Project Ecologist had undertaken ground truthing on a number of trees tentatively identified as *Syzygium paniculatum* during the Tree Survey and Pre-clearance Survey. This Report only references *Syzygium paniculatum* which meet the definition of a 'tree' (in accordance with Section 1.4). Further investigations (collecting fruit samples when available dismissed the majority of species as *Syzygium paniculatum* and rather identified them as *Acmena* (sic – actually *Syzygium*) *smithii*, refer to letter authored by AMBS Ecology and Heritage, dated 28th January 2022 Reference 21983. It is noted by the author of this report that the AMBS Ecology and Heritage letter refers to *Acmena smithii* however this genus name has been reassessed as *Syzygium* in the last few years, thus identified as *Syzygium smithii*.

The author of this report was also made aware that Swamp Oak Floodplain Forest of the New South Wales Coast, Sydney Basin and South East (sic) Corner Bioregions has been identified on site. This is listed as an Ecological Endangered Community under State Government legislation i.e. NSW Biodiversity Conservation Act 2016 and an Endangered status under Australian Government legislation, the Environment Protection and Biodiversity Conservation Act 1999. Areas of this Plant Community Type will be removed during Stage 2 clearing activities, in accordance with the SSI 8931.

Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions has been identified. This holds Ecological Endangered Community status under State Government legislation i.e. NSW Biodiversity Conservation Act 2016. Areas of this Plant Community Type will be removed during Stage 2 clearing activities, in accordance with the SSI 8931.

Additionally, Mangrove species *Avicennia marina* (Grey Mangrove) were identified within Map 11 (known as ATC North 1 Muddy Creek). This species is protected under state legislation particularly Fisheries Management Act 1994, NSW Biodiversity Conservation Act 2016, Biosecurity Act 2015 and Exhibited Animals Protection Regulation 2021. None of the proposed Stage 2 Construction activities will impact the area where *Avicennia marina* is located.

2.3 Vegetation Retention

The project will limit the clearing of native vegetation to the greatest extent practicable. This includes retaining street trees wherever possible and viable. Where reasonable and feasible, existing trees will be retained and protected within construction areas.

During the detailed design it will be identified where native vegetation and habitat removal for the construction of the project can be avoided or minimised, where feasible.

Vegetation located within the Environmental Exclusion Zone will be retained throughout the Project. Some trees within the northern carpark have been retained along with selective Street Trees along West Botany Street and President Avenue.

Area 2 - C3 Bicentennial Park construction ancillary facility:

During Stage 1 Preliminary Construction, CGU identified trees along the boundary Western and Northern boundary of the C3 compound which can be retained. This includes Street Trees located adjacent to West Botany Street and Trees within the existing northern car park. To facilitate the safe removal of spoil from the construction compound via West Botany Street and reduce the risk of queuing on public roads, the ingress and egress points to the compound has been separated.

Design of the construction ingress into the C3 compound from West Botany Street is still being developed and during Stage 1 Preliminary Construction, this ingress is obstructed by access to land under the Site Access Schedule.

Street tree removal to facilitate the construction of this access will be required as discussed within Section 3.3 of this report.

Egress from the construction compound onto West Botany Street will be positioned within an existing gap in Street Trees. Refer to Appendix F for diagram of site.

2.4 Tree Replacement Report

The Tree Replacement Report (Report) will be developed and provided to DPIE no later than nine months following the commencement of operation. This document will be updated based on the findings of the Report.

3 Impact of the Proposed Development

3.1 Incursion Calculation Method

Incursions into the Tree Protection Zones (TPZ's) were calculated based on the GIS schematics made available on 3rd December 2021 by the client.

As such, unless otherwise noted, all incursions are based solely on the interaction between the "line-work" provided in the GIS schematics and calculated TPZ's. Additional details indicating construction

methods, required access for machinery, over excavation, grade changes, cut and fill were not made available.

3.2 West Botany Street

The client has aimed to retain street trees have been retained to the greatest extent practicable along West Botany Street, adjacent to the C3 Bicentennial Park compound. Two (2) street trees will require removal to facilitate construction of access into the C3 Bicentennial Park compound, where the proposed design encroaches within the TPZ (as described in Section 3.7). Detailed design assessed the opportunity to redirect or relocate access to the compound to avoid removal of further trees in the area. With the completion of temporary works design of the compound, the existing gaps in street trees did not provide safe access and adequate turning circle for truck and dog trailers into the tunnelling compound acoustic shed. Constraints included an existing power pole and location of the acoustic shed (situated over the temporary binocular shafts). Refer to Appendix F for further detail.

Trees (including street trees) at the intersection of West Botany Street and President Avenue will require removal to facilitate construction and realignment of the intersection. Detailed design assessed the opportunity to relocate the turning lane to avoid removal of further trees in the area however appropriate space is not available. These works include widening of West Botany Street, construction of a dedicated turning lane (east bound onto President Avenue), adjustments of the Jemena high pressure gas line, construction of utility trenches for Intelligent Technology System (refer to Figure 4 below) and construction of new pedestrian footpaths, gutter and verges. Refer to Appendix F for further detail.

3.3 President Avenue

Tree removal (including Street Tree removal) will be required along President Avenue, in order to facilitate construction. As part of the detailed design process it was identified that street trees along the northern side of President Ave between Cross Lane and Cross Street were able to be retained. These trees have been assessed as high Retention Value (RV - see Appendix C)

The project utility services were considered to be placed in the roadway in order to retain existing street trees on the south side of President Avenue. However due to the existing gas asset, (Jemena pipeline), and other utilities, the project services must be installed outside the roadway on the southern side, between the TAFE, private residential property and the road verge. Refer to Figure 2 for locations of existing services on President Avenue.

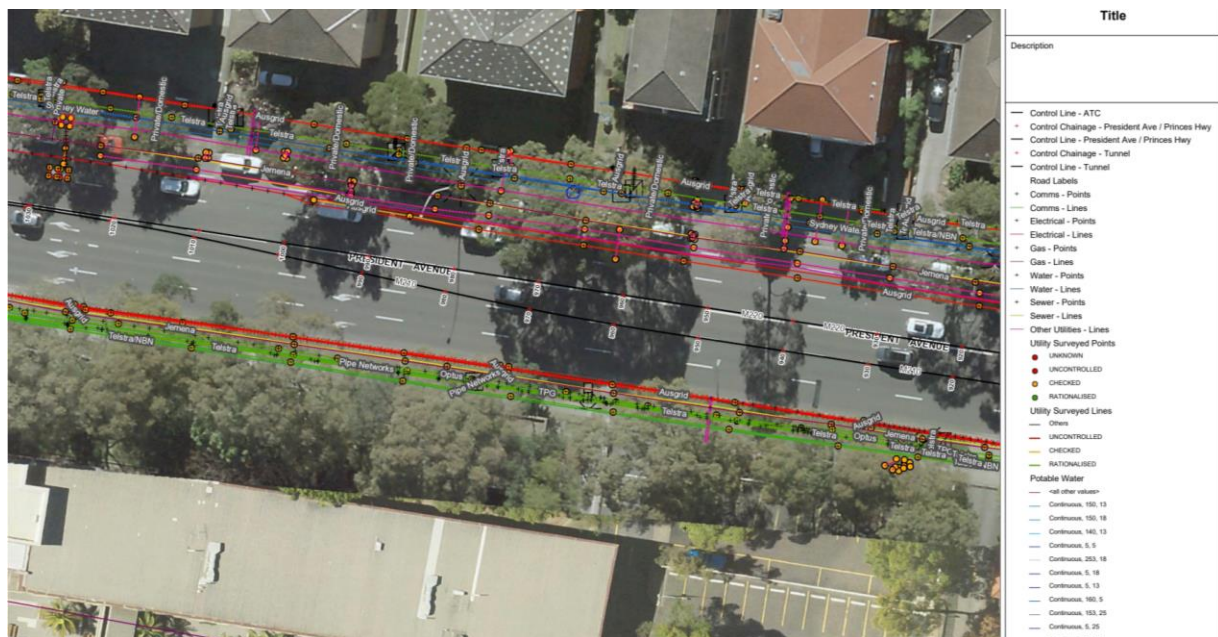


Figure 2 – Existing services on President Avenue (between Cross Lane and Cross Street)

The retention of trees was assessed during detailed design of the conversion of the O'Neill Street access from President Avenue to a cul-de-sac, the development of the neighbouring Active Transport Corridor and installation of utilities. However, seven (7) street trees will require removal to facilitate the construction of the cul-de-sac, Active Transport Corridor (ATC) and utilities, where the proposed design encroaches within the TPZ (as described in Section 3.6). Due to limited space between the active transport corridor, existing road and houses these trees require removal.

The retention of trees was considered during detailed design of the widening of Civic Avenue access from President Avenue and installation of utilities. Two (2) street trees will require removal to facilitate the widening of the road and installation of utilities, where the proposed design encroaches within the TPZ (as described in Section 3.6). Due to limited space between the project boundary and existing road these trees require removal.

Within Zone A (O'Connell Street to West Botany Street including Civic Avenue and O'Neill Street), within the Project boundary trees will need to be removed to ensure adequate space to:

- Install erosion and sediment controls;
- Underbore a utility corridor beneath Scarborough Park Ponds North;
- Construct temporary pavement to allow for traffic switches, which will allow CGU to safely widen and raise President Avenue in a staged manner while maintaining traffic flows;
- Allow for laydown of materials and equipment;
- Construct the portal into the Cut and Cover off President Avenue;
- Construction of the Active Transport Corridor including a bridge across President Avenue;
- Construction of Joint Bay (Ausgrid), refer to Figure 3 below;
- Construction of utility trenches for Intelligent Technology System (refer to Figure 4);
- Allow a sufficient footprint for vehicles to turn around at O'Neill Street where access to President Avenue will no longer be available; and
- Construction of new pedestrian footpaths, gutter and verges.

Where trees have been recommended for removal, this is due to encroachment of works within the calculated TPZ as described in Section 3.7.

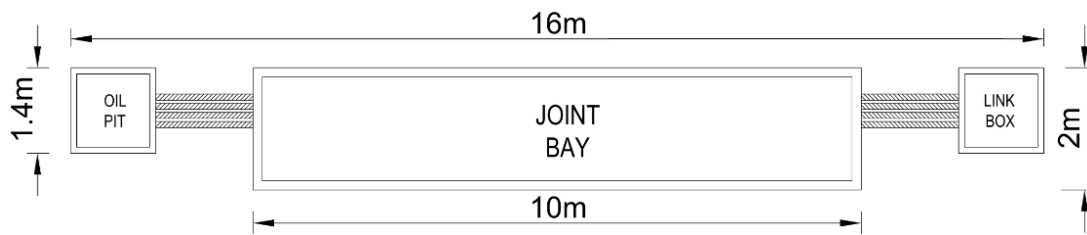


Figure 3 Standard dimensions of Joint Bay

Figure 4 Intelligent Technology System trench proposed along east and west bound lanes on President Avenue

Refer to Appendix G for traffic switch staging drawings and Appendix F for maps of surveyed trees.

Within Zone B (West Botany Street to Princes Highway), a utility corridor will be constructed on the west bound verge of President Ave from the property boundary alignment through to the carriageway. This trench allows for the safe installation of multiple utilities including electricity, gas, telecommunications and water. Dimension of this trench are dictated by utility asset owners. This will result in the removal of street trees along the verge of President Avenue (west bound). Discussions are to be held between the client and the property owners where trees have been recommended for removal due to encroachment of works within TPZ as recommend in Section 3.7.

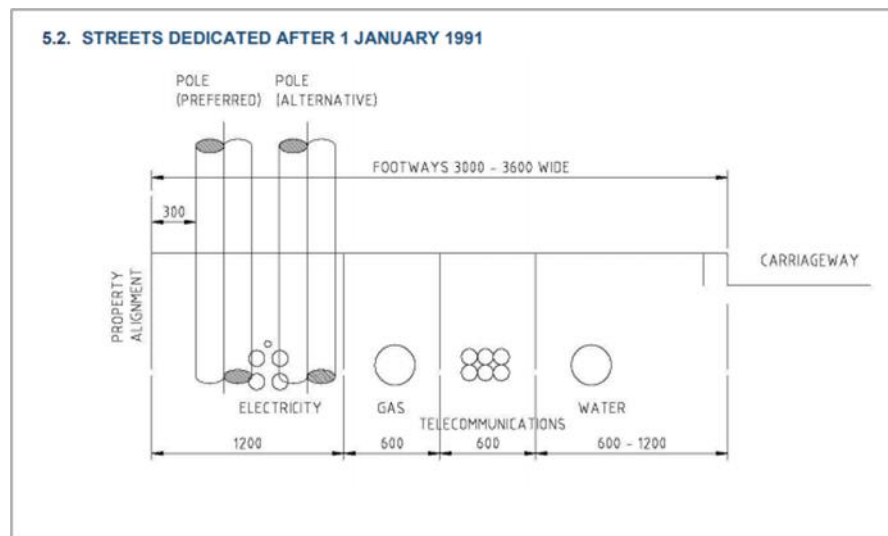


Figure 5 Proposed trench along West bound verge of President Avenue

Along the east bound lane of President Avenue, two (2) street trees will require removal outside 66 and 64D President Avenue to facilitate the construction of an Ausgrid joint bay. The dimensions of the Joint Bay are dictated by the utility asset owner (refer to Figure 1). This Joint Bay was moved away from the entrance to President Avenue Fruit World in order to reduce disruption to the business and minimise impacts to access.

Further investigation is to be undertaken on street trees located between Cross Street and Cross Lane, on the east bound verge of President Avenue. An Intelligent Technology System trench (refer to Figure 2 above) has been proposed to be constructed within this area. Further investigations into the root

system present within the verge and in President Avenue will be undertaken to determine the extent of the potential impact. The location of the Intelligent Technology System message boards within this area are currently being finalised and may result in the removal of street trees. Further advice will be sought from the author of this Report on the completion of the investigation (non-destructive digging only) and if required, this Report will be updated.

Refer to Appendix G for traffic switch staging drawings and Appendix F for maps of surveyed trees.

3.4 Princes Highway

A retaining wall will be constructed along the verge of the Princes Highway. This will delineate traffic from TAFE. In order to facilitate construction of this wall, tree removal will be required within the TAFE property. To the greatest extent practicable, trees will be retained along boundary of land being leased from TAFE.

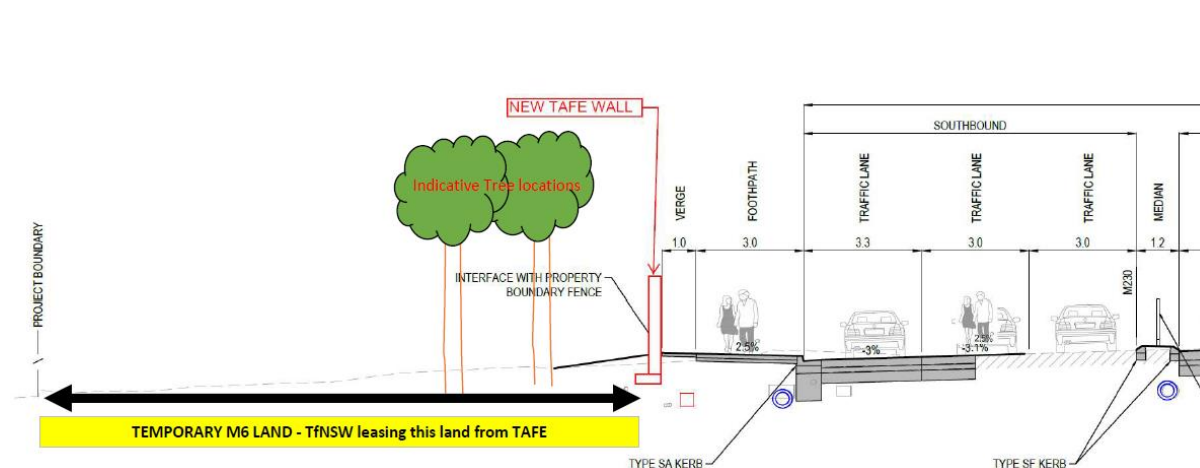


Figure 6 Retaining wall required within TAFE property

3.5 Summary of Potential Removal of Prescribed Trees

Two (2) groups (Group 16 and Group 29A) related to the Active Transport Corridor have not been assessed for encroachment as access was not safe at the time of inspection. Species appeared mainly low laying weed species however some mature Swamp She-oak were noted. These trees will require consideration once the area is safely accessible.

Table 3 and Table 10 below notes trees previously removed as per Treeism's Preliminary Arboricultural Assessment dated 3rd December 2021.

Table 4, Table 5, Table 6, Table 9 and Table 11 below detail tree removal required due to encroachment 15% or greater. Under the Australian Standard 4970-2009 *Protection of trees on development sites* (AS4970), encroachments less than 10% of the *Tree Protection Zone* (TPZ) are considered to be minor. No specifications are provided in AS4970 for potential impacts of 10% or greater. This 10% is interpreted as the threshold figure, and the trigger where arboricultural investigations into TPZ encroachments beyond this figure need to be considered under the consideration set out in Section 3.3.4 of AS4970.

Disturbance within the *Structural Root Zone* (SRZ) is also classified as major encroachment and is not generally supportable. Where the encroachment is greater than 15% and within the SRZ, tree removal has been recommended in most cases. Further investigation and/or Project Arborist review and discussion will be required for encroachments between 10% and 15%. Encroachments in excess of 15% have been considered non-viable for tree retention by the author.

Table 8 and Table 13 indicate trees that may be retainable provided tree sensitive construction is applied and works are under intensive Project Arborist (PA) involvement. However, viable tree retention is not a guarantee.

Table 9 is the street trees that require removal singled out for clarity for the relevant determining authorities.

Table 7 and Table 12 detail trees retainable provided Project Arborist involvement/supervision and protection as detailed under to the Australian Standard 4970-2009 *Protection of trees on development sites* (AS4970) is followed rigorously.

A Tree Protection Plan for trees to be retained is recommended to ensure tree viability. Where tree pruning is required, this shall be carried out in accordance with Treeism Tree Pruning recommendations (see Appendix D).

3.6 Previous tree removal – Individual trees

The following trees within Table 3 have been removed following submission and approval of the Preliminary Arboricultural Assessment authored by Treeism Arboricultural Services dated 3rd December 2021. These trees were located within or too close to Area 1 - C2 Rockdale Depot construction ancillary facility and Area 2 - C3 Bicentennial Park construction ancillary facility.

Table 3 – Previously removed trees.

INDIVIDUAL TREES PREVIOUSLY REMOVED AREA 1 & 2			
Map No.	Tree No.	Botanic/Common Name	RV
8	4	Eucalyptus botryoides Southern Mahogany	M
8	5	Casuarina cunninghamiana River She-oak	M
8	6	Callistemon viminalis Weeping Bottlebrush	M
8	7	Eucalyptus robusta Swamp Mahogany	M
8	8	Syncarpia glomulifera Turpentine	M
8	9	Eucalyptus robusta Swamp Mahogany	M
8	10	Eucalyptus robusta Swamp Mahogany	M
8	11	Melaleuca quinquenervia Broad-leaved Paperbark	M
8	12	Ficus rubiginosa Port Jackson Fig	M
8	13	Eucalyptus microcorys Tallowwood	M
8	14	Melaleuca linariifolia Snow in Summer	L
8	15	Eucalyptus microcorys Tallowwood	H
8	16	Eucalyptus camaldulensis River Red Gum	H
8	17	Lophostemon confertus Queensland Box	M
8	18	Eucalyptus microcorys Tallowwood	M
8	19	Ficus microcarpa var. hillii Hills Weeping Fig	H
8	20	Ficus microcarpa var. hillii Hills Weeping Fig	H
8	21	Eucalyptus tereticornis Forest Red Gum	H
8	44	Callistemon citrinus Crimson Bottlebrush	M
8	45	Eucalyptus robusta Swamp Mahogany	M

INDIVIDUAL TREES PREVIOUSLY REMOVED AREA 1 & 2			
Map No.	Tree No.	Botanic/Common Name	RV
8	46	Stenocarpus sinuatus Fire Wheel Tree	M
8	47	Eucalyptus scoparia Wallangarra White Gum	L
8	48	Eucalyptus robusta Swamp Mahogany	M
8	49	Eucalyptus scoparia Wallangarra White Gum	M
8	50	Melaleuca quinquenervia Broad-leaved P'bark	M
8	51	Eucalyptus microcorys Tallowwood	M
8	52	Eucalyptus robusta Swamp Mahogany	M
8	53	Eucalyptus robusta Swamp Mahogany	M
8	54	Eucalyptus robusta Swamp Mahogany	L
8	55	Eucalyptus robusta Swamp Mahogany	L
8	56	Eucalyptus robusta Swamp Mahogany	L
8	57	Eucalyptus microcorys Tallowwood	M
8	58	Eucalyptus microcorys Tallowwood	M
8	59	Eucalyptus microcorys Tallowwood	M
8	60	Eucalyptus microcorys Tallowwood	L
8	61	Eucalyptus microcorys Tallowwood	H
8	67	Eucalyptus microcorys Tallowwood	H
8	68	Eucalyptus microcorys Tallowwood	H
8	69	Eucalyptus microcorys Tallowwood	M
8	71	Eucalyptus microcorys Tallowwood	H
8	72	Eucalyptus microcorys Tallowwood	H
8	73	Eucalyptus microcorys Tallowwood	H
8	74	Eucalyptus microcorys Tallowwood	M
8	76	Eucalyptus microcorys Tallowwood	H
8	77	Eucalyptus microcorys Tallowwood	H
8	81	Eucalyptus microcorys Tallowwood	H
8	83	Eucalyptus microcorys Tallowwood	M

INDIVIDUAL TREES PREVIOUSLY REMOVED AREA 1 & 2			
Map No.	Tree No.	Botanic/Common Name	RV
8	85	Eucalyptus microcorys Tallowwood	M
8	86	Eucalyptus microcorys Tallowwood	M
8	87	Eucalyptus microcorys Tallowwood	M
8	88	Eucalyptus microcorys Tallowwood	M
8	90	Eucalyptus microcorys Tallowwood	M
8	91	Eucalyptus microcorys Tallowwood	M
8	92	Eucalyptus botryoides Southern Mahogany	M
8	93	Eucalyptus botryoides Southern Mahogany	L
8	94	Eucalyptus microcorys Tallowwood	M
8	95	Eucalyptus botryoides Southern Mahogany	M
8	96	Casuarina glauca Swamp she-oak	M
8	97	Angophora floribunda Rough-barked Apple Myrtle	M
8	98	Eucalyptus microcorys Tallowwood	M
8	99	Lophostemon confertus Queensland Box	M
8	100	Casuarina glauca Swamp she-oak	M
8	101	Eucalyptus botryoides Southern Mahogany	M
8	102	Eucalyptus tereticornis Forest Red Gum	M
8	103	Eucalyptus tereticornis Forest Red Gum	M
8	104	Eucalyptus botryoides Southern Mahogany	M
8	105	Eucalyptus tereticornis Forest Red Gum	M
8	106	Eucalyptus tereticornis Forest Red Gum	L
8	107	Eucalyptus tereticornis Forest Red Gum	M
8	108	Casuarina glauca Swamp she-oak	M
8	109	Eucalyptus botryoides Southern Mahogany	M
8	110	Eucalyptus robusta Swamp Mahogany	M
8	111	Casuarina glauca Swamp she-oak	M

INDIVIDUAL TREES PREVIOUSLY REMOVED AREA 1 & 2			
Map No.	Tree No.	Botanic/Common Name	RV
8	112	Eucalyptus tereticornis Forest Red Gum	M
8	113	Eucalyptus tereticornis Forest Red Gum	M
8	114	Eucalyptus microcorys Tallowwood	M
8	115	Eucalyptus microcorys Tallowwood	M
8	116	Eucalyptus microcorys Tallowwood	M
8	117	Eucalyptus tereticornis Forest Red Gum	M
8	118	Eucalyptus botryoides Southern Mahogany	L
8	119	Eucalyptus microcorys Tallowwood	M
8	120	Eucalyptus microcorys Tallowwood	M
8	121	Callistemon viminalis Weeping Bottlebrush	L
8	122	Callistemon viminalis Weeping Bottlebrush	M
8	123	Eucalyptus microcorys Tallowwood	M
8	124	Acacia longifolia Sallow Wattle	M
8	125	Eucalyptus botryoides Southern Mahogany	M
9	145	Eucalyptus nicholii Narrow-leaved Black Peppermint	M
9	146	Eucalyptus microcorys Tallowwood	M
9	147	Cupaniopsis anacardioides Tuckaroo	M
9	148	Cupaniopsis anacardioides Tuckaroo	M
9	149	Cupaniopsis anacardioides Tuckaroo	M
9	150	Eucalyptus botryoides Southern Mahogany	H
9	151	Melaleuca styphelioides Prickly-leaved Paperbark	M
9	152	Eucalyptus botryoides Southern Mahogany	M
9	153	Melaleuca quinquenervia Broad-leaved Paperbark	M
9	154	Melaleuca styphelioides Prickly-leaved Paperbark	M
9	155	Melaleuca styphelioides Prickly-leaved Paperbark	M
9	156	Casuarina cunninghamiana River She-oak	M
9	157	Eucalyptus botryoides Southern Mahogany	M

INDIVIDUAL TREES PREVIOUSLY REMOVED AREA 1 & 2			
Map No.	Tree No.	Botanic/Common Name	RV
9	158	Melaleuca quinquenervia Broad-leaved Paperbark	M
9	159	Eucalyptus sp. Eucalypt	L
9	160	Eucalyptus botryoides Southern Mahogany	M
9	161	Melaleuca quinquenervia Broad-leaved Paperbark	M
9	162	Melaleuca quinquenervia Broad-leaved Paperbark	M
9	163	Casuarina cunninghamiana River She-oak	M
9	164	Melaleuca quinquenervia Broad-leaved Paperbark	M
9	165	Melaleuca quinquenervia Broad-leaved Paperbark	M
9	166	Corymbia maculata Spotted Gum	H
9	167	Casuarina glauca Swamp she-oak	M
9	168	Casuarina glauca Swamp she-oak	M
9	169	Melaleuca quinquenervia Broad-leaved Paperbark	M
9	170	Melaleuca quinquenervia Broad-leaved Paperbark	M
9	171	Casuarina cunninghamiana River She-oak	L
9	172	Melaleuca quinquenervia Broad-leaved Paperbark	L
9	173	Eucalyptus scoparia Wallangarra White Gum	L
9	174	Melaleuca quinquenervia Broad-leaved Paperbark	M
9	175	Ficus benjamina Weeping Fig	M
9	176	Eucalyptus botryoides Southern Mahogany	M
9	177	Eucalyptus botryoides Southern Mahogany	M
9	178	Casuarina cunninghamiana River She-oak	M
9	179	Eucalyptus bicostata Victorian Blue Gum	L
9	180	Eucalyptus scoparia Wallangarra White Gum	M
9	181	Eucalyptus scoparia Wallangarra White Gum	M
9	182	Cupressus sp. Cypress	M
9	183	Eucalyptus robusta Swamp Mahogany	M
14	226	Casuarina glauca Swamp she-oak	M

INDIVIDUAL TREES PREVIOUSLY REMOVED AREA 1 & 2			
Map No.	Tree No.	Botanic/Common Name	RV
14	227	Casuarina cunninghamiana River She-oak	M
14	228	Casuarina glauca Swamp she-oak	M
14	229	Casuarina glauca Swamp she-oak	M
14	230	Casuarina glauca Swamp she-oak	M
14	231	Casuarina glauca Swamp she-oak	M
14	232	Populus alba White Poplar	M
14	233	Casuarina glauca Swamp she-oak	M
14	234	Casuarina glauca Swamp she-oak	M

3.7 Trees requiring removal due to proximity within project works footprint.

The following trees in Table 4 require removal as part of the remaining project. The trees are located within the footprint of works and cannot be safely retained. Table 5 details trees that incur major encroachment under the Australian Standard 4970-2009 *Protection of trees on development sites* (AS4970). Trees worthy of alternative constructions methods and with hope of retaining a viable tree are detailed in Table 10.

Table 4 – Tree to be removed located directly within footprint.

INDIVIDUAL TREES				
100% ENCROACHMENT – REQUIRE REMOVAL AS TREE STEM WITHIN DESIGN/UTILITIES FOOTPRINT				
Map No.	Tree No.	Street Tree Y/N	Botanic/Common Name	RV
9	184	No	Corymbia maculata Spotted Gum	H
9	185	No	Corymbia maculata Spotted Gum	H
9	187	No	Corymbia citriodora Lemon-scented Gum	H
9	194	No	Tristanopsis laurina Water Gum	M
9	197	No	Corymbia maculata Spotted Gum	H
9	198	No	Corymbia maculata Spotted Gum	H

INDIVIDUAL TREES				
100% ENCROACHMENT – REQUIRE REMOVAL AS TREE STEM WITHIN DESIGN/UTILITIES FOOTPRINT				
9	199	No	Celtis australis European Nettle Tree	H
9	200	No	Corymbia maculata Spotted Gum	H
9	201	No	Melaleuca linariifolia Snow in Summer	M
9	202	No	Corymbia maculata Spotted Gum	H
9	203	No	Corymbia maculata Spotted Gum	H
9	204	No	Corymbia maculata Spotted Gum	H
9	205	No	Corymbia maculata Spotted Gum	H
9	206	No	Corymbia maculata Spotted Gum	H
9	207	No	Corymbia maculata Spotted Gum	H
9	241	Yes	Callistemon viminalis Weeping Bottlebrush	M
9	242	Yes	Tristaniopsis laurina Water Gum	M
8	270	Yes	Fraxinus griffithii Evergreen Ash	H
7	291	Yes	Tristaniopsis laurina Water Gum	M
7	301	Yes	Callistemon viminalis Weeping Bottlebrush	M
7	308	?	Morus nigra Black Mulberry	L
7	315	Yes	Tristaniopsis laurina Water Gum	M
7	317	Yes	Corymbia ficifolia West. Aust. Red Flowering Gum	H
7	327	Yes	Tristaniopsis laurina Water Gum	M
7	328	Yes	Tristaniopsis laurina Water Gum	M
6	393	No	Archontophoenix cunninghamiana Bangalow Palm	M
6	394	No	Plumeria sp. Frangipani	M
6	395	No	Acacia sp. Wattle	M
6	397	No	Unknown - ID to be confirmed	M
10	409	No	Casuarina glauca Swamp she-oak	H
10	411	No	Eucalyptus botryoides Southern Mahogany	M
10	413	No	Casuarina glauca Swamp she-oak	M
10	414	No	Eucalyptus botryoides Southern Mahogany	M

INDIVIDUAL TREES				
100% ENCROACHMENT – REQUIRE REMOVAL AS TREE STEM WITHIN DESIGN/UTILITIES FOOTPRINT				
2	423	No	Dead Tree Dead tree	L
2	424	No	Callistemon viminalis Weeping Bottlebrush	M
2	431	Yes	Lophostemon confertus Queensland Box	H
1	443	No	Eucalyptus microcorys Tallowwood	H
1	445	No	Eucalyptus botryoides Southern Mahogany	H
1	446	No	Eucalyptus microcorys Tallowwood	H
1	448	No	Eucalyptus robusta Swamp Mahogany	H
1	449	No	Casuarina glauca Swamp she-oak	H
1	450	No	Casuarina glauca Swamp she-oak	H
1	452	No	Acacia longifolia Sallow Wattle	L
1	457	No	Eucalyptus robusta Swamp Mahogany	H
1	462	No	Sapium sebiferum Chinese Tallow Tree	M

Table 5 – Trees with calculated encroachment in excess of 15% of TPZ.

INDIVIDUAL TREES								
MAJOR ENCROACHMENT – TREES REQUIRE REMOVAL								
Map No.	Tree No.	Street Tree Y/N	Botanic/Common Name	SRZ Impact Y/N	TPZ Area (m)	TPZ Impacted (m ²)	TPZ Impacted %	RV
9	186	No	Grevillea robusta Silky Oak	N	32.17	13.32	41.4%	H
9	188	No	Corymbia maculata Spotted Gum	N	58.08	24.83	42.7%	H
9	189	No	Corymbia maculata Spotted Gum	N	24.63	8.76	35.6%	H
9	190	No	Corymbia maculata Spotted Gum	N	216.40	76.32	35.3%	H
9	191	No	Corymbia maculata Spotted Gum	N	113.09	19.94	17.6%	H
9	193	No	Melaleuca linariifolia Snow in Summer	N	26.42	5.61	21.2%	M
9	195	No	Corymbia maculata Spotted Gum	N	162.85	49.61	30.5%	H

INDIVIDUAL TREES								
MAJOR ENCROACHMENT – TREES REQUIRE REMOVAL								
Map No.	Tree No.	Street Tree Y/N	Botanic/Common Name	SRZ Impact Y/N	TPZ Area (m)	TPZ Impacted (m ²)	TPZ Impacted %	RV
9	196	No	Grevillea robusta Silky Oak	N	72.38	35.36	48.9%	H
9	210	No	Corymbia maculata Spotted Gum	N	50.26	16.31	32.5%	H
9	213	No	Corymbia maculata Spotted Gum	N	66.47	23.49	35.3%	H
9	216	No	Eucalyptus racemosa Scribbly Gum	N	32.17	6.42	20.0%	M
9	222	No	Corymbia maculata Spotted Gum	N	40.71	20.32	49.9%	H
9	223	No	Corymbia maculata Spotted Gum	N	24.63	3.80	15.4%	H
9	225	No	Corymbia maculata Spotted Gum	N	66.47	22.06	33.2%	H
3	227	No	Casuarina cunninghamiana River She-oak	N	84.94	20.24	23.8%	H
3	228	No	Casuarina glauca Swamp she-oak	N	706.80	157.60	22.3%	H
8	235	No	Grevillea sp. Grevillea	N	26.42	4.99	18.9%	L
8	236	Yes	Callistemon viminalis Weeping Bottlebrush	Y	38.48	10.54	27.4%	M
9	237	Yes	Callistemon sp. Bottlebrush	Y	109.35	33.35	30.5%	M
9	238	Yes	Callistemon viminalis Weeping Bottlebrush	Y	72.38	21.43	29.6%	M
9	252	Yes	Eucalyptus botryoides Southern Mahogany	Y	191.12	61.60	32.2%	H
9	253	Yes	Corymbia maculata Spotted Gum	Y	109.35	26.84	24.5%	H
9	254	Yes	Corymbia maculata Spotted Gum	Y	113.09	31.78	28.1%	H
9	255	Yes	Callistemon viminalis Weeping Bottlebrush	Y	16.62	2.95	17.8%	H
9	257	Yes	Corymbia maculata Spotted Gum	Y	38.48	7.52	19.5%	H
9	258	Yes	Eucalyptus robusta Swamp Mahogany	Y	132.72	42.34	31.9%	H
9	259	Yes	Eucalyptus robusta Swamp Mahogany	Y	75.42	22.83	30.3%	H
9	260	Yes	Agonis flexuosa Willow Myrtle/Peppermint	Y	128.67	44.86	34.9%	L
9	261	Yes	Agonis flexuosa Willow Myrtle/Peppermint	Y	120.75	36.49	30.2%	H
8	262	Yes	Agonis flexuosa Willow Myrtle/Peppermint	Y	172.02	49.05	28.5%	H
8	263	Yes	Callistemon viminalis Weeping Bottlebrush	Y	30.19	4.67	15.5%	H

INDIVIDUAL TREES								
MAJOR ENCROACHMENT – TREES REQUIRE REMOVAL								
Map No.	Tree No.	Street Tree Y/N	Botanic/Common Name	SRZ Impact Y/N	TPZ Area (m)	TPZ Impacted (m ²)	TPZ Impacted %	RV
8	264	Yes	Callistemon viminalis Weeping Bottlebrush	Y	58.08	12.74	21.9%	H
8	267	Yes	Fraxinus griffithii Evergreen Ash	Y	28.27	7.68	27.2%	H
8	268	Yes	Fraxinus griffithii Evergreen Ash	Y	109.35	27.73	25.4%	H
8	269	Yes	Fraxinus griffithii Evergreen Ash	Y	43.00	19.54	45.4%	H
8	275	Yes	Lophostemon confertus Queensland Box	N	254.45	55.56	21.8%	H
8	278	Yes	Lophostemon confertus Queensland Box	N	295.57	71.72	24.3%	H
8	280	?	Platanus X acerifolia London Plane	Y	401.11	198.50	49.5%	H
8	281	?	Platanus X acerifolia London Plane	N	498.71	77.21	15.5%	H
8	282	No	Platanus X acerifolia London Plane	Y	260.13	94.68	36.4%	H
8	284	?	Platanus X acerifolia London Plane	Y	366.40	71.97	19.6%	H
7	297	No	Ficus microcarpa var. hillii Hills Weeping Fig	N	243.26	113.29	46.6%	H
7	298	No	Ficus microcarpa var. hillii Hills Weeping Fig	N	295.57	143.75	48.6%	H
8	299	Yes	Callistemon viminalis Weeping Bottlebrush	N	141.01	23.60	16.7%	M
8	300	Yes	Callistemon viminalis Weeping Bottlebrush	Y	120.75	84.45	69.9%	M
7	304	?	Corymbia maculata Spotted Gum	Y	72.38	22.84	31.6%	H
7	305	No	Corymbia maculata Spotted Gum	N	45.36	12.41	27.4%	H
7	306	No	Corymbia maculata Spotted Gum	N	58.08	21.30	36.7%	H
7	310	Yes	Tristanopsis laurina Water Gum	Y	12.57	6.43	51.2%	M
7	311	?	Eucalyptus saligna Sydney Blue Gum	Y	314.13	144.03	45.8%	H
7	312	Yes	Tristanopsis laurina Water Gum	Y	36.31	13.37	36.8%	M
7	313	Yes	Tristanopsis laurina Water Gum	Y	12.57	6.10	48.5%	M
7	314	Yes	Tristanopsis laurina Water Gum	Y	16.62	6.63	39.9%	M
7	316	?	Eucalyptus saligna Sydney Blue Gum	Y	120.75	65.15	54.0%	H
7	318	Yes	Tristanopsis laurina Water Gum	Y	12.57	9.27	73.8%	M

INDIVIDUAL TREES								
MAJOR ENCROACHMENT – TREES REQUIRE REMOVAL								
Map No.	Tree No.	Street Tree Y/N	Botanic/Common Name	SRZ Impact Y/N	TPZ Area (m)	TPZ Impacted (m ²)	TPZ Impacted %	RV
7	319	Yes	Tristanopsis laurina Water Gum	Y	12.57	5.38	42.8%	M
7	320	Yes	Tristanopsis laurina Water Gum	Y	18.09	8.45	46.7%	M
7	321	Yes	Tristanopsis laurina Water Gum	Y	12.57	5.70	45.4%	M
7	322	Yes	Tristanopsis laurina Water Gum	Y	16.62	7.90	47.6%	M
7	323	Yes	Tristanopsis laurina Water Gum	Y	26.42	12.28	46.5%	M
6	325	Yes	Tristanopsis laurina Water Gum	Y	19.63	7.65	39.0%	M
6	329	Yes	Agonis flexuosa Willow Myrtle/Peppermint	Y	277.57	203.79	73.4%	L
6	330	Yes	Agonis flexuosa Willow Myrtle/Peppermint	Y	564.06	461.19	81.8%	L
6	331	Yes	Agonis flexuosa Willow Myrtle/Peppermint	Y	452.35	359.94	79.6%	L
6	332	Yes	Eucalyptus robusta Swamp Mahogany	Y	191.12	129.56	67.8%	H
6	333	Yes	Eucalyptus racemosa Scribbly Gum	Y	116.89	70.24	60.1%	H
6	334	Yes	Lophostemon confertus Queensland Box	Y	78.53	43.53	55.4%	H
6	336	?	Corymbia maculata Spotted Gum	Y	72.38	26.37	36.4%	H
6	353	Yes	Callistemon viminalis Weeping Bottlebrush	Y	78.53	28.36	36.1%	M
6	355	Yes	Callistemon viminalis Weeping Bottlebrush	Y	15.20	7.05	46.4%	M
6	365	Yes	Eucalyptus botryoides Southern Mahogany	N	216.41	45.80	21.2%	H
6	398	No	Mangifera indica Mango	Y	113.09	50.70	44.8%	M
6	400	No	Plumeria sp. Frangipani	Y	18.09	15.01	82.9%	M
6	401	No	Syagrus romanzoffiana Cocos Palm	N/A	153.92	138.66	90.1%	M
6	402	No	Syagrus romanzoffiana Cocos Palm	N/A	153.92	130.23	84.6%	M
6	404	No	Howea forsteriana Kentia Palm	N/A	153.92	62.21	40.4%	M
8	407	No	Chamaecyparis sp Cypress	N	162.85	26.42	16.2%	M
10	410	No	Pittosporum undulatum Sweet Pittosporum	Y	12.57	5.53	44.0%	M
1	434	No	Ficus benjamina Weeping Fig	Y	153.93	56.76	36.9%	M

INDIVIDUAL TREES								
MAJOR ENCROACHMENT – TREES REQUIRE REMOVAL								
Map No.	Tree No.	Street Tree Y/N	Botanic/Common Name	SRZ Impact Y/N	TPZ Area (m)	TPZ Impacted (m ²)	TPZ Impacted %	RV
1	435	No	Banksia integrifolia Coast Banksia	N	366.40	62.08	16.9%	H
1	437	No	Casuarina glauca Swamp she-oak	Y	84.94	23.99	28.2%	M
1	438	No	Casuarina glauca Swamp she-oak	Y	132.72	53.11	40.0%	H
1	439	No	Casuarina glauca Swamp she-oak	Y	141.01	37.81	26.8%	H
1	441	No	Corymbia maculata Spotted Gum	Y	373.22	174.94	46.9%	H
1	444	No	Corymbia maculata Spotted Gum	Y	32.17	18.16	56.4%	H
1	451	No	Eucalyptus robusta Swamp Mahogany	Y	132.72	33.28	25.1%	H
1	453	No	Acacia longifolia Sallow Wattle	Y	66.47	17.03	25.6%	L
1	454	No	Acacia binervia Coast Myall	Y	254.45	100.04	39.3%	L
1	456	No	Acacia binervia Coast Myall	Y	75.42	21.95	29.1%	L
1	458	No	Eucalyptus microcorys Tallowwood	Y	186.25	84.31	45.3%	H
1	461	No	Casuarina glauca Swamp she-oak	Y	145.25	52.00	35.8%	L
1	463	No	Sapium sebiferum Chinese Tallow Tree	Y	201.04	109.27	54.4%	M

Table 6 – Trees within works zone areas, area required to allow vehicle movement or stockpile – see maps Appendix F for further information.

INDIVIDUAL TREES				
ADJACENT TO WORKS BUT WITHIN 'WORKS ZONE – TREES REQUIRE REMOVAL				
Map No.	Tree No.	Street Tree Y/N	Botanic/Common Name	RV
5	65	?	Eucalyptus microcorys Tallowwood	H
5	82	Yes	Lophostemon confertus QLD Box	M
5	84	Yes	Lophostemon confertus QLD Box	H
9	192	No	Lophostemon confertus QLD Box	H
9	214	No	Eucalyptus sp. Eucalypt	H

INDIVIDUAL TREES				
ADJACENT TO WORKS BUT WITHIN 'WORKS ZONE – TREES REQUIRE REMOVAL				
9	215	?	Corymbia maculata Spotted Gum	H
9	239	No	Callistemon viminalis Weeping Bottlebrush	M
9	240	Yes	Callistemon viminalis Weeping Bottlebrush	M
8	271	Yes	Callistemon viminalis Weeping Bottlebrush	H
8	272	Yes	Callistemon viminalis Weeping Bottlebrush	H
8	273	Yes	Callistemon viminalis Weeping Bottlebrush	H
8	274	Yes	Callistemon viminalis Weeping Bottlebrush	H
8	276	Yes	Lophostemon confertus QLD Box	H
8	277	Yes	Lophostemon confertus QLD Box	H
8	279	Yes	Lophostemon confertus QLD Box	H
8	283	Yes	Corymbia ficifolia WA Red Flowering Gum	L
7	285	Yes	Corymbia ficifolia WA Red Flowering Gum	H
7	286	Yes	Tristanopsis laurina Water Gum	M
7	287	Yes	Eucalyptus sp. Eucalypt	M
7	288	Yes	Corymbia ficifolia WA Red Flowering Gum	H
7	289	Yes	Tristanopsis laurina Water Gum	M
7	290	Yes	Corymbia ficifolia WA Red Flowering Gum	H
7	292	Yes	Corymbia ficifolia WA Red Flowering Gum	M
7	293	Yes	Tristanopsis laurina Water Gum	M
7	294	Yes	Tristanopsis laurina Water Gum	M
7	295	Yes	Corymbia ficifolia WA Red Flowering Gum	M
7	296	Yes	Corymbia maculata Spotted Gum	M
7	302	?	Eucalyptus saligna Sydney Blue Gum	H
7	303	?	Corymbia maculata Spotted Gum	H
7	307	No	Corymbia maculata Spotted Gum	M
7	309	Yes	Eucalyptus saligna Sydney Blue Gum	M
6	324	Yes	Tristanopsis laurina Water Gum	M

INDIVIDUAL TREES				
ADJACENT TO WORKS BUT WITHIN 'WORKS ZONE – TREES REQUIRE REMOVAL				
6	326	Yes	Tristaniopsis laurina Water Gum	M
6	335	Yes	Unknown - ID to be confirmed	M
6	337	?	Corymbia maculata Spotted Gum	H
6	338	?	Corymbia maculata Spotted Gum	H
6	339	No	Corymbia maculata Spotted Gum	H
6	340	?	Corymbia maculata Spotted Gum	H
6	341	?	Corymbia maculata Spotted Gum	H
6	342	?	Corymbia maculata Spotted Gum	H
6	343	?	Corymbia maculata Spotted Gum	H
6	344	?	Corymbia maculata Spotted Gum	H
6	345	?	Corymbia maculata Spotted Gum	H
6	346	?	Corymbia maculata Spotted Gum	H
6	347	Yes	Tristaniopsis laurina Water Gum	M
7	348	Yes	Tristaniopsis laurina Water Gum	M
6	349	Yes	Corymbia ficifolia WA Red Flowering Gum	H
6	350	Yes	Tristaniopsis laurina Water Gum	M
6	351	Yes	Callistemon viminalis Weeping Bottlebrush	M
6	352	Yes	Callistemon viminalis Weeping Bottlebrush	M
6	354	Yes	Photinia robusta Large-leaved Photinia	M
6	356	Yes	Photinia robusta Large-leaved Photinia	M
6	357	Yes	Banksia integrifolia Coast Banksia	H
6	358	Yes	Banksia integrifolia Coast Banksia	H
6	359	Yes	Banksia integrifolia Coast Banksia	H
6	360	Yes	Persea americana Avocado	M
6	361	Yes	Lophostemon confertus QLD Box	H
6	362	Yes	Olea europaea Olive	M
6	363	Yes	Olea europaea Olive	M

INDIVIDUAL TREES				
ADJACENT TO WORKS BUT WITHIN 'WORKS ZONE – TREES REQUIRE REMOVAL				
6	364	Yes	Olea europaea Olive	M
6	366	Yes	Callistemon viminalis Weeping Bottlebrush	M
7	368	No	Casuarina glauca Swamp she-oak	M
6	378	No	Morus nigra Black Mulberry	L
6	379	No	Salix sp. Willow	M
6	380	No	Salix sp. Willow	L
6	381	No	Salix sp. Willow	M
6	382	No	Howea forsteriana Kentia Palm	M
6	383	No	Archontophoenix cunninghamiana Bangalow Palm	M
6	384	No	Phoenix canariensis Canary Island Date Palm	M
6	385	No	Archontophoenix cunninghamiana Bangalow Palm	M
6	386	No	Archontophoenix cunninghamiana Bangalow Palm	M
6	387	No	Morus nigra Black Mulberry	M
6	388	No	Corymbia citriodora Lemon-scented Gum	M
6	389	No	Persea americana Avocado	M
6	390	No	Unknown - ID to be confirmed	M
6	391	No	Syagrus romanzoffiana Cocos Palm	M
6	392	No	Lagerstroemia indica Crepe Myrtle	M
6	396	No	Morus nigra Black Mulberry	M
6	399	No	Camellia sp. Camellia	M
6	403	No	Murraya paniculata Orange Jessamine	M
6	405	No	Cupressus sp. Cypress	M
6	406	No	Syagrus romanzoffiana Cocos Palm	M
1	408	No	Callistemon viminalis Weeping Bottlebrush	M
10	412	No	Pittosporum undulatum Sweet Pittosporum	M
10	415	No	Pittosporum undulatum Sweet Pittosporum	M
10	416	No	Pittosporum undulatum Sweet Pittosporum	M

INDIVIDUAL TREES				
ADJACENT TO WORKS BUT WITHIN 'WORKS ZONE – TREES REQUIRE REMOVAL				
10	417	No	Phoenix canariensis Canary Island Date Palm	M
10	418	No	Erythrina x sykesii Common Coral Tree	M
10	420	No	Lophostemon confertus QLD Box	H
9	421	No	Glochidion ferdinandi Cheese Tree	H
9	422	No	Syzygium sp. Lilly Pilly	M
2	425	No	Lophostemon confertus QLD Box	H
2	426	No	Agonis flexuosa Willow Myrtle/Peppermint	H
2	427	No	Acacia longifolia Sallow Wattle	M
2	428	No	Acacia elata Cedar Wattle	L
2	432	No	Callistemon viminalis Weeping Bottlebrush	M
1	433	No	Ficus macrophylla Moreton Bay Fig	H
1	436	No	Ficus benjamina Weeping Fig	M
1	440	No	Eucalyptus microcorys Tallowwood	H
1	442	No	Corymbia maculata Spotted Gum	H
1	447	No	Casuarina glauca Swamp she-oak	H
1	449	No	Casuarina glauca Swamp she-oak	H
1	453	No	Lophostemon confertus QLD Box	L
1	455	No	Casuarina glauca Swamp she-oak	H
1	459	No	Acacia binervia Coast Myall	L
1	460	No	Acacia binervia Coast Myall	L

3.8 Individual Trees that can be retained.

Refer to Table 7 for trees that can be retained under the guidelines within the Australian Standard 4970-2009 *Protection of trees on development sites* (AS4970).

Table 7 – Trees with calculated encroachment less than 15% of the TPZ.

INDIVIDUAL TREES								
MINOR ENCROACHMENT – TREES RETAINABLE								
Map No.	Tree No.	Street Tree Y/N	Botanic/Common Name	SRZ Impact Y/N	TPZ Area (m)	TPZ Impacted (m ²)	TPZ Impacted %	RV
9	1	N	Gleditsia triacanthos Honey Locust	N	12.57	0.00	0.0%	M
9	2	?	Eucalyptus microcorys Tallowwood	N	289.53	0.00	0.0%	H
9	3	?	Eucalyptus microcorys Tallowwood	N	243.28	4.60	1.9%	H
5	62	?	Eucalyptus microcorys Tallowwood	N	136.85	0.00	0.0%	H
5	63	?	Eucalyptus microcorys Tallowwood	N	181.46	0.00	0.0%	H
5	64	?	Eucalyptus microcorys Tallowwood	N	191.13	0.00	0.0%	H
5	66	Y	Lophostemon confertus QLD Box	N	91.61	0.00	0.0%	H
5	70	Y	Lophostemon confertus QLD Box	N	55.42	0.00	0.0%	H
5	75	Y	Lophostemon confertus QLD Box	N	50.27	0.00	0.0%	H
5	78	Y	Lophostemon confertus QLD Box	N	66.48	0.00	0.0%	H
5	79	?	Eucalyptus microcorys Tallowwood	N	113.10	0.00	0.0%	H
5	80	?	Eucalyptus microcorys Tallowwood	N	72.38	0.00	0.0%	H
5	89	Y	Lophostemon confertus QLD Box	N	78.54	0.00	0.0%	M
9	208	?	Corymbia maculata Spotted Gum	N	88.2	8.9	10.0%	H
9	209	No	Eucalyptus sp. Eucalypt	N	52.8	0.00	0.0%	M
9	211	?	Corymbia maculata Spotted Gum	N	36.3	2.5	7.0%	H
9	212	No	Eucalyptus sp. Eucalypt	N	105.7	0.00	0.0%	H
9	217	No	Eucalyptus racemosa Scribbly Gum	N	19.6	0.00	0.0%	H
9	218	No	Corymbia maculata Spotted Gum	N	26.4	3.9	15.0%	H
9	219	?	Corymbia maculata Spotted Gum	N	60.4	4.3	7.0%	H
9	220	No	Corymbia maculata Spotted Gum	N	98.5	0.00	0.0%	H
9	221	?	Corymbia maculata Spotted Gum	N	55.4	2.7	5.0%	H
9	224	No	Corymbia maculata Spotted Gum	N	66.5	0.00	0.0%	M

INDIVIDUAL TREES								
MINOR ENCROACHMENT – TREES RETAINABLE								
Map No.	Tree No.	Street Tree Y/N	Botanic/Common Name	SRZ Impact Y/N	TPZ Area (m)	TPZ Impacted (m ²)	TPZ Impacted %	RV
3	226	?	Casuarina glauca Swamp she-oak	N	75.42	0.23	0.3%	H
3	230	?	Casuarina glauca Swamp she-oak	N	91.60	0.30	0.3%	H
3	231	?	Casuarina glauca Swamp she-oak	N	401.12	33.63	8.4%	H
3	234	?	Casuarina glauca Swamp she-oak	N	72.38	2.41	3.3%	H
5	246	Yes	Tristanopsis laurina Water Gum	N	45.36	6.71	14.8%	H
5	250	Yes	Callistemon viminalis Weeping Bottlebrush	Y	12.57	0.00	0.00%	H
5	251	Yes	Callistemon viminalis Weeping Bottlebrush	Y	28.27	0.00	0.00%	H
5	256	Yes	Callistemon viminalis Weeping Bottlebrush	N	12.57	0.64	5.1%	H
8	265	Yes	Prunus cerasifera Cherry Plum	N	12.57	0.42	3.4%	H
8	266	Yes	Fraxinus griffithii Evergreen Ash	N	28.27	3.37	11.9%	H
10	367	No	Casuarina glauca Swamp she-oak	N	216.42	0.00	0.00%	M
10	419	No	Melaleuca armillaris Bracelet Honey Myrtle	N	18.1	0.00	0.00%	L
2	429	Yes	Pinus radiata Monterey Pine	N	72.38	0.00	0.00%	H
2	430	Yes	Callistemon viminalis Weeping Bottlebrush	N	40.72	0.00	0.00%	H

3.9 Individual Trees requiring further investigation to ensure retention via tree sensitive construction methods where viable.

The following trees within Table 8 have calculated encroachments in excess of 10% however a commitment to find methods to retain trees is proposed by the client.

Table 8 – Tree sensitive construction proposed where feasible under PA direct supervision.

INDIVIDUAL TREES POTENTIALLY RETAINABLE WITH INTENSIVE PA INVOLVEMENT AND NDD								
Map No.	Tree No.	Street Tree Y/N	Botanic/Common Name	SRZ Impact Y/N	TPZ Area (m)	TPZ Impacted (m ²)	TPZ Impacted %	RV
9	243	Yes	Phoenix canariensis Canary Island Date Palm	N/A	153.92	67.29	43.7%	H
9	244	Yes	Callistemon viminalis Weeping Bottlebrush	Y	15.21	15.21	100%	H
9	245	Yes	Eucalyptus microcorys Tallowwood	Y	243.26	97.12	39.9%	H
9	247	Yes	Callistemon viminalis Weeping Bottlebrush	Y	36.31	10.06	27.7%	H
9	248	Yes	Callistemon viminalis Weeping Bottlebrush	Y	45.36	11.76	25.9%	H
9	249	Yes	Eucalyptus robusta Swamp Mahogany	Y	95.02	27.23	28.7%	H
9	252	Yes	Eucalyptus botryoides Southern Mahogany	Y	191.1	57.33	30.0%	H
9	253	Yes	Corymbia maculata Spotted Gum	Y	109.35	26.84	24.5%	H
9	254	Yes	Corymbia maculata Spotted Gum	Y	113.09	31.78	28.1%	H
9	255	Yes	Callistemon viminalis Weeping Bottlebrush	Y	16.62	2.95	17.8%	H
9	257	Yes	Corymbia maculata Spotted Gum	Y	38.48	7.52	19.5%	H
9	258	Yes	Eucalyptus robusta Swamp Mahogany	Y	132.7	50.42	38.0%	H
9	259	Yes	Eucalyptus robusta Swamp Mahogany	Y	75.43	22.62	30.0%	H
9	260	Yes	Agonis flexuosa Willow Myrtle/Peppermint	Y	128.7	78.24	60.79%	L
8	261	Yes	Agonis flexuosa Willow Myrtle/Peppermint	Y	120.8	32.6	27.0%	H
8	262	Yes	Agonis flexuosa Willow Myrtle/Peppermint	Y	172	43.02	25.0%	H
8	263	Yes	Callistemon viminalis Weeping Bottlebrush	Y	30.19	4.67	15.5%	H
8	264	Yes	Callistemon viminalis Weeping Bottlebrush	Y	58.09	26.09	44.91%	H
8	267	Yes	Fraxinus griffithii Evergreen Ash	Y	28.27	7.68	27.2%	H
8	268	Yes	Fraxinus griffithii Evergreen Ash	Y	109.35	27.73	25.4%	H
2	377	Yes	Eucalyptus robusta Swamp Mahogany	Y	191.1	191.1	100%	M

3.10 Street Trees requiring removal are detailed below – for additional clarity.

Table 9 - Street trees requiring removal.

STREET TREES REQUIRING REMOVAL		
Tree no.	Botanic/Common Name	RV
38 2	Melaleuca quinquenervia Paper Bark Tea Tree	M
38 3	Casuarina glauca Swamp she-oak	M
65	Eucalyptus microcorys Tallowwood	H
82	Lophostemon confertus QLD Box	M
84	Lophostemon confertus QLD Box	H
194	Tristanopsis laurina Water Gum	M
236	Callistemon viminalis Weeping Bottlebrush	M
237	Callistemon sp. Bottlebrush	M
238	Callistemon viminalis Weeping Bottlebrush	M
239	Callistemon viminalis Weeping Bottlebrush	M
240	Callistemon viminalis Weeping Bottlebrush	M
241	Callistemon viminalis Weeping Bottlebrush	M
242	Tristanopsis laurina Water Gum	M
269	Fraxinus griffithii Evergreen Ash	H
270	Fraxinus griffithii Evergreen Ash	H
271	Callistemon viminalis Weeping Bottlebrush	H
272	Callistemon viminalis Weeping Bottlebrush	H
273	Callistemon viminalis Weeping Bottlebrush	H
274	Callistemon viminalis Weeping Bottlebrush	H
275	Lophostemon confertus Queensland Box	H
276	Lophostemon confertus QLD Box	H
277	Lophostemon confertus QLD Box	H
278	Lophostemon confertus Queensland Box	H
279	Lophostemon confertus QLD Box	H
280	Platanus X acerifolia London Plane	H
283	Corymbia ficifolia WA Red Flowering Gum	L

STREET TREES REQUIRING REMOVAL		
Tree no.	Botanic/Common Name	RV
285	Corymbia ficifolia WA Red Flowering Gum	H
286	Tristaniaopsis laurina Water Gum	M
287	Eucalyptus sp. Eucalypt	M
288	Corymbia ficifolia WA Red Flowering Gum	H
289	Tristaniaopsis laurina Water Gum	M
290	Corymbia ficifolia WA Red Flowering Gum	H
291	Tristaniaopsis laurina Water Gum	M
292	Corymbia ficifolia WA Red Flowering Gum	M
293	Tristaniaopsis laurina Water Gum	M
294	Tristaniaopsis laurina Water Gum	M
295	Corymbia ficifolia WA Red Flowering Gum	M
296	Corymbia maculata Spotted Gum	M
299	Callistemon viminalis Weeping Bottlebrush	M
300	Callistemon viminalis Weeping Bottlebrush	M
301	Callistemon viminalis Weeping Bottlebrush	M
309	Eucalyptus saligna Sydney Blue Gum	M
310	Tristaniaopsis laurina Water Gum	M
311	Eucalyptus saligna Sydney Blue Gum	H
312	Tristaniaopsis laurina Water Gum	M
313	Tristaniaopsis laurina Water Gum	M
314	Tristaniaopsis laurina Water Gum	M
315	Tristaniaopsis laurina Water Gum	M
316	Eucalyptus saligna Sydney Blue Gum	H
317	Corymbia ficifolia West. Aust. Red Flowering Gum	H
318	Tristaniaopsis laurina Water Gum	M
319	Tristaniaopsis laurina Water Gum	M
320	Tristaniaopsis laurina Water Gum	M
321	Tristaniaopsis laurina Water Gum	M
322	Tristaniaopsis laurina Water Gum	M
323	Tristaniaopsis laurina Water Gum	M

STREET TREES REQUIRING REMOVAL		
Tree no.	Botanic/Common Name	RV
324	Tristaniaopsis laurina Water Gum	M
325	Tristaniaopsis laurina Water Gum	M
326	Tristaniaopsis laurina Water Gum	M
327	Tristaniaopsis laurina Water Gum	M
328	Tristaniaopsis laurina Water Gum	M
329	Agonis flexuosa Willow Myrtle/Peppermint	L
330	Agonis flexuosa Willow Myrtle/Peppermint	L
331	Agonis flexuosa Willow Myrtle/Peppermint	L
332	Eucalyptus robusta Swamp Mahogany	H
333	Eucalyptus racemosa Scribbly Gum	H
334	Lophostemon confertus Queensland Box	H
335	Tristaniaopsis laurina Water Gum	M
347	Tristaniaopsis laurina Water Gum	M
348	Corymbia ficifolia WA Red Flowering Gum	H
349	Tristaniaopsis laurina Water Gum	M
350	Callistemon viminalis Weeping Bottlebrush	M
351	Callistemon viminalis Weeping Bottlebrush	M
352	Photinia robusta Large-leaved Photinia	M
353	Photinia robusta Large-leaved Photinia	M
354	Banksia integrifolia Coast Banksia	H
355	Banksia integrifolia Coast Banksia	H
356	Banksia integrifolia Coast Banksia	H
357	Persea americana Avocado	M
358	Lophostemon confertus QLD Box	H
359	Olea europaea Olive	M
360	Olea europaea Olive	M
361	Olea europaea Olive	M
362	Callistemon viminalis Weeping Bottlebrush	M
363	Tristaniaopsis laurina Water Gum	M
364	Tristaniaopsis laurina Water Gum	M

STREET TREES REQUIRING REMOVAL		
Tree no.	Botanic/Common Name	RV
365	Corymbia ficifolia WA Red Flowering Gum	H
366	Tristania laurina Water Gum	M

3.11 Group Trees – Previously removed Tree Groups for Area 1 and Area 2.

Table 10 – Previously removed group trees.

GROUP TREES PREVIOUSLY REMOVED IN AREAS 1 & 2			
Group No.	Tree No.	Botanic Common Name	RV
1	1	Casuarina glauca Swamp she-oak	H
1	2		
2	1	Eucalyptus botryoides Southern Mahogany	M
2	2	Species as discussed in comments within Appendix K	M
2	3		
2	4		
3	1	Species as discussed in comments within Appendix K	M
3	2		
3	3		
3	4		
3	5		
3	6		
3	7		
4	1	Casuarina cunninghamiana River She-oak	M
4	2	Species as discussed in comments within Appendix K	
4	3		
4	4		
13	11	Eucalyptus botryoides Southern Mahogany	H
5	1	Cupaniopsis anacardioides Tuckaroo	M

5	2	Species as discussed in comments within Appendix K	
5	3		
6	1	Casuarina glauca Swamp she-oak	H
6	2	Casuarina glauca Swamp she-oak	
6	3	Species as discussed in comments within Appendix K	
6	4		
6	5		

3.12 Grouped trees requiring removal.

The following trees require removal to facilitate the development.

Table 11 – Tree groups within the design footprint and /or works zone.

GROUP TREES LOCATED WITHIN THE DESIGN FOOTPRINT/WORKS ZONE REQUIRING REMOVAL				
Map No.	Group No.	Tree No.	Botanic Common Name	RV
3	8	1	Angophora costata Smooth-barked Apple Myrtle	M
3	8	2	Eucalyptus botryoides Southern Mahogany	
3	8	3	Angophora costata Smooth-barked Apple Myrtle	
4	8	4	Angophora costata Smooth-barked Apple Myrtle	
4	8	5	Melaleuca styphelioides Prickly-leaved Paperbark	
4	8	6	Melaleuca styphelioides Prickly-leaved Paperbark	
4	9	1	Eucalyptus microcorys Tallowwood	H
4	9	2	Casuarina glauca Swamp she-oak	
4	9	3	Eucalyptus botryoides Southern Mahogany	
4	9	4	Eucalyptus tereticornis Forest Red Gum	
4	9	5		
4	9	6	Melaleuca styphelioides Prickly-leaved Paperbark	
4	9	7	Eucalyptus sp. Eucalypt	

GROUP TREES LOCATED WITHIN THE DESIGN FOOTPRINT/WORKS ZONE REQUIRING REMOVAL				
Map No.	Group No.	Tree No.	Botanic Common Name	RV
4	9	8	Casuarina glauca Swamp she-oak	
4	10	1	Casuarina glauca Swamp she-oak	M
4	10	2	-	
4	10	3	Casuarina glauca Swamp she-oak	
4	11	5	Corymbia maculata Spotted Gum	M
4	11	6	Casuarina glauca Swamp she-oak	
4	11	7	Eucalyptus tereticornis Forest Red Gum	
4	11	8	-	
4	11	9	Eucalyptus sp. Eucalypt	
4	11	10	Acacia sp. Wattle	
4	11	12	Corymbia maculata Spotted Gum	
4	11	13	Casuarina glauca Swamp she-oak	
4	11	14	Casuarina glauca Swamp she-oak	
4	11	15	Eucalyptus sp. Eucalypt	
4	11	16	Melaleuca styphelioides Prickly-leaved Paperbark	H
4	11	17	Melaleuca linariifolia Snow in Summer	
4	13	1	Casuarina glauca Swamp she-oak	
4	13	2	Eucalyptus robusta Swamp Mahogany	
4	13	3	Ficus macrophylla Moreton Bay Fig	
4	13	4	Eucalyptus parramattensis Parramatta Red Gum	
4	13	5	Eucalyptus pilularis Blackbutt	
4	13	6	Eucalyptus botryoides Southern Mahogany	
4	13	8	Eucalyptus botryoides Southern Mahogany	
4	13	9	Eucalyptus botryoides Southern Mahogany	
7	13	10	Eucalyptus botryoides Southern Mahogany	
7	13	11	Eucalyptus botryoides Southern Mahogany	

GROUP TREES LOCATED WITHIN THE DESIGN FOOTPRINT/WORKS ZONE REQUIRING REMOVAL				
Map No.	Group No.	Tree No.	Botanic Common Name	RV
7	14	1	Casuarina glauca Swamp she-oak	H
4	14	2	Melaleuca styphelioides Prickly-leaved Paperbark	
4	14	5	Casuarina glauca Swamp she-oak	
4	14	8	Eucalyptus botryoides Southern Mahogany	
4	14	9	Eucalyptus botryoides Southern Mahogany	
4	14	10	Eucalyptus botryoides Southern Mahogany	
4	14	11	Eucalyptus grandis Flooded Gum	
4	15	1	Eucalyptus robusta Swamp Mahogany	H
4	15	2	Eucalyptus botryoides Southern Mahogany	
4	15	3	Eucalyptus botryoides Southern Mahogany	
4	15	4	Eucalyptus botryoides Southern Mahogany	
4	15	6	Eucalyptus botryoides Southern Mahogany	
4	15	8	Eucalyptus botryoides Southern Mahogany	
4	15	9	Eucalyptus botryoides Southern Mahogany	
4	15	10	Eucalyptus botryoides Southern Mahogany	
4	15	11	Eucalyptus robusta Swamp Mahogany	
	16	1	Various species	
3	17	1	Eucalyptus botryoides Southern Mahogany	H
4	17	5	Angophora costata Smooth-barked Apple Myrtle	
4	17	6	Casuarina glauca Swamp she-oak	
3	17	12	Eucalyptus botryoides Southern Mahogany	
3	18	2	Eucalyptus botryoides Southern Mahogany	H
3	18	3	Corymbia citriodora Lemon-scented Gum	
3	20	1	Corymbia citriodora Lemon-scented Gum	M
3	20	2	Populus alba White Poplar	
3	20	6	Populus alba White Poplar	

GROUP TREES LOCATED WITHIN THE DESIGN FOOTPRINT/WORKS ZONE REQUIRING REMOVAL				
Map No.	Group No.	Tree No.	Botanic Common Name	RV
3	20	7	Populus alba White Poplar	
3	20	8	Casuarina cunninghamiana River She-oak	
3	20	11	Populus alba White Poplar	
9	21	1	Elaeocarpus reticulatus Blueberry Ash	M
9	21	2	-	
9	21	3	Elaeocarpus reticulatus Blueberry Ash	
9	21	4	Elaeocarpus reticulatus Blueberry Ash	
7	22	1	Acacia elata Cedar Wattle	H
7	22	2	Eucalyptus saligna Sydney Blue Gum	
7	22	3	Eucalyptus saligna Sydney Blue Gum	
7	22	4	Eucalyptus botryoides Southern Mahogany	
7	22	5	Eucalyptus saligna Sydney Blue Gum	
7	22	6	Eucalyptus saligna Sydney Blue Gum	
7	22	7	Acacia elata Cedar Wattle	
7	22	8	Angophora costata Smooth-barked Apple Myrtle	
7	22	9	Angophora costata Smooth-barked Apple Myrtle	
7	23	1	Eucalyptus tereticornis Forest Red Gum	H
7	23	2	Casuarina glauca Swamp she-oak	
6	23	3	Casuarina glauca Swamp she-oak	
7	23	4	Eucalyptus botryoides Southern Mahogany	
7	23	5	Casuarina glauca Swamp she-oak	
7	24	1	Corymbia maculata Spotted Gum	H
7	24	2	Eucalyptus botryoides Southern Mahogany	
7	25	1	Callistemon viminalis Weeping Bottlebrush	H
7	25	2	Casuarina glauca Swamp she-oak	
7	25	3	Schinus areira Peppercorn	

GROUP TREES LOCATED WITHIN THE DESIGN FOOTPRINT/WORKS ZONE REQUIRING REMOVAL				
Map No.	Group No.	Tree No.	Botanic Common Name	RV
7	25	4	Melaleuca bracteata Black Tea Tree	
7	25	5	Casuarina glauca Swamp she-oak	
7	26	1	Podocarpus elatus Brown Pine	H
7	26	2	Eucalyptus scoparia Wallangarra White Gum	
7	26	3	Eucalyptus scoparia Wallangarra White Gum	
7	26	4	Eucalyptus scoparia Wallangarra White Gum	
7	27	1	Melaleuca bracteata Black Tea Tree	H
7	27	2	Ficus microcarpa var. hillii Hills Weeping Fig	
7	27	3	Callistemon viminalis Weeping Bottlebrush	
6	28	1	Celtis sinensis Chinese Hackberry	L
6	28	2	Erythrina crista-galli Cockscomb Coral Tree	
7	28	3	Morus nigra Black Mulberry	
7	28	4	Unknown - ID to be confirmed Unknown - ID to be confirmed	
7	28	5	Lantana camara Lantana	
7	28	6	Lantana camara Lantana	
10	29A	1	Various species	H
6	30	1	-	L
6	31	1	Archontophoenix cunninghamiana Bangalow Palm	M
3	32	1	Cupressus sp. Cypress	M
10	33	1	Populus nigra 'Italica' Lombardy Poplar	M
10	34	1	Eucalyptus botryoides Southern Mahogany	M
10	34	2	Casuarina glauca Swamp she-oak	
10	35	1	Erythrina x sykesii Common Coral Tree	M
10	35	1	Eucalyptus saligna x botryoides Hybrid Sydney Blue Gum	
10	36	1	Melaleuca ericifolia Swamp Paperbark	H
10	37	2	Radermachera sinica China Doll	L

GROUP TREES LOCATED WITHIN THE DESIGN FOOTPRINT/WORKS ZONE REQUIRING REMOVAL				
Map No.	Group No.	Tree No.	Botanic Common Name	RV
10	38	1	Casuarina glauca Swamp she-oak	M
10	38	2	Casuarina glauca Swamp she-oak	
10	38	3	Casuarina glauca Swamp she-oak	
2	39	1	Casuarina glauca Swamp she-oak	M
2	40	1	Cupressus sp. Cypress	M
2	41	1	Dead Tree Dead tree	L
2	41	1	Dead Tree Dead tree	M
2	42	1	Eucalyptus pilularis Blackbutt	
2	42	2	Angophora costata Smooth-barked Apple Myrtle	
2	42	3	Angophora costata Smooth-barked Apple Myrtle	
1	44	1	Casuarina glauca Swamp she-oak	H
1	44	2	Casuarina glauca Swamp she-oak	
1	44	3	Casuarina glauca Swamp she-oak	
2	45	1	Viburnum odoratissimum Sweet Viburnum	M
2	45	2	Viburnum odoratissimum Sweet Viburnum	M
2	45	3	Callistemon viminalis Weeping Bottlebrush	M
9	P1-3	P1-3	No information	

3.13 Grouped Trees Retainable.

The following trees within the groups are retainable. Some trees within the groups not individually assessed may require removal or pruning.

Table 12 – Tree groups partially within the footprint.

GROUP TREES MINOR ENCROACHMENT - RETAINABLE							
Map No.	Group No.	Tree No.	Botanic Common Name	Design F/Print Area (m ²)	Design F/Print Area (%)	TPZ Area for Group (m ²)	RV
4	8	2	Eucalyptus botryoides Southern Mahogany	4.36	8.7%	50.27	M
4	8	3	Angophora costata Smooth-barked Apple Myrtle	5.09	18.0%	28.28	M
4	8	4	Angophora costata Smooth-barked Apple Myrtle	1.13	6.2%	18.1	M
4	9	3	Eucalyptus botryoides Southern Mahogany	8.73	13.1%	66.47	H
7	11	3	Casuarina glauca Swamp she-oak	46.12	33.7%	136.84	M
7	11	4	Casuarina glauca Swamp she-oak	67.46	41.4%	162.85	M
7	11	6	Casuarina glauca Swamp she-oak	42.73	33.2%	128.67	M
7	11	7	Eucalyptus tereticornis Forest Red Gum	23.84	31.6%	75.43	M
7	11	8	-	122.66	42.4%	289.51	M
7	11	9	Eucalyptus sp. Eucalypt	45.77	48.2%	95.03	M
4	17	2	Eucalyptus botryoides Southern Mahogany	5.89	11.7%	50.27	M
3	18	1	Eucalyptus botryoides Southern Mahogany	76.9	41.3%	186.25	H
3	18	4	Corymbia citriodora Lemon-scented Gum	18.36	15.2%	120.76	H
3	18	5	Eucalyptus botryoides Southern Mahogany	6.89	5.2%	132.73	H
4	19	3	Eucalyptus botryoides Southern Mahogany	16.76	4.7%	359.65	H
3	20	1	Corymbia citriodora Lemon-scented Gum	41.87	25.7%	162.85	M
3	20	10	Populus alba White Poplar	29.56	11.6%	254.45	M
7	22	2	Eucalyptus saligna Sydney Blue Gum	2.25	2.5%	91.61	H
7	22	3	Eucalyptus saligna Sydney Blue Gum	17.83	19.5%	91.61	H
7	22	4	Eucalyptus botryoides Southern Mahogany	9.45	6.7%	141.02	H
7	22	5	Eucalyptus saligna Sydney Blue Gum	0.69	0.3%	221.66	H
7	22	6	Eucalyptus saligna Sydney Blue Gum	93.79	42.3%	221.66	H
7	23	1	Eucalyptus tereticornis Forest Red Gum	0.14	0.2%	84.95	H

GROUP TREES MINOR ENCROACHMENT - RETAINABLE							
Map No.	Group No.	Tree No.	Botanic Common Name	Design F/Print Area (m ²)	Design F/Print Area (%)	TPZ Area for Group (m ²)	RV
7	23	3	Casuarina glauca Swamp she-oak	2.33	18.5%	12.57	H
7	23	4	Eucalyptus botryoides Southern Mahogany	0.05	0.1%	66.47	H
7	24	1	Corymbia maculata Spotted Gum	1.02	1.4%	75.43	H
7	24	3	Eucalyptus botryoides Southern Mahogany	23.58	18.3%	128.67	H
7	27	1	Melaleuca bracteata Black Tea Tree	51.39	48.6%	105.68	H
7	27	2	Ficus microcarpa var. hillii Hills Weeping Fig	113.19	48.7%	232.34	H
7	27	3	Callistemon viminalis Weeping Bottlebrush	3.41	27.1%	12.57	H
7	28	2	Erythrina crista-galli Cockscomb Coral Tree	13.44	74.2%	18.1	L
7	28	4	Lantana camara Lantana	8.72	69.4%	12.57	L
7	28	7	Lantana camara Lantana	6.27	49.9%	12.57	L
6	32	1	Cupressus sp. Cypress	0.63	5.0%	12.57	M
10	38	3	Casuarina glauca Swamp she-oak	3.21	2.3%	136.84	M
2	42	1	Eucalyptus pilularis Blackbutt	18.15	4.4%	415.45	M
2	42	4	Angophora costata Smooth-barked Apple Myrtle	56.23	41.1%	136.84	M
1	43	1	Avicennia marina Grey Mangrove	0.38	0.7%	55.42	H
1	44	3	Casuarina glauca Swamp she-oak	30.11	41.6%	72.38	H

3.14 Group trees requiring further investigation to ensure retention via tree sensitive construction methods where viable

Table 13 – Potentially retainable with intensive Project Arborist (PA) involvement and non-destructive digging techniques.

GROUP TREES POTENTIALLY RETAINABLE WITH INTENSIVE PA INVOLVEMENT AND NDD						
Map No.	Group No.	Tree No.	Botanic/Common Name	SRZ Impact Y/N	Level of Impact	RV
7	11	3	Casuarina glauca Swamp she-oak	Y	Works within SRZ	M
7	11	4	Casuarina glauca Swamp she-oak	Y	Works within SRZ	
3	18	1	Eucalyptus botryoides Southern Mahogany	Y	Trunk within footprint	H
3	18	2	Eucalyptus botryoides Southern Mahogany	Y	Trunk within footprint	
3	18	3	Corymbia citriodora Lemon-scented Gum	Y	Trunk within footprint	

4 General Tree Protection Measures

4.1 Stockpiling

Any ground identified for proposed stockpiling that is within the TPZ of trees to be retained shall be covered with thick, coarse mulch, placement of wooden pallets over the mulch, covering of the pallets with a tarpaulin (or similar), and the placement of materials on top of this device to prevent loose or potentially contaminating materials from moving into the soil profile.

4.2 Fill Material

Placement of fill material within the TPZ of trees to be retained should be avoided where possible. Where placement of fill cannot be avoided, the material should be a coarse, gap graded material such as 20 — 50mm crushed basalt or equivalent to provide some aeration to the root zone. Note that roadbase or crushed sandstone or other material containing a high percentage of fines is unacceptable for this purpose.

The fill material should be consolidated with a non-vibrating roller 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. No fill material should be placed in direct contact with the trunk.

4.3 Hygiene Practices

No washing or rinsing of tools or other equipment, preparation of any mortars, cement mixing, or brick cutting is to occur within 8m upslope of any palms/trees to be retained.

5 Post Construction Tree Care Measures

5.1 Mulching

The removal of mulch after construction to remove any contaminants and its replacement with a good quality mulch and addition of 10% organic matter will improve beneficial soil micro-organisms, retain moisture and improve aeration and water infiltration.

5.2 Irrigation

An arboriculturist should determine whether irrigation should be carried out during extended periods of drought.

5.3 Pest Management

Monitoring is required, as trees under stress are more prone to insect attack.

6 References

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Standards Australia AS4373-2007: Pruning of Amenity Trees, Standards Australia, Sydney.

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Report prepared by Chantalle Hughes – December 2021.



Chantalle Brackenridge Hughes

Consulting arboriculturist and horticulturist.

Tree Surgery Certificate

Advanced Certificate Urban Horticulture

Diploma of Horticulture (Arboriculture) *Credit* – AQF Level 5

ISA Tree Risk Assessment Qualification (TRAQ) 2016

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Affiliate Member of the Local Government Tree Resources of Australia (LGTRA)

Member of the International Society of Arboriculture (ISA)

7 Appendices

Appendix A - Terms and Definitions

Aerial inspection: where the subject tree is climbed by a professional tree worker/ arborist (typically AQF Level 3) specifically to inspect and assess the tree for signs of symptoms of defects, disease, etc.

Age classes

- Y** Young refers to an established but juvenile tree.
- SM** Semi-mature refers to a tree at growth stages between immaturity and full size.
- EM** Early-mature refers to a tree close to full sized still actively growing.
- M** Mature refers to a full sized tree with some capacity for further growth.
- LM** Late-Mature refers to a full sized tree with little capacity for growth that is not yet about to enter decline.
- OM** Over-Mature refers to a full sized tree with little capacity for growth that is entering or has entered decline.

Co-dominant: refers to stems or branches equal in size and relative importance.

Condition/Structure: refers to the tree's form and growth habit, as modified by its environment (aspect, suppression by other trees, soils) and the state of the scaffold (i.e. trunk and major branches), including structural defects such as cavities, crooked trunks or weak trunk/branch junctions. These are not directly connected with health and it is possible for a tree to be healthy but in poor condition/structure.

Deadwood: refers to any whole limb that no longer contains living tissues (e.g. live leaves and/or bark). Some dead wood is common in a number of tree species.

Diameter at Breast Height (DBH): Refers to the tree trunk diameter at breast height (1.4 metres above ground level).

Epicormic growth: adventitious branches that are considered to be a weak attachment in the short term due to minimal wood formation. There are generally formed following storm-related branch breakage or poor pruning practices. Should sufficient holding wood form in the long-term this growth is less of an issue.

Hazard: refers to anything with the potential to harm health, life or property.

Health: Refers to the tree's vigour as exhibited by the crown density, leaf colour, presence of epicormic shoots, ability to withstand disease invasion, and the degree of dieback.

Inclusion stem/bark: the pattern of development at branch or stem junctions where bark is turned inward rather than pushed out. This fault is located at the point where the stems/branches meet. This is normally a genetic fault and potentially a weak point of attachment as the bark obstructs healthy tissue from joining together to strengthen the joint.

Scaffold branch/root: a primary structural branch of the crown or primary structural root of the tree.

Secondary Stem: refers to stems or branches with one of unequal size and relative importance.

SRZ: refers to the Structural Root Zone of the tree, this is the area required for tree stability.

TPZ: refers to the Tree Protection Zone of the tree, this is the primary method of protecting trees, it is a combination of the root area and the canopy and the SRZ is located within it.

Visual Tree Assessment (VTA): a procedure of defect analysis developed by Mattheck and Breloer (1994) that uses the growth response and form of trees to detect defects.

Appendix B – SULE Guide

SULE categories (after Barrell 1996, Updated 01/04/01)

The five categories and their sub-groups are as follows:

1. Long SULE - tree appeared retainable at the time of assessment for over 40 years with an acceptable degree of risk, assuming reasonable maintenance:
 - a) Structurally sound trees located in positions that can accommodate future growth
 - b) Trees which could be made suitable for long term retention by remedial care
 - c) Trees of special significance which would warrant extraordinary efforts to secure their long term retention
2. Medium SULE - tree appeared to be retainable at the time of assessment for 15 to 40 years with an acceptable degree of risk, assuming reasonable maintenance:
 - a) Trees which may only live from 15 to 40 years
 - b) Trees which may live for more than 40 years but would be removed for safety or nuisance reasons
 - c) Trees which may live for more than 15 years but would be removed to prevent interference with more suitable individuals or to provide space for new planting
 - d) Trees which could be made suitable for retention in the medium term by remedial care
3. Short SULE - tree appeared to be retainable at the time of assessment for 5 to 15 years with an acceptable degree of risk, assuming reasonable maintenance:
 - a) Trees which may only live from 5 to 15 years
 - b) Trees which may live for more than 15 years but would be removed for safety or nuisance reasons
 - c) Trees which may live for more than 15 years but would be removed to prevent interference with more suitable individuals or to provide space for new planting
 - d) Trees which require substantial remediation and are only suitable for retention in the short term.
4. Removal - trees which should be removed within the next 5 years:
 - a) Dead, dying, suppressed or declining trees because of disease or inhospitable conditions
 - b) dangerous trees through instability or recent loss of adjacent trees
 - c) Dangerous trees because of structural defects including cavities, decay, included bark, wounds or poor form
 - d) Damaged trees that are clearly not safe to retain
 - e) Trees which may live for more than 5 years but would be removed to prevent interference with more suitable individuals or to provide space for new planting
 - f) Trees which are damaging or may cause damage to existing structures within the next 5 years
 - g) Trees that will become dangerous after removal of other trees for the reasons given in (a) to (f)
 - h) Trees in categories (a) to (g) that have a high wildlife habitat value and, with appropriate treatment, could be retained subject to regular review
5. Small, young or regularly pruned - Trees that can be reliably moved or replaced:
 - a) small trees less than 5m in height
 - b) young trees less than 15 years old but over 5m in height
 - c) formal hedges and trees intended for regular pruning to artificially control growth

Appendix C – STARS – Significance of a Tree Assessment Rating System (IACA 2010)©

The landscape significance of a tree is an essential criterion for establishing the importance that a particular tree may have on a site. However, rating the significance of a tree becomes subjective and difficult to ascertain in a consistent and repetitive fashion due to assessor bias. It is therefore necessary to have a rating system utilising structured qualitative criteria to assist in determining the retention value for a tree.

This rating system will assist in the planning processes for proposed works, above and below ground where trees are to be retained on or adjacent a development site. The system uses a scale of *High*, *Medium* and *Low* significance in the landscape. Once the landscape significance and *Useful Life Expectancy* of an individual tree has been defined, the retention value can be determined.

Tree Significance - Assessment Criteria

1. High Significance in landscape.

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

2. Medium Significance in landscape.

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

3. Low Significance in landscape.

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

Appendix C – STARS – Significance of a Tree Assessment Rating System (IACA 2010)©

Environmental Pest / Noxious Weed Species:

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

Hazardous/Irreversible Decline:

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

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

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

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

		Significance				
		1. High	2. Medium	3. Low		
		Significance in Landscape	Significance in Landscape	Significance in Landscape	Environmental Pest / Noxious Weed Species	Hazardous / Irreversible Decline
Estimated Life Expectancy	1. Long >40 years					
	2. Medium 15-40 Years					
	3. Short <1-15 Years					
	Dead					
Legend for Matrix Assessment						
	Priority for Retention (High) -These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 <i>Protection of trees on development sites</i> . Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.					
	Consider for Retention (Medium) -These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.					
	Consider for Removal (Low) -These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.					
	Priority for Removal -These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.					

Table 1 - Tree Retention Value - Priority Matrix.

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

Ms Mikaela Malcolm
Senior Environmental Advisor
CPB Contractors, Ghella & UGL Engineering Pty Ltd
Level 7, Building B, 197 - 201 Coward Street
MASCOT NSW 2020



ABN 14631973638

2 December 2021

Dear Mikaela,

Pruning Specification – M6 Motorway Project Stage 1.

At your request, I reviewed pruning requirements for the proposed Haul Road (located adjacent to the school in the eastern side of the Bicentennial Park), however the following pruning specification would be relevant for most required pruning for site works.

To assist with my assessment, I have referred to the following:

- AS4373-2007 Pruning of Amenity Trees;
- Work Health and Safety Act 2011;
- Work Health and Safety (WHS) Regulations 2017;
- Safe Work Guide to Managing Risks of Tree Trimming and Removal Work 2016;
- Code of Practice for the Amenity Tree Industry 1998;
- Code of Practice for Work Near Overhead Power Lines.

Pruning Specification

Pruning to achieve clearances of up to 5.5m above natural ground level are to be completed in accordance with AS4373-2007 (Pruning of Amenity Trees). Clearances shall be achieved using the following pruning class where possible:

Reduction Pruning Code (R) Clause 7.3.2. of AS4373. Reduction pruning - specifically, pruning the ends of branches are removed to internal lateral branches or stems.

NOTE:

1. The lateral branch to which the final cut is made should be at least one third of the diameter of the branch being reduced at the point of the final cut.
2. Reduction pruning is not lopping or topping.

Where reduction pruning does not achieve the clearance objective the following pruning classes may be applied:

Crown lifting (Code C) Clause 7.3.3 or Selective Pruning (Code S) Clause 7.2.4 of AS4373.

Only branches that overhang the corridor or impede access are allowed to be removed.

Treeism Arboricultural Services Pty Ltd		
Consulting Arboriculturist	PO Box Balgowlah, NSW 2093	Mobile: 0403 935 419
Email: chantalle@treeism.com.au		

The maximum allowable clearance shall be 5.5m above natural ground level and the maximum diameter of branches to be removed is 100mm, without additional consultation with the Project Arborist (PA).

Where the clearance objective cannot be achieved through an acceptable pruning class i.e. Trees which lean over the access corridor, that do not have suitable lateral branches to cut back too, or trees which have their trunk and root crown in the access corridor. Consultation with the PA is required.

Trees with hollows or other active or obvious habitat may need further assessment by an ecologist or wildlife specialist.

Consideration shall be made to any relevant legislation including planning, heritage and protected species. Where required, approval from the relevant consent authorities shall be obtained.

All works shall be carried out using a AQF Level III Arborist in accordance with;

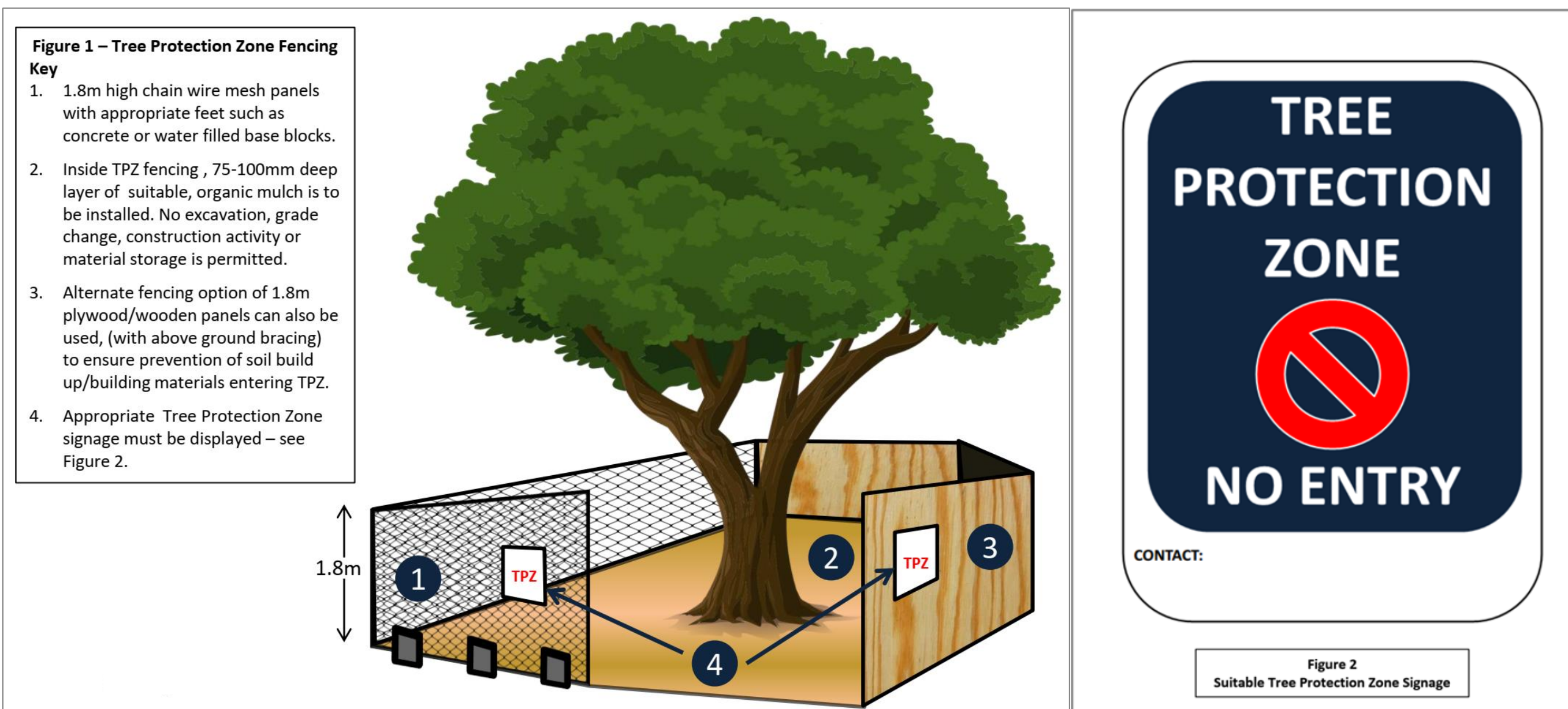
- AS4373-2007 (Pruning of Amenity Trees).
- Work Health and Safety Act 2011 and the Work Health and Safety (WHS) Regulations 2017.
- Safe Work Guide to Managing Risks of Tree Trimming and Removal Work 2016.
- Code of Practice for the Amenity Tree Industry 1998.
- Any pruning works near powerlines shall be carried out in accordance with the Code of Practice for Work Near Overhead Power Lines.

Please contact the undersigned via email chantalle@treeism.com.au or phone 0403 935 419 to discuss further if required.

Yours sincerely



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Affiliate Member of the Local Government Tree Resources of Australia (LGTRA)



Figures 1 & 2 – Tree Protection Fencing and appropriate signage.

Figure 3 - Stem, Branch & Ground protection measures

Key

1. Padding (such as geotextile membrane, natural hessian, rubber, or carpet to protect bark).
2. Battens/boards for branch/stem protection, strapped together NOT nailed into bark/tree. Minimum 2m in height on stem where feasible.
3. Ground protection base 75-100mm of fit for purpose mulch.
4. If machinery is required to move within the TPZ then steel rumble boards (4a) or wide, timber sheeting/boards thrashed together (4b) is to be placed over mulch layer (preferably with geotextile base layer), this to spread the weight and minimise soil compaction

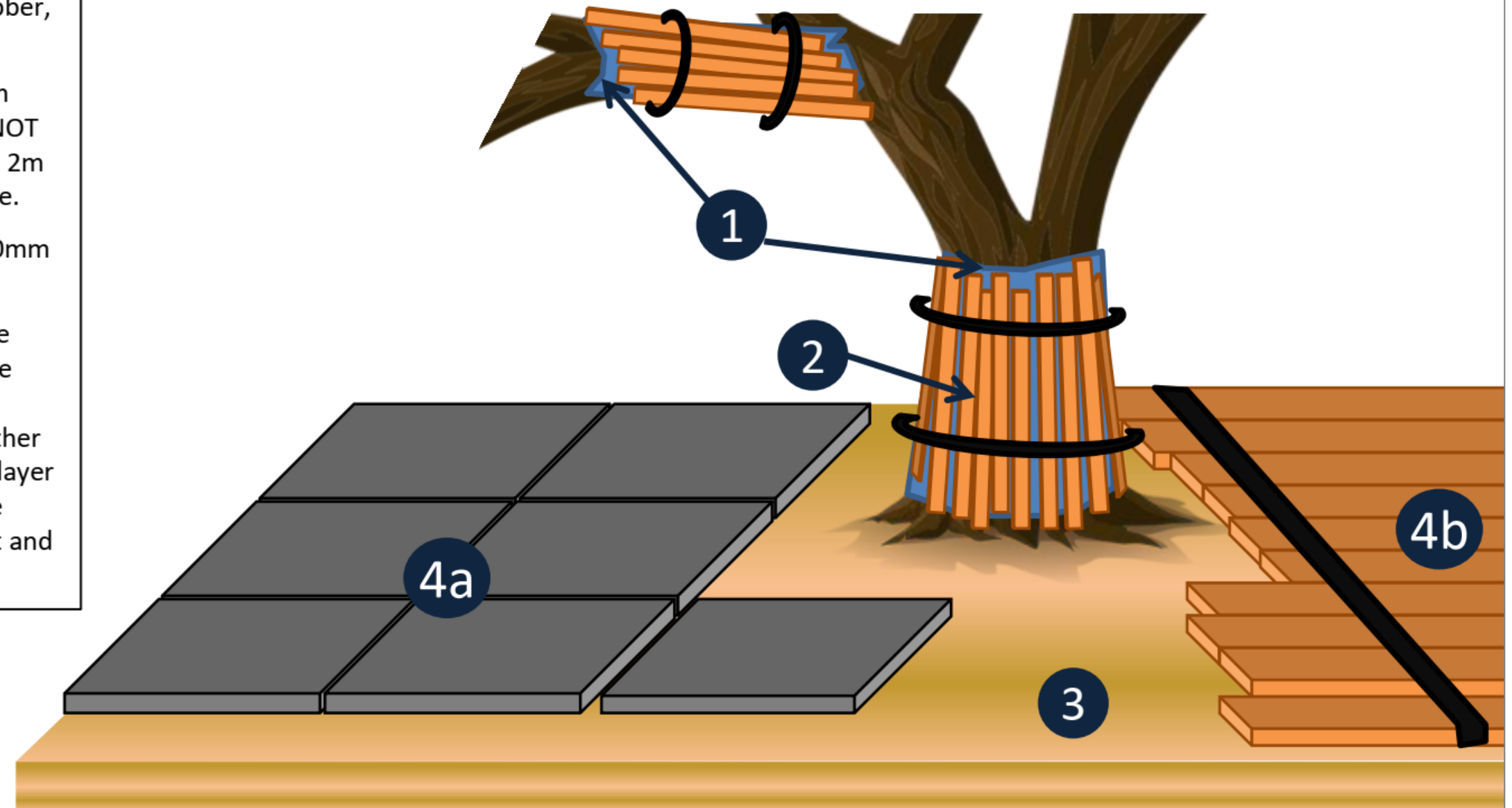


Figure 3 – Stem and ground protection measures.



Figure 7: Map 1



Figure 8: Map 2

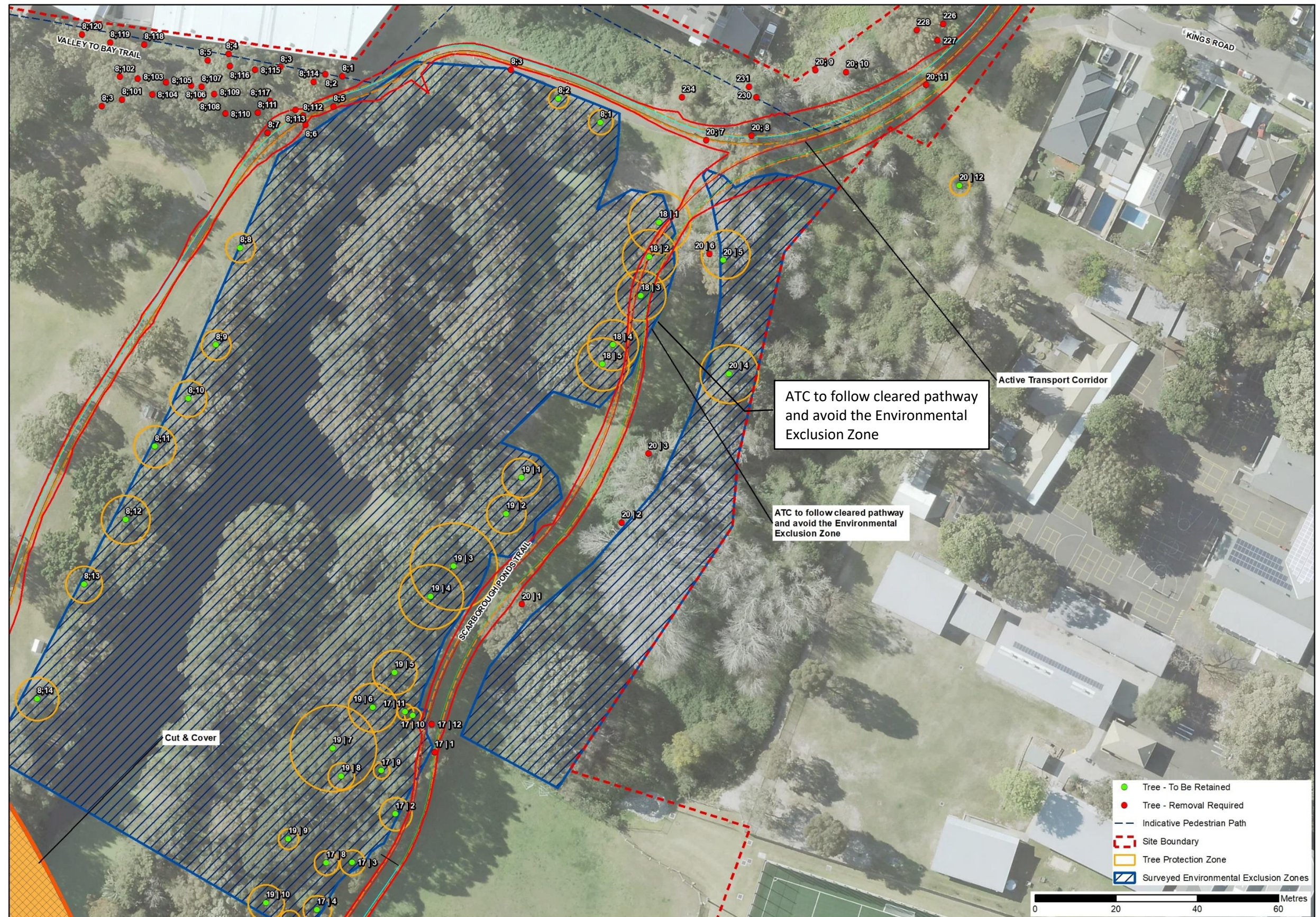


Figure 9: Map 3

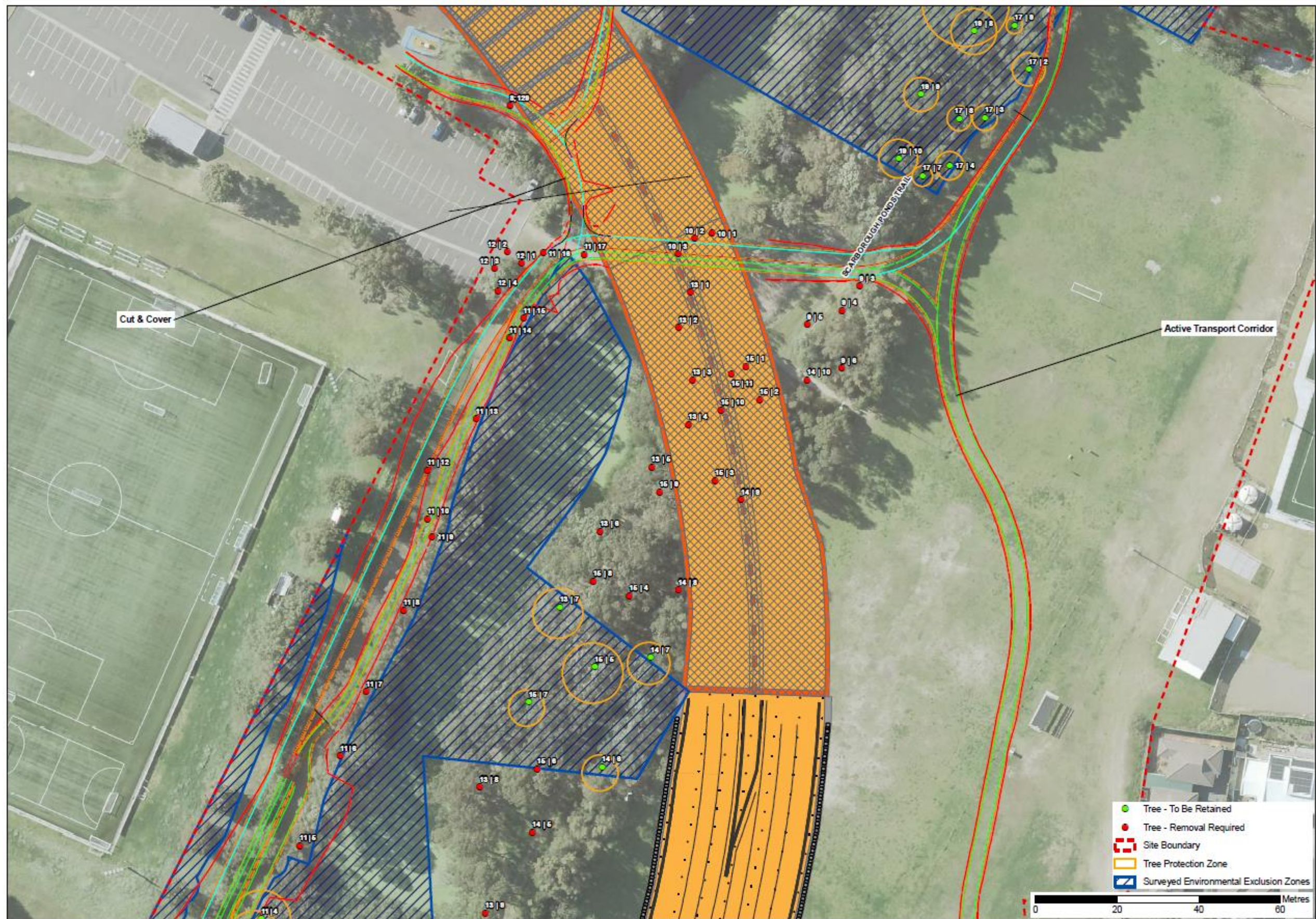


Figure 10: Map 4



Figure 11: Map 5



Figure 12: Map 6

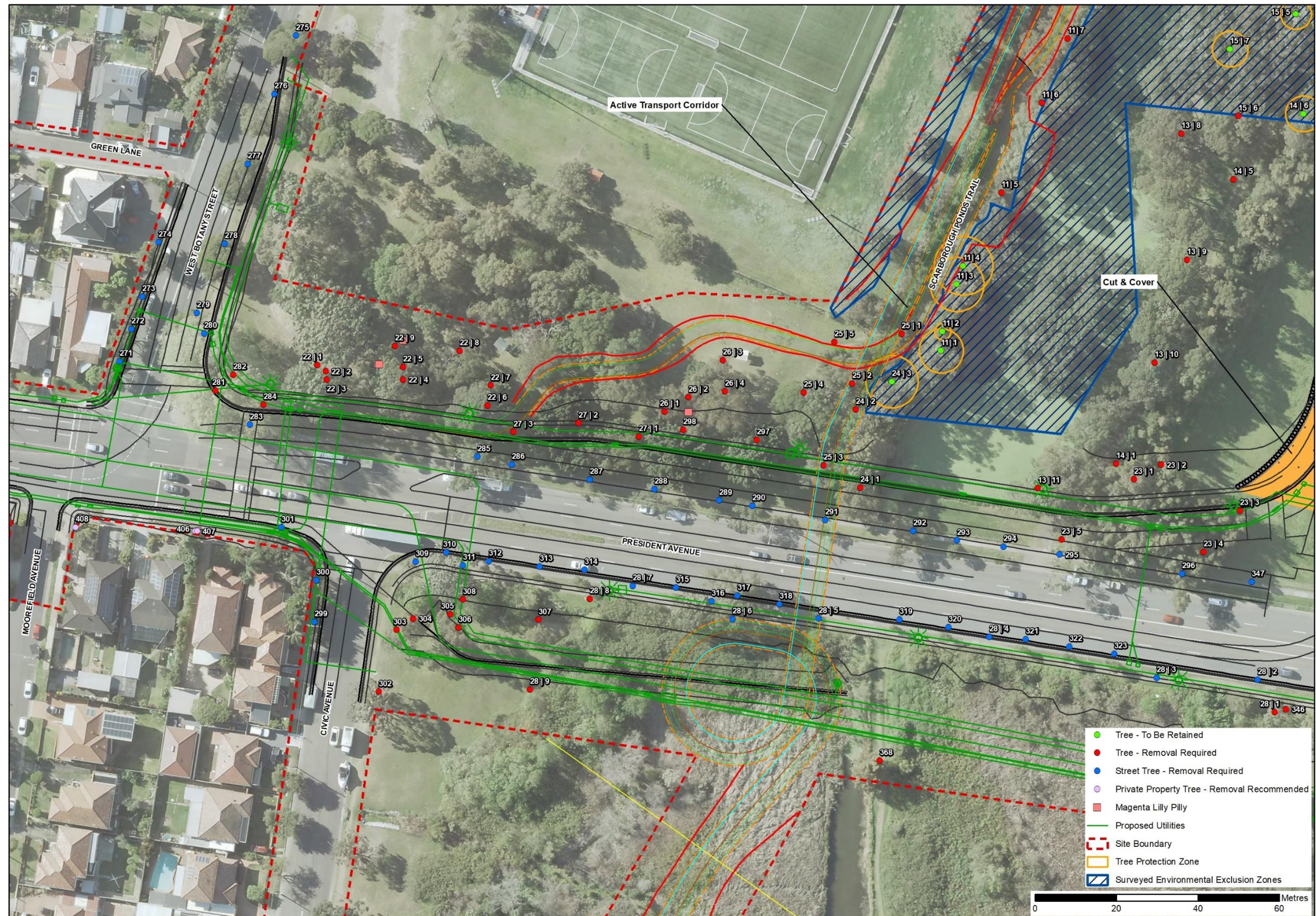


Figure 13: Map 7



Figure 14: Map 8

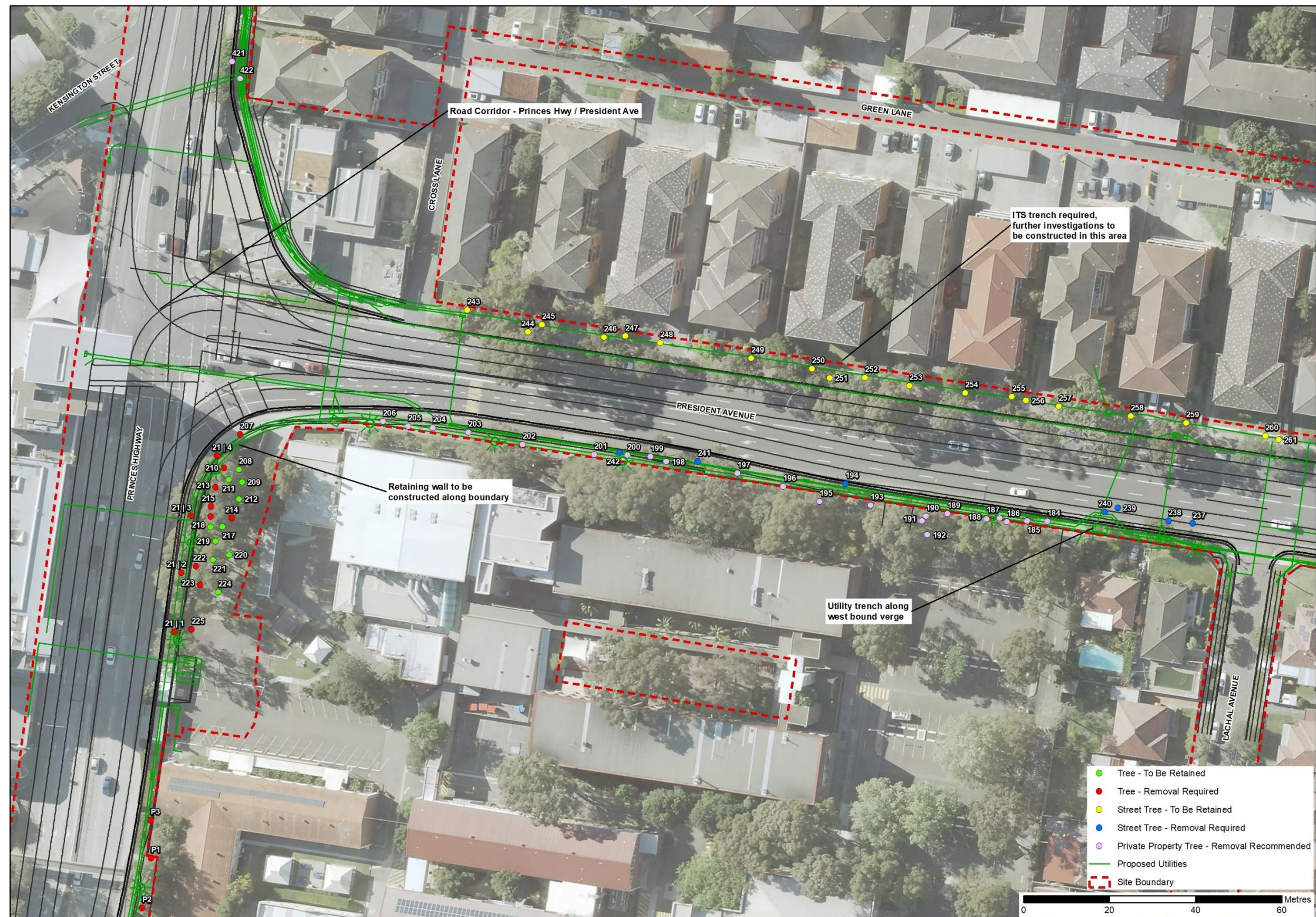


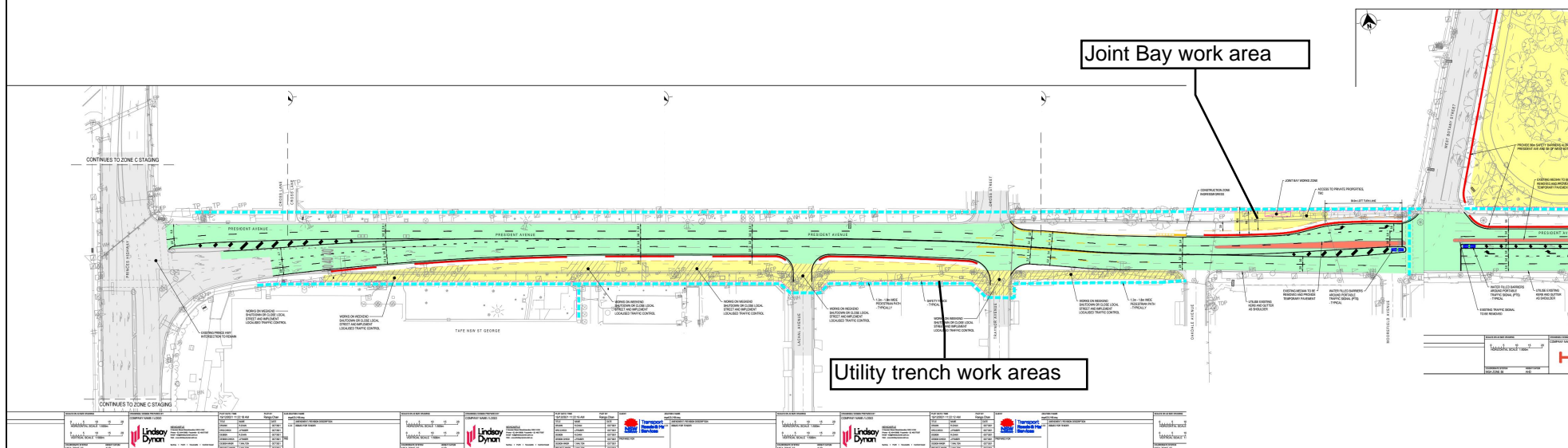
Figure 15: Map 9



Figure 16: Map 10

Appendix G – Traffic Staging areas on President Avenue and Princes Highway

Appendix G CGU Traffic Staging along President Avenue

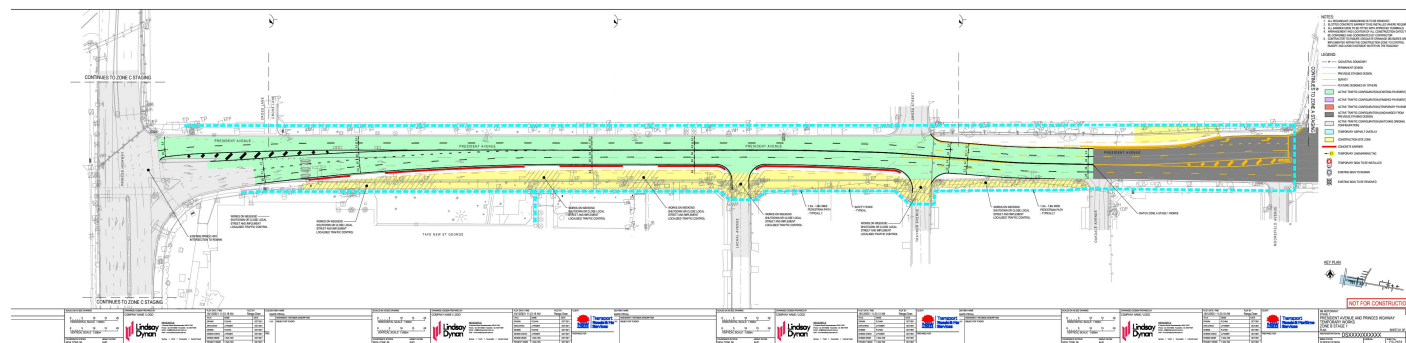
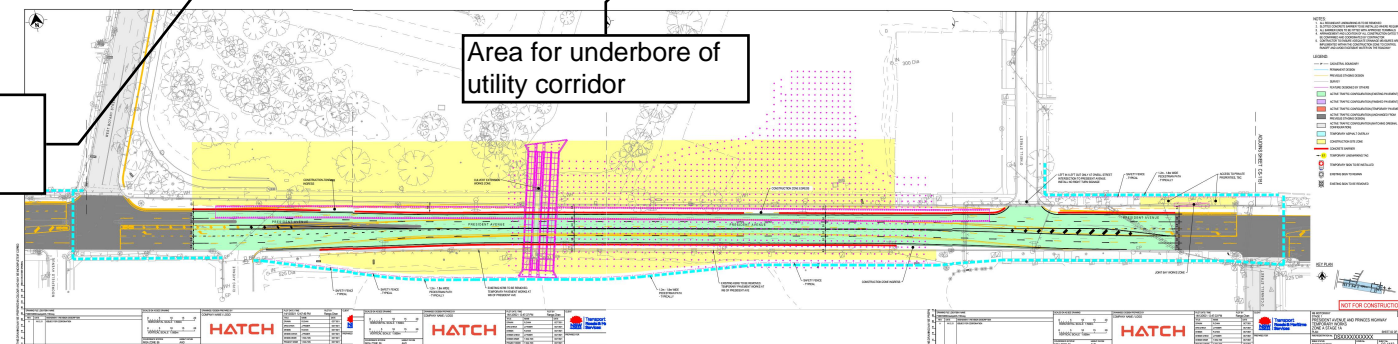
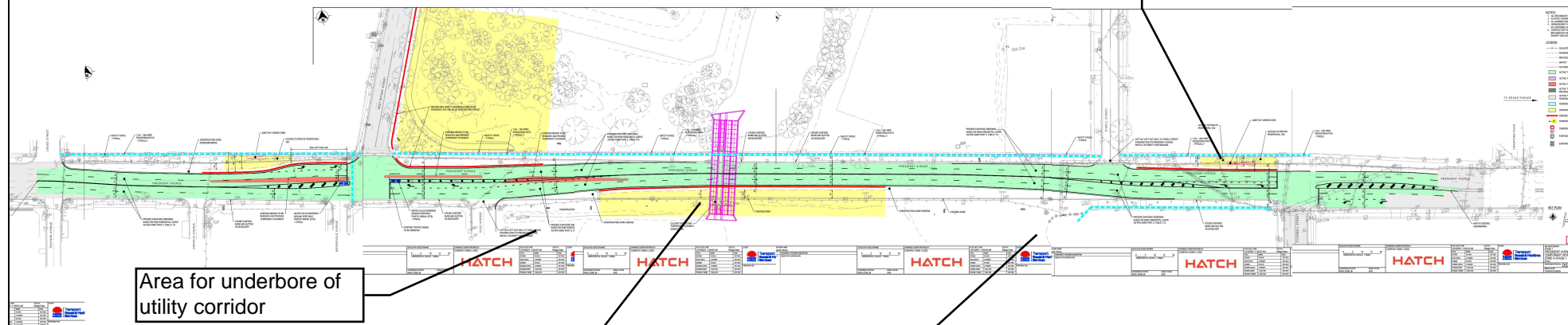


Joint Bay work area

Area for underbore of utility corridor

Works to facilitate construction of temporary pavement, drainage system

Area for underbore of utility corridor



Appendix H - Schedule of Assessed Trees

Tree no	Botanic Common Name	H (m)	S (m)	DBH (m)	Multi (DBH)	DAB (m)	Age	H	S	Comments	SRZ (m)	TPZ (m)	Street Tree Y/N/?	Significance of a Tree Assessment Rating System (STARS)		
														SULE	TSR	RV
1	Gleditsia triacanthos Honey Locust	10	5	0.16	0.16	0.18	EM	Good-Fair	Good	Vine noted up stem.	1.6	2	No	2A	M	M
2	Eucalyptus microcorys Tallowwood	16	14	0.8	0.8	0.9	M	Good	Good	Deadwood 5 - 10cm diameter.	3.2	9.6	?	2A	H	H
3	Eucalyptus microcorys Tallowwood	18	14	0.73	0.725	0.82	M	Good	Good	Deadwood 5 - 10cm diameter. Codominant at 2m AGL.	3	8.7	?	2A	H	H
4	Eucalyptus botryoides Southern Mahogany	11	12	0.03	0.20	0.03	M	Good-Fair	Fair	Deadwood 10cm plus diameter. Epicormic growth.	1.5	2.5	No	2A	M	M
5	Casuarina cunninghamiana River She-oak	12	16	0.5	0.5	0.56	M	Good	Good	No visual defects sited.	2.6	6	No	2A	M	M
6	Callistemon viminalis Weeping Bottlebrush	7	10	0.12	0.24	0.14	M	Good-Fair	Good-Fair	Multiple stems, sprawling	1.5	2.9	No	2A	M	M
7	Eucalyptus robusta Swamp Mahogany	14	16	0.8	0.8	0.9	M	Good	Good-Fair	DBH taken @ 1m.	3.2	9.6	No	2A	M	M
8	Syncarpia glomulifera Turpentine	6	4	0.15	0.15	0.17	Y	Good	Good	No special problems noted at time of assessment.	1.6	2	No	2A	M	M
9	Eucalyptus robusta Swamp Mahogany	8	10	0.45	0.50	0.51	M	Good	Good	Deadwood <-5cm diameter.	2.5	6	No	2A	M	M
10	Eucalyptus robusta Swamp Mahogany	10	8	0.53	0.53	0.59	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter. Cavity noted. Decay, poor tree form, previous failures	2.7	6.3	No	2A	M	M
11	Melaleuca quinquenervia Broad-leaved P'bark	9	9	0.56	0.56	0.63	M	Good	Good	Included bark, minor inclusion.	2.7	6.7	No	2A	M	M
12	Ficus rubiginosa Port Jackson Fig	9	15	0.25	0.72	0.28	EM	Good	Good	No special problems noted at time of assessment.	1.9	8.7	No	2A	M	M
13	Eucalyptus microcorys Tallowwood	12	9	0.45	0.45	0.51	M	Good	Good-Fair	Deadwood 10cm plus diameter. Lean to northwest.	2.5	5.4	No	2A	M	M
14	Melaleuca linariifolia Snow in Summer	4	6	0.2	0.26	0.23	OM	Fair-Poor	Poor	Cavity noted Decay Poor tree form decay into rootcrown.	1.8	3.1	No	4A	L	L
15	Eucalyptus microcorys Tallowwood	18	16	0.48	0.64	0.53	M	Good	Good	codominant @ 0.2m AGL.	2.5	7.6	No	2A	H	H
16	Eucalyptus camaldulensis River Red Gum	16	9	0.45	0.63	0.51	M	Fair	Fair	Deadwood 5 - 10cm diameter. Bleeding/sap flow Decay Dieback-general Epicormic growth Borer/Termites.	2.5	7.6	No	2A	H	H
17	Lophostemon confertus QLD Box	8	7	0.38	0.38	0.42	M	Good	Good	DBH @1m AGL.	2.3	4.5	No	2A	M	M
18	Eucalyptus microcorys Tallowwood	13	10	0.58	0.66	0.65	M	Good	Good-Fair	Deadwood <-5cm diameter. Secondary stem @ 0.2m AGL.	2.8	7.9	No	2A	M	M
19	Ficus microcarpa var. hillii Hills Weeping Fig	17	18	0.48	0.78	0.53	M	Good	Fair	Included bark damaged (mowed) roots.	2.5	9.4	No	2A	H	H
20	Ficus microcarpa var. hillii Hills Weeping Fig	17	16	0.58	0.58	0.65	M	Good	Fair	Root damage Wounds.	2.8	6.9	No	2A	H	H
21	Eucalyptus tereticornis Forest Red Gum	17	16	0.95	0.95	1.07	M	Good	Good-Fair	Deadwood <-5cm diameter. Epicormic growth	3.4	11.4	No	2A	H	H
44	Callistemon citrinus Crimson Bottlebrush	4	7	0.48	0.48	0.53	M	Good	Good	No special problems noted at time of assessment.	2.5	5.7	No	2A	M	M
45	Eucalyptus robusta Swamp Mahogany	12	12	0.4	0.49	0.45	M	Good	Fair	Deadwood <-5cm diameter. Epicormic growth Poor tree form.	2.4	5.8	No	2A	M	M
46	Stenocarpus sinuatus Fire Wheel Tree	6	5	0.2	0.22	0.23	EM	Good	Good-Fair	No special problems noted at time of assessment.	1.8	2.7	No	2A	M	M

Tree no	Botanic Common Name	H (m)	S (m)	DBH (m)	Multi (DBH)	DAB (m)	Age	H	S	Comments	SRZ (m)	TPZ (m)	Street Tree Y/N/?	Significance of a Tree Assessment Rating System (STARS)		
														SULE	TSR	RV
47	Eucalyptus scoparia Wallangarra White Gum	16	10	0.53	0.525	0.59	M	Good-Fair	Fair-Poor	Deadwood 10cm plus diameter. Epicormic growth codominant @ 2.5m AGL.	2.7	6.3	No	3A	M	L
48	Eucalyptus robusta Swamp Mahogany	14	13	0.45	0.61	0.51	M	Good-Fair	Good-Fair	Deadwood <-5cm diameter.	2.5	7.3	No	2A	M	M
49	Eucalyptus scoparia Wallangarra White Gum	16	12	0.4	0.4	0.45	M	Good	Good	Deadwood 5 - 10cm diameter.	2.4	4.8	No	2A	M	M
50	Melaleuca quinquenervia Broad-leaved P' bark	10	12	0.55	0.55	0.62	M	Good	Good	No special problems noted at time of assessment.	2.7	6.6	No	2A	M	M
51	Eucalyptus microcorys Tallowwood	12	12	0.6	0.6	0.68	M	Good	Good-Fair	Deadwood <-5cm diameter. DBH @ 0.5. Broken branches.	2.8	7.2	No	2A	M	M
52	Eucalyptus robusta Swamp Mahogany	15	10	0.55	0.55	0.62	M	Good	Good-Fair	Deadwood <-5cm diameter. Dieback-tip Pests/insect damage.	2.7	6.6	No	2A	M	M
53	Eucalyptus robusta Swamp Mahogany	8	10	0.63	0.63	0.70	M	Good-Fair	Fair	Deadwood 10cm plus diameter. Bracket fungi Dieback-tip Epicormic growth.	2.9	7.5	No	2A	M	M
54	Eucalyptus robusta Swamp Mahogany	7	5	0.3	0.3	0.34	M	Poor	Poor	Deadwood 10cm plus diameter. Dieback-general Epicormic growth Poor tree form Wound(s).	2.1	3.6	No	4A	M	L
55	Eucalyptus robusta Swamp Mahogany	14	12	0.48	0.48	0.53	M	Poor	Poor	Deadwood 10cm plus diameter.	2.5	5.7	No	4A	M	L
56	Eucalyptus robusta Swamp Mahogany	12	12	0.5	0.5	0.56	M	Poor	Poor	Deadwood 10cm plus diameter.	2.6	6	No	4A	M	L
57	Eucalyptus microcorys Tallowwood	14	15	0.45	0.45	0.51	M	Good	Good	No special problems noted at time of assessment.	2.5	5.4	No	2A	M	M
58	Eucalyptus microcorys Tallowwood	14	14	0.43	0.43	0.48	M	Good	Good	Deadwood <-5cm diameter.	2.4	5.1	No	2A	M	M
59	Eucalyptus microcorys Tallowwood	14	12	0.45	0.45	0.51	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter.	2.5	5.4	No	2A	M	M
60	Eucalyptus microcorys Tallowwood	10	6	0.23	0.23	0.25	EM	Good-Fair	Poor	Deadwood 5 - 10cm diameter. Suckers Wound(s) Previous failures.	1.9	2.7	No	4A	M	L
61	Eucalyptus microcorys Tallowwood	16	13	0.5	0.73	0.56	M	Good	Good	Deadwood <-5cm diameter.	2.6	8.8	No	2A	M	M
62	Eucalyptus microcorys Tallowwood	17	8	0.55	0.55	0.62	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter. Epicormic growth Poor pruning Poor tree form.	2.7	6.6	?	2A	H	H
63	Eucalyptus microcorys Tallowwood	18	13	0.63	0.63	0.7	M	Good	Good-Fair	Deadwood 5 - 10cm diameter.	2.9	7.5	?	2A	H	H
64	Eucalyptus microcorys Tallowwood	18	12	0.65	0.65	0.7	M	Good	Fair	Deadwood 5 - 10cm diameter. Epicormic growth Poor pruning.	2.9	7.8	?	2A	H	H
65	Eucalyptus microcorys Tallowwood	16	7	0.5	0.5	0.56	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter. Epicormic growth.	2.6	6	?	2A	H	H
66	Lophostemon confertus QLD Box	12	12	0.45	0.45	0.51	M	Good	Good	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines.	2.5	5.4	Yes	2A	H	H
67	Eucalyptus microcorys Tallowwood	18	12	0.5	0.5	0.56	M	Good	Good	Deadwood <-5cm diameter.	2.6	6	?	2A	H	H
68	Eucalyptus microcorys Tallowwood	14	12	0.53	0.53	0.59	M	Good	Good-Fair	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines.	2.7	6.3	?	2A	H	H
69	Eucalyptus microcorys Tallowwood	7	10	0.38	0.38	0.42	M	Good	Fair	Epicormic growth Lopped for powerlines Previously lopped.	2.3	4.5	?	2A	M	M
70	Lophostemon confertus QLD Box	8	10	0.35	0.35	0.39	M	Good	Fair	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines.	2.2	4.2	Yes	2A	H	H
71	Eucalyptus microcorys Tallowwood	8	8	0.3	0.3	0.34	M	Good	Fair	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines	2.1	3.6	?	2A	H	H

Tree no	Botanic I Common Name	H (m)	S (m)	DBH (m)	Multi (DBH)	DAB (m)	Age	H	S	Comments	SRZ (m)	TPZ (m)	Street Tree Y/N/?	Significance of a Tree Assessment Rating System (STARS)		
														SULE	TSR	RV
72	Eucalyptus microcorys Tallowwood	8	9	0.5	0.5	0.56	M	Good	Fair	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines.	2.6	6	?	2A	H	H
73	Eucalyptus microcorys Tallowwood	8	7	0.45	0.45	0.51	M	Good	Fair	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines.	2.5	5.4	?	2A	H	H
74	Eucalyptus microcorys Tallowwood	6	4	0.15	0.15	0.17	EM	Good	Fair	Suppressed growth.	1.6	2	?	2A	M	M
75	Lophostemon confertus QLD Box	8	8	0.23	0.33	0.37	M	Good	Fair	Epicormic growth Lopped for powerlines.	1.9	3.9	Yes	2A	H	H
76	Eucalyptus microcorys Tallowwood	9	10	0.43	0.43	0.48	M	Good	Good-Fair	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines.	2.4	5.1	?	2A	H	H
77	Eucalyptus microcorys Tallowwood	12	9	0.38	0.38	0.42	M	Good-Fair	Fair	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines.	2.3	4.5	?	2A	H	H
78	Lophostemon confertus QLD Box	8	7	0.38	0.38	0.42	M	Good	Good-Fair	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines.	2.3	4.5	Yes	2A	H	H
79	Eucalyptus microcorys Tallowwood	7	12	0.5	0.5	0.56	M	Good	Fair	Epicormic growth Lopped for powerlines.	2.6	6	?	2A	H	H
80	Eucalyptus microcorys Tallowwood	8	9	0.4	0.4	0.45	M	Good	Fair	Epicormic growth Lopped for powerlines.	2.4	4.8	?	2A	H	H
81	Eucalyptus microcorys Tallowwood	8	9	0.4	0.4	0.45	M	Good-Fair	Fair-Poor	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines.	2.4	4.8	?	3A	M	M
82	Lophostemon confertus QLD Box	8	7	0.35	0.38	0.39	M	Good-Fair	Fair-Poor	Epicormic growth Lopped for powerlines.	2.2	4.6	Yes	3A	M	M
83	Eucalyptus microcorys Tallowwood	10	6	0.25	0.25	0.28	EM	Good-Fair	Fair-Poor	Epicormic growth Lopped for powerlines.	1.9	3	?	3A	M	M
84	Lophostemon confertus QLD Box	7	9	0.4	0.4	0.45	M	Good-Fair	Fair	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines.	2.4	4.8	Yes	2A	H	H
85	Eucalyptus microcorys Tallowwood	8	4	0.2	0.2	0.23	EM	Good-Fair	Fair-Poor	Deadwood <-5cm diameter. Epicormic growth Lopped for powerlines.	1.8	2.4	?	3A	M	M
86	Eucalyptus microcorys Tallowwood	8	8	0.36	0.36	0.40	M	Good-Fair	Fair-Poor	Epicormic growth Lopped for powerlines.	2.3	4.3	?	3A	M	M
87	Eucalyptus microcorys Tallowwood	12	11	0.45	0.45	0.51	M	Good-Fair	Fair-Poor	Epicormic growth Lopped for powerlines.	2.5	5.4	?	3A	M	M
88	Eucalyptus microcorys Tallowwood	8	11	0.35	0.35	0.39	M	Good-Fair	Fair-Poor	Epicormic growth Lopped for powerlines.	2.2	4.2	?	3A	M	M
89	Lophostemon confertus QLD Box	8	6	0.35	0.42	0.47	M	Good-Fair	Fair-Poor	Epicormic growth Lopped for powerlines.	2.2	5	Yes	3A	M	M
90	Eucalyptus microcorys Tallowwood	18	11	0.53	0.53	0.59	M	Good	Good-Fair	Deadwood 5 - 10cm diameter. Epicormic growth.	2.7	6.3	No	2A	M	M
91	Eucalyptus microcorys Tallowwood	18	11	0.53	0.53	0.65	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter.	2.8	6.9	No	2A	M	M
92	Eucalyptus botryoides Southern Mahogany	16	16	0.73	0.73	0.81	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter. Hanger(s).	3	8.7	No	2A	M	M
93	Eucalyptus botryoides Southern Mahogany	9	8	0.33	0.33	0.37	EM	Fair	Fair-Poor	Deadwood 5 - 10cm diameter. Suppressed growth. Codominant @ .8m AGL. DBH taken @ 1m AGL.	2.2	3.9	No	3A	M	L
94	Eucalyptus microcorys Tallowwood	18	11	0.53	0.53	0.59	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter.	2.7	6.3	No	2A	M	M
95	Eucalyptus botryoides Southern Mahogany	9	6	0.38	0.38	0.42	EM	Good-Fair	Good-Fair	Deadwood 5 - 10cm diameter. DBH taken 1m AGL.	2.3	4.5	No	2A	M	M
96	Casuarina glauca Swamp she-oak	12	8	0.4	0.4	0.45	M	Good	Good	Deadwood <-5cm diameter. DBH @ 1m AGL.	2.4	4.8	No	2A	M	M

Tree no	Botanic Common Name	H (m)	S (m)	DBH (m)	Multi (DBH)	DAB (m)	Age	H	S	Comments	SRZ (m)	TPZ (m)	Street Tree Y/N/?	Significance of a Tree Assessment Rating System (STARS)		
														SULE	TSR	RV
97	Angophora floribunda Rough-barked Apple Myrtle	10	4	0.2	0.26	0.23	EM	Good	Good-Fair	Codominant @ .2m AGL.	1.8	3.1	No	2A	M	M
98	Eucalyptus microcorys Tallowwood	14	17	0.575	0.575	0.65	M	Good-Fair	Good-Fair	Deadwood 5 - 10cm diameter.	2.8	6.9	No	2A	M	M
99	Lophostemon confertus QLD Box	14	9	0.2	0.386	0.23	M	Good-Fair	Good-Fair	Epicormic growth. Top snapped out in youth.	1.8	4.6	No	2A	M	M
100	Casuarina glauca Swamp she-oak	16	8	0.4	0.4	0.45	M	Good	Good-Fair	Deadwood <-5cm diameter.	2.4	4.8	No	2A	M	M
101	Eucalyptus botryoides Southern Mahogany	16	11	0.5	0.5	0.56	M	Good	Good-Fair	Deadwood 5 - 10cm diameter. Dieback-tip Epicormic growth.	2.6	6	No	2A	M	M
102	Eucalyptus tereticornis Forest Red Gum	18	12	0.35	0.49	0.39	M	Good-Fair	Good-Fair	Deadwood <-5cm diameter. Codominant @ AGL. Line of 10 trees.	2.2	5.9	No	2A	M	M
103	Eucalyptus tereticornis Forest Red Gum	18	8	0.48	0.48	0.53	M	Good-Fair	Fair	Deadwood 5 - 10cm diameter. Included bark. Small Euc. tereticornis on either side.	2.5	5.7	No	2A	M	M
104	Eucalyptus botryoides Southern Mahogany	13	7	0.33	0.33	0.37	M	Good-Fair	Good-Fair	Deadwood 5 - 10cm diameter.	2.2	3.9	No	2A	M	M
105	Eucalyptus tereticornis Forest Red Gum	16	10	0.2	0.32	0.23	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter.	1.8	3.8	No	2A	M	M
106	Eucalyptus tereticornis Forest Red Gum	18	7	0.4	0.4	0.45	M	Good-Fair	Fair-Poor	Crack(s)/split(s) Decay Wound(s). Two Euc. tereticornis to the right of it approx. 200mm in diameter of stem.	2.4	4.8	No	4A	M	L
107	Eucalyptus tereticornis Forest Red Gum	20	13	0.55	0.55	0.62	M	Good-Fair	Good-Fair	Deadwood 5 - 10cm diameter. End of line of Euc. tereticornis.	2.7	6.6	No	2A	M	M
108	Casuarina glauca Swamp she-oak	18	8	0.38	0.38	0.42	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	2.3	4.5	No	2A	M	M
109	Eucalyptus botryoides Southern Mahogany	16	7	0.325	0.325	0.37	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	2.2	3.9	No	2A	M	M
110	Eucalyptus robusta Swamp Mahogany	16	13	0.25	0.51	0.28	M	Good-Fair	Fair	Deadwood 10cm plus diameter. Dieback-tip Epicormic growth Poor tree form.	1.9	6.1	No	2A	M	M
111	Casuarina glauca Swamp she-oak	12	5	0.25	0.35	0.28	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.9	4.2	No	2A	M	M
112	Eucalyptus tereticornis Forest Red Gum	16	10	0.37	0.37	0.42	M	Good	Good-Fair	Deadwood <-5cm diameter.	2.3	4.4	No	2A	M	M
113	Eucalyptus tereticornis Forest Red Gum	14	8	0.04	0.04	0.05	M	Good	Good-Fair	Deadwood <-5cm diameter.	1.5	2	No	2A	M	M
114	Eucalyptus microcorys Tallowwood	16	9	0.33	0.478	0.37	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter.	2.2	5.7	No	2A	M	M
115	Eucalyptus microcorys Tallowwood	16	9	0.45	0.45	0.51	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter.	2.5	5.4	No	2A	M	M
116	Eucalyptus microcorys Tallowwood	16	10	0.48	0.48	0.53	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter.	2.5	5.7	No	2A	M	M
117	Eucalyptus tereticornis Forest Red Gum	14	8	0.38	0.38	0.42	EM	Good-Fair	Good-Fair	No special problems noted at time of assessment.	2.3	4.5	No	2A	M	M
118	Eucalyptus botryoides Southern Mahogany	7	5	0.2	0.2	0.22	SM	Good-Fair	Fair-Poor	Poor tree form.	1.8	2.4	No	3A	M	L
119	Eucalyptus microcorys Tallowwood	16	9	0.38	0.38	0.42	M	Good	Fair	Deadwood 10cm plus diameter.	2.3	4.5	No	2A	M	M
120	Eucalyptus microcorys Tallowwood	18	10	0.38	0.38	0.42	M	Good	Good-Fair	Deadwood 10cm plus diameter.	2.3	4.5	No	2A	M	M
121	Callistemon viminalis Weeping Bottlebrush	5	4	0.175	0.175	0.2	EM	Good-Fair	Fair-Poor	Wound(s) Previous failures.	1.7	2.1	No	3A	M	L

Tree no	Botanic Common Name	H (m)	S (m)	DBH (m)	Multi (DBH)	DAB (m)	Age	H	S	Comments	SRZ (m)	TPZ (m)	Street Tree Y/N/?	Significance of a Tree Assessment Rating System (STARS)		
														SULE	TSR	RV
122	Callistemon viminalis Weeping Bottlebrush	5	4	0.1	.1	.1	EM	Good-Fair	Fair	Wound(s).	1.5	2	No	2A	M	M
123	Eucalyptus microcorys Tallowwood	14	12	0.46	0.46	0.52	M	Good	Fair	Deadwood <-5cm diameter. Included bark. Edge Tree near path.	2.5	5.5	No	2A	M	M
124	Acacia longifolia Sallow Wattle	4	5	0.03	0.07	0.03	Y	Good	Good	Multiple stems @ base.	1.5	2	No	2A	M	M
125	Eucalyptus botryoides Southern Mahogany	18	12	0.38	0.55	0.42	M	Good	Good-Fair	Limited assessment. Potentially partially on private property. Estimated DBH and condition.	2.3	6.6	No	2A	M	M
226	Casuarina glauca Swamp she-oak	16	6	0.41	0.41	0.46	M	Good	Good-Fair	No special problems noted at time of assessment.	2.4	4.9	No	2A	M	M
227	Casuarina cunninghamiana River She-oak	18	9	0.43	0.43	0.48	M	Good	Good		2.4	5.2	No	2A	M	M
228	Casuarina glauca Swamp she-oak	20	16	1.25	1.25	1.41	LM	Good	Good-Fair	Included bark Codominant Stems	3.8	15	No	2A	M	M
229	Casuarina glauca Swamp she-oak	18	9	0.5	0.5	0.56	M	Good	Good-Fair	No special problems noted at time of assessment.	2.6	6	No	2A	M	M
230	Casuarina glauca Swamp she-oak	20	8	0.25	0.46	0.28	M	Good	Good	Poplar twisted around base of tree. Poplar low over path.	1.9	5.5	No	2A	M	M
231	Casuarina glauca Swamp she-oak	20	16	0.82	0.94	0.92	M	Good	Fair	Included bark Wound(s) Suckering (mature) at base.	3.2	11.3	No	2A	M	M
232	Populus alba White Poplar	20	10	0.44	0.44	0.45	M	Good	Good-Fair	No special problems noted at time of assessment.	2.5	5.3	No	2A	M	M
233	Casuarina glauca Swamp she-oak	18	8	0.4	0.4	0.45	M	Good	Good-Fair		2.4	4.8	No	2A	M	M
234	Casuarina glauca Swamp she-oak	20	14	0.4	0.4	0.45	M	Good	Good-Fair	Limited inspection tree in water surrounded by lantana. tree similar dimensions behind.	2.4	4.8	No	2A	M	M
145	Eucalyptus nicholii Narrow-leaved Black Peppermint	12	8	0.67	0.67	0.75	M	Good-Fair	Good-Fair	Deadwood 5 - 10cm diameter.	2.9	8	No	2A	M	M
146	Eucalyptus microcorys Tallowwood	14	12	0.5	0.5	0.56	M	Good	Good	Deadwood <-5cm diameter.	2.6	6	No	2A	M	M
147	Cupaniopsis anacardioides Tuckaroo	4	3	0.12	0.12	0.14	Y	Good-Fair	Good-Fair	Diameter taken @ 1m AGL.	1.5	2	No	2A	M	M
148	Cupaniopsis anacardioides Tuckaroo	5	3	0.14	0.14	0.16	Y	Good	Good	No visual defects sited	1.5	2	No	2A	M	M
149	Cupaniopsis anacardioides Tuckaroo	3	3	0.09	0.09	0.1	Y	Good	Good	No special problems noted at time of assessment.	1.5	2	No	2A	M	M
150	Eucalyptus botryoides Southern Mahogany	16	18	0.93	0.93	1.05	M	Good-Fair	Good	Deadwood 10cm plus diameter.	3.4	11.2	No	2A	H	H
151	Melaleuca styphelioides Prickly-leaved P'bark	8	5	0.26	0.38	0.29	LM	Good-Fair	Fair	Poor pruning.	2	4.5	No	2A	M	M
152	Eucalyptus botryoides Southern Mahogany	14	8	0.4	0.4	0.45	M	Good	Good-Fair	Deadwood 5 - 10cm diameter. Wound(s).	2.4	4.8	No	2A	M	M
153	Melaleuca quinquenervia Broad-leaved P'bark	16	4	0.46	0.46	0.52	M	Good	Good-Fair	Included bark. Multi-stemmed.	2.5	5.5	No	2A	M	M
154	Melaleuca styphelioides Prickly-leaved P'bark	12	6	0.35	0.46	0.39	M	Good-Fair	Good-Fair	Poor pruning lopped. Codominant Stems	2.2	5.5	No	2A	M	M
155	Melaleuca styphelioides Prickly-leaved P'bark	10	5	0.4	0.4	0.45	M	Good-Fair	Good-Fair	Included bark noted.	2.4	4.8	No	2A	M	M

Tree no	Botanic I Common Name	H (m)	S (m)	DBH (m)	Multi (DBH)	DAB (m)	Age	H	S	Comments	SRZ (m)	TPZ (m)	Street Tree Y/N/?	Significance of a Tree Assessment Rating System (STARS)		
														SULE	TSR	RV
156	Casuarina cunninghamiana River She-oak	18	8	0.67	0.67	0.75	M	Good	Fair	Deadwood 5 - 10cm diameter. Dieback-general Epicormic growth.	2.9	8	No	2A	M	M
157	Eucalyptus botryoides Southern Mahogany	16	8	0.57	0.57	0.64	M	Good-Fair	Fair	Deadwood 10cm plus diameter. Hanger(s).	2.7	6.8	No	2A	M	M
158	Melaleuca quinquenervia Broad-leaved P'bark	14	14	0.64	0.64	0.72	M	Good	Good-Fair	Deadwood <-5cm diameter. Included bark.	2.9	7.7	No	2A	M	M
159	Eucalyptus sp. Eucalypt	14	12	0.43	0.43	0.48	M	Poor	Poor	Deadwood 10cm plus diameter. Dieback-general Wound(s).	2.4	5.2	No	3A	M	L
160	Eucalyptus botryoides Southern Mahogany	12	12	0.4	0.4	0.45	M	Fair	Good-Fair	Deadwood 10cm plus diameter. Poor pruning Previous failures.	2.4	4.8	No	2A	M	M
161	Melaleuca quinquenervia Broad-leaved P'bark	14	6	0.43	0.43	0.48	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	2.4	5.2	No	2A	M	M
162	Melaleuca quinquenervia Broad-leaved P'bark	14	6	0.4	0.4	0.45	M	Good	Good-Fair	Included bark noted.	2.4	4.8	No	2A	M	M
163	Casuarina cunninghamiana River She-oak	18	12	0.43	0.43	0.48	M	Good	Good-Fair	Included bark noted.	2.4	5.2	No	2A	M	M
164	Melaleuca quinquenervia Broad-leaved P'bark	14	7	0.4	0.4	0.45	M	Good	Fair	Included bark noted.	2.4	4.8	No	2A	M	M
165	Melaleuca quinquenervia Broad-leaved P'bark	18	8	0.65	0.86	0.73	M	Good	Good-Fair	Included bark noted.	2.9	10.3	No	2A	M	M
166	Corymbia maculata Spotted Gum	20	14	0.56	0.56	0.63	M	Good	Good	Deadwood <-5cm diameter.	2.7	6.7	No	2A	H	H
167	Casuarina glauca Swamp she-oak	18	12	0.41	0.41	0.46	M	Good	Good	Deadwood 5 - 10cm diameter.	2.4	4.9	No	2A	M	M
168	Casuarina glauca Swamp she-oak	18	18	0.81	0.81	0.91	M	Good	Good	No special problems noted at time of assessment.	3.2	9.7	No	2A	M	M
169	Melaleuca quinquenervia Broad-leaved P'bark	16	10	0.66	0.66	0.74	M	Good-Fair	Good-Fair	Included bark noted.	2.9	7.9	No	2A	M	M
170	Melaleuca quinquenervia Broad-leaved P'bark	14	7	0.4	0.4	0.45	M	Good	Good-Fair	Included bark.	2.4	4.8	No	2A	M	M
171	Casuarina cunninghamiana River She-oak	12	6	0.47	0.47	0.53	M	Fair	Poor	Deadwood 10cm plus diameter. Wound(s) Previous failures.	2.5	5.6	No	3A	M	L
172	Melaleuca quinquenervia Broad-leaved P'bark	12	4	0.34	0.34	0.38	M	Good	Fair-Poor	Inclusions noted.	2.2	4.1	No	3A	M	L
173	Eucalyptus scoparia Wallangarra White Gum	7	6	0.32	0.32	0.36	M	Fair	Fair-Poor	Deadwood 10cm plus diameter. Decay Epicormic growth noted.	2.2	3.8	No	3A	L	L
174	Melaleuca quinquenervia Broad-leaved P'bark	8	4	0.33	0.33	0.37	M	Good	Good-Fair	No special problems noted at time of assessment.	2.2	4	No	2A	M	M
175	Ficus benjamina Weeping Fig	6	6	0.25	0.35	0.39	EM	Good	Good-Fair	Multi-stemmed specimen.	1.9	4.2	No	2A	M	M
176	Eucalyptus botryoides Southern Mahogany	14	14	0.45	0.45	0.51	M	Good	Good-Fair	Deadwood 10cm plus diameter. Epicormic growth Cross/rubbing branches.	2.5	5.4	No	2A	M	M
177	Eucalyptus botryoides Southern Mahogany	18	18	0.53	0.53	0.6	M	Good	Good-Fair	Wound(s) noted.	2.7	6.4	No	2A	M	M
178	Casuarina cunninghamiana River She-oak	12	8	0.39	0.39	0.44	M	Good	Good	Deadwood 5 - 10cm diameter.	2.3	4.7	No	2A	M	M
179	Eucalyptus bicostata Victorian Blue Gum	10	8	0.6	0.6	0.68	M	Good-Fair	Poor	Deadwood 5 - 10cm diameter. Dieback noted. Wound(s) Previous failures.	2.8	7.2	No	3A	M	L
180	Eucalyptus scoparia Wallangarra White Gum	12	12	0.51	0.51	0.57	M	Good	Good	Deadwood 5 - 10cm diameter. Hanger(s).	2.6	6.1	No	2A	M	M
181	Eucalyptus scoparia Wallangarra White Gum	7	7	0.34	0.34	0.38	M	Good-Fair	Fair	Deadwood <-5cm diameter. Previous failures.	2.2	4.1	No	2A	M	M

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														SULE	TSR	RV
182	Cupressus sp. Cypress	10	10	0.83	0.83	0.93	M	Good	Good	No special problems noted at time of assessment.	3.2	10	No	2A	M	M
183	Eucalyptus robusta Swamp Mahogany	14	10	0.83	0.83	0.93	M	Good	Fair	Deadwood 10cm plus diameter. Dieback-general Epicormic growth.	3.2	10	No	2A	M	M
184	Corymbia maculata Spotted Gum	12	8	0.29	0.29	0.32	M	Good	Good	No visual defects sited.	2.1	3.5	No	2A	H	H
185	Corymbia maculata Spotted Gum	14	7	0.4	0.40	0.45	M	Good	Good	Deadwood <-5cm diameter.	2.4	4.8	No	2A	H	H
186	Grevillea robusta Silky Oak	15	6	0.27	0.27	0.30	EM	Fair	Good-Fair	Deadwood <-5cm diameter.	2	3.2	No	2A	H	H
187	Corymbia citriodora Lemon-scented Gum	14	8	0.34	0.34	0.38	M	Good-Fair	Fair	Suppressed growth	2.2	4.1	No	2A	H	H
188	Corymbia maculata Spotted Gum	16	8	0.36	0.36	0.40	M	Good	Good-Fair	Deadwood 5 - 10cm diameter.	2.3	4.3	No	2A	H	H
189	Corymbia maculata Spotted Gum	12	7	0.23	0.23	0.26	EM	Good-Fair	Good-Fair	Deadwood <-5cm diameter.	1.9	2.8	No	2A	H	H
190	Corymbia maculata Spotted Gum	22	16	0.69	0.69	0.77	M	Good	Good	Deadwood 5 - 10cm diameter.	3	8.3	No	2A	H	H
191	Corymbia maculata Spotted Gum	21	11	0.5	0.50	0.56	M	Good	Good	Deadwood <-5cm diameter.	2.6	6	No	2A	H	H
192	Lophostemon confertus Queensland Box	8	8	0.41	0.41	0.46	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	2.4	4.9	No	2A	H	H
193	Melaleuca linariifolia Snow in Summer	6	3	0.24	0.24	0.27	M	Fair	Fair	Deadwood 5 - 10cm diameter. Poor tree form Wound(s)	1.9	2.9	No	2A	L	M
194	Tristaniopsis laurina Water Gum	9	6	0.33	0.53	0.59	M	Fair	Fair-Poor	Deadwood 5 - 10cm diameter. Epicormic growth Poor tree form Suckers Wound(s) Lopped for powerlines Codominant Stems	2.7	6.4	No	2A	L	M
195	Corymbia maculata Spotted Gum	24	18	0.6	0.60	0.67	M	Good	Good	Deadwood 10cm plus diameter.	2.8	7.2	No	2A	H	H
196	Grevillea robusta Silky Oak	22	6	0.4	0.40	0.45	M	Good	Good-Fair	Deadwood 10cm plus diameter.	2.4	4.8	No	2A	H	H
197	Corymbia maculata Spotted Gum	24	20	0.61	0.61	0.68	M	Good	Good-Fair	Deadwood 5 - 10cm diameter. Epicormic growth Poor pruning	2.8	7.3	No	2A	H	H
198	Corymbia maculata Spotted Gum	26	22	0.56	0.56	0.63	M	Good	Good	Deadwood 5 - 10cm diameter.	2.7	6.7	No	2A	H	H
199	Celtis australis European Nettle Tree	8	8	0.23	0.27	0.30	M	Good	Good-Fair	Deadwood 5 - 10cm diameter. Codominant Stems	2	3.2	No	2A	H	H
200	Corymbia maculata Spotted Gum	24	20	0.71	0.71	0.80	M	Good	Good	Deadwood 5 - 10cm diameter.	3	8.5	No	2A	H	H
201	Melaleuca linariifolia Snow in Summer	10	6	0.29	0.29	0.32	M	Good	Good	No special problems noted at time of assessment.	2.1	3.5	No	2A	M	M
202	Corymbia maculata Spotted Gum	26	20	0.41	0.41	0.46	M	Good	Good	Deadwood 10cm plus diameter.	2.4	4.9	No	2A	H	H
203	Corymbia maculata Spotted Gum	14	6	0.15	0.15	0.17	SM	Good	Good	No special problems noted at time of assessment.	1.6	2	No	2A	H	H
204	Corymbia maculata Spotted Gum	15	5	0.19	0.19	0.21	SM	Good	Good-Fair	Deadwood <-5cm diameter.	1.7	2.3	No	2A	H	H
205	Corymbia maculata Spotted Gum	12	4	0.12	0.12	0.13	SM	Good-Fair	Good-Fair	Deadwood <-5cm diameter.	1.5	2	No	2A	H	H
206	Corymbia maculata Spotted Gum	14	6	0.22	0.22	0.25	EM	Good	Good	Deadwood <-5cm diameter.	1.8	2.6	No	2A	H	H

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207	Corymbia maculata Spotted Gum	12	4	0.15	0.15	0.17	SM	Good	Good	No special problems noted at time of assessment.	1.6	2	No	2A	H	H
208	Corymbia maculata Spotted Gum	20	14	0.44	0.44	0.49	M	Good	Good	Deadwood 5 - 10cm diameter.	2.5	5.3	No	2A	H	H
209	Eucalyptus sp. Eucalypt	14	10	0.34	0.34	0.38	EM	Good-Fair	Fair	Deadwood 5 - 10cm diameter. Suppressed growth Phototropic Lean	2.2	4.1	No	2A	M	M
210	Corymbia maculata Spotted Gum	18	12	0.33	0.33	0.37	M	Good	Good-Fair	Deadwood <-5cm diameter.	2.2	4	No	2A	H	H
211	Corymbia maculata Spotted Gum	16	4	0.28	0.28	0.31	M	Good	Good	No special problems noted at time of assessment.	2	3.4	No	2A	H	H
212	Eucalyptus sp. Eucalypt	20	14	0.48	0.48	0.54	M	Good	Good-Fair	No special problems noted at time of assessment.	2.6	5.8	No	2A	H	H
213	Corymbia maculata Spotted Gum	20	8	0.38	0.38	0.43	M	Good	Good	No special problems noted at time of assessment.	2.3	4.6	No	2A	H	H
214	Eucalyptus sp. Eucalypt	20	14	0.38	0.38	0.43	M	Good	Good-Fair	No special problems noted at time of assessment.	2.3	4.6	No	2A	H	H
215	Corymbia maculata Spotted Gum	14	6	0.19	0.19	0.21	SM	Good	Good-Fair	Suppressed growth	1.7	2.3	No	2A	H	H
216	Eucalyptus racemosa Scribbly Gum	10	6	0.27	0.27	0.30	EM	Good-Fair	Good-Fair	Poor tree form Suppressed growth Phototropic Lean	2	3.2	No	2A	M	M
217	Eucalyptus racemosa Scribbly Gum	8	6	0.21	0.21	0.24	EM	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.8	2.5	No	2A	H	H
218	Corymbia maculata Spotted Gum	14	8	0.24	0.24	0.27	M	Good	Good	No special problems noted at time of assessment.	1.9	2.9	No	2A	H	H
219	Corymbia maculata Spotted Gum	18	10	0.37	0.37	0.41	M	Good	Good	No special problems noted at time of assessment.	2.3	4.4	No	2A	H	H
220	Corymbia maculata Spotted Gum	18	12	0.47	0.47	0.53	M	Good	Good	No special problems noted at time of assessment.	2.5	5.6	No	2A	H	H
221	Corymbia maculata Spotted Gum	18	10	0.35	0.35	0.39	M	Good	Good	No special problems noted at time of assessment.	2.2	4.2	No	2A	H	H
222	Corymbia maculata Spotted Gum	16	9	0.3	0.30	0.34	M	Good	Good	Deadwood <-5cm diameter.	2.1	3.6	No	2A	H	H
223	Corymbia maculata Spotted Gum	16	6	0.23	0.23	0.26	EM	Good	Good	No special problems noted at time of assessment.	1.9	2.8	No	2A	H	H
224	Corymbia maculata Spotted Gum	8	3	0.16	0.16	0.18	SM	Good	Good-Fair	No special problems noted at time of assessment.	1.6	2	No	2A	M	M
225	Corymbia maculata Spotted Gum	16	12	0.38	0.38	0.43	M	Good	Good	Deadwood <-5cm diameter.	2.3	4.6	No	2A	H	H

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226	Casuarina glauca Swamp she-oak	16	6	0.41	0.41	0.46	M	Good	Good-Fair	No special problems noted at time of assessment.	2.4	4.9	No	2A	H	H
227	Casuarina cunninghamiana River She-oak	18	9	0.43	0.43	0.48	M	Good	Good	No special problems noted at time of assessment.	2.4	5.2	No	2A	H	H
228	Casuarina glauca Swamp she-oak	20	16	1.25	1.25	1.40	LM	Good	Good-Fair	Included bark Codominant Stems	3.8	15	No	2A	H	H
229	Casuarina glauca Swamp she-oak	18	9	0.5	0.50	0.56	M	Good	Good-Fair	No special problems noted at time of assessment.	2.6	6	No	2A	H	H
230	Casuarina glauca Swamp she-oak	20	8	0.25	0.45	0.50	M	Good	Good	Poplar twisted around base of tree. Poplar low over path.	2.5	5.4	No	2A	H	H
231	Casuarina glauca Swamp she-oak	20	16	0.82	0.94	1.05	M	Good	Fair	Included bark Wound(s) Suckering (mature) at base.	3.4	11.3	No	2A	M	M
232	Populus alba White Poplar	20	10	0.44	0.44	0.49	M	Good	Good-Fair	No special problems noted at time of assessment.	2.5	5.3	No	2A	M	M
233	Casuarina glauca Swamp she-oak	18	8	0.4	0.40	0.45	M	Good	Good-Fair	No special problems noted at time of assessment.	2.4	4.8	No	2A	H	H
234	Casuarina glauca Swamp she-oak	20	14	0.4	0.40	0.45	M	Good	Good-Fair	limited inspection tree in water surrounded by lantana. tree similar dimensions behind.	2.4	4.8	No	2A	H	H
235	Grevillea sp. Grevillea	5	8	0.24	0.24	0.27	M	Good	Poor	Crack(s)/split(s)	1.9	2.9	No	3A	L	L
236	Callistemon viminalis Weeping Bottlebrush	5	6	0.17	0.29	0.32	M	Good	Good	No special problems noted at time of assessment.	2.1	3.5	Yes	2A	M	M
237	Callistemon sp. Bottlebrush	6	14	0.22	0.49	0.55	LM	Good	Good-Fair	Deadwood 5 - 10cm diameter.	2.6	5.9	Yes	2A	M	M
238	Callistemon viminalis Weeping Bottlebrush	7	8	0.33	0.40	0.45	M	Good	Good-Fair	Poor pruning	2.4	4.8	Yes	2A	M	M
239	Callistemon viminalis Weeping Bottlebrush	6	10	0.13	0.21	0.24	M	Good	Good	No special problems noted at time of assessment.	1.8	2.5	No	2A	M	M
240	Callistemon viminalis Weeping Bottlebrush	6	6	0.13	0.20	0.22	M	Good	Good	No special problems noted at time of assessment.	1.8	2.4	No	2A	M	M
241	Callistemon viminalis Weeping Bottlebrush	7	10	0.21	0.38	0.43	M	Good	Good	Hanger(s) Multi-stemmed	2.3	4.6	Yes	2A	M	M
242	Tristaniaopsis laurina Water Gum	8	10	0.11	0.39	0.44	M	Good-Fair	Poor	Deadwood 5 - 10cm diameter. Dieback-general Epicormic growth Poor pruning Lopped for powerlines	2.3	4.7	Yes	2A	M	M
243	Phoenix canariensis Canary Island Date Palm	18	6	0.66	0.66	0.74	M	Good-Fair	Good	No special problems noted at time of assessment.	2.9	7.9	Yes	2A	H	H
244	Callistemon viminalis Weeping Bottlebrush	6	6	0.12	0.18	0.20	M	Good	Good-Fair	Epicormic growth Hanger(s) Poor pruning	1.7	2.2	Yes	2A	H	H

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														SULE	TSR	RV
245	Eucalyptus microcorys Tallowwood	24	16	0.73	0.73	0.82	M	Good	Good	Deadwood 5 - 10cm diameter. Epicormic growth Hanger(s)	3	8.8	Yes	2A	H	H
246	Tristaniopsis laurina Water Gum	7	14	0.23	0.32	0.36	M	Good-Fair	Fair	Deadwood <-5cm diameter. Dieback-tip Epicormic growth Poor pruning Poor tree form Codominant Stems	2.2	3.8	Yes	2A	H	H
247	Callistemon viminalis Weeping Bottlebrush	8	8	0.28	0.28	0.31	M	Good	Good	Deadwood <-5cm diameter.	2	3.4	Yes	2A	H	H
248	Callistemon viminalis Weeping Bottlebrush	7	8	0.22	0.32	0.36	M	Good	Good	No special problems noted at time of assessment.	2.2	3.8	Yes	2A	H	H
249	Eucalyptus robusta Swamp Mahogany	18	14	0.46	0.46	0.52	M	Good-Fair	Good-Fair	Deadwood 10cm plus diameter. Epicormic growth Root damage Pests/insect damage Exposed roots	2.5	5.5	Yes	2A	H	H
250	Callistemon viminalis Weeping Bottlebrush	7	6	0.17	0.17	0.19	M	Good	Good-Fair	Codominant Stems codom lopped off.	1.6	2	Yes	2A	H	H
251	Callistemon viminalis Weeping Bottlebrush	7	8	0.21	0.25	0.28	M	Good	Good-Fair	Deadwood <-5cm diameter. Epicormic growth Codominant Stems	1.9	3	Yes	2A	H	H
252	Eucalyptus botryoides Southern Mahogany	18	16	0.65	0.65	0.73	M	Good	Good-Fair	Deadwood 10cm plus diameter. Epicormic growth Poor pruning Pests/insect damage Exposed roots	2.9	7.8	Yes	2A	H	H
253	Corymbia maculata Spotted Gum	22	10	0.49	0.49	0.55	M	Good	Good	Deadwood 10cm plus diameter.	2.6	5.9	Yes	2A	H	H
254	Corymbia maculata Spotted Gum	22	8	0.5	0.50	0.56	M	Good	Good	No special problems noted at time of assessment.	2.6	6	Yes	2A	H	H
255	Callistemon viminalis Weeping Bottlebrush	6	4	0.19	0.19	0.21	M	Good	Good	No special problems noted at time of assessment.	1.7	2.3	Yes	2A	H	H
256	Callistemon viminalis Weeping Bottlebrush	5	5	0.17	0.17	0.19	M	Good	Good	No special problems noted at time of assessment.	1.6	2	Yes	2A	H	H
257	Corymbia maculata Spotted Gum	18	9	0.29	0.29	0.32	M	Good	Good-Fair	Deadwood <-5cm diameter. Wound(s)	2.1	3.5	Yes	2A	H	H
258	Eucalyptus robusta Swamp Mahogany	18	10	0.54	0.54	0.60	M	Good	Good-Fair	Root damage Exposed roots	2.7	6.5	Yes	2A	H	H
259	Eucalyptus robusta Swamp Mahogany	16	15	0.41	0.41	0.46	M	Good	Good-Fair	Deadwood <-5cm diameter. Epicormic growth Root damage Exposed roots	2.4	4.9	Yes	2A	H	H
260	Agonis flexuosa Willow Myrtle/Peppermint	14	8	0.47	0.53	0.59	LM	Good-Fair	Fair-Poor	Decay Epicormic growth Suckers Wound(s)	2.7	6.4	Yes	3A	M	L
261	Agonis flexuosa Willow Myrtle/Peppermint	14	8	0.38	0.52	0.58	LM	Good-Fair	Fair	Deadwood <-5cm diameter. Decay Epicormic growth Poor pruning	2.6	6.2	Yes	2A	H	H
262	Agonis flexuosa Willow Myrtle/Peppermint	12	14	0.62	0.62	0.69	LM	Good-Fair	Fair	Deadwood 5 - 10cm diameter. Decay Epicormic growth Included bark Root damage Wound(s) Codominant Stems	2.8	7.4	Yes	2A	H	H

Tree no	Botanic I Common Name	H (m)	S (m)	DBH (m)	Multi (DBH)	DAB (m)	Age	H	S	Comments	SRZ (m)	TPZ (m)	Street Tree Y/N/?	Significance of a Tree Assessment Rating System (STARS)		
														SULE	TSR	RV
263	Callistemon viminalis Weeping Bottlebrush	6	5	0.18	0.26	0.29	M	Good	Good	Deadwood <-5cm diameter. Poor pruning	2	3.1	Yes	2A	H	H
264	Callistemon viminalis Weeping Bottlebrush	6	7	0.29	0.36	0.40	LM	Good-Fair	Fair	Deadwood <-5cm diameter. Decay Epicormic growth Codominant Stems	2.3	4.3	Yes	2A	H	H
265	Prunus cerasifera Cherry Plum	4	4	0.07	0.07	0.08	M	Good-Fair	Fair	Dieback-tip Suckers	1.5	2	Yes	2A	H	H
266	Fraxinus griffithii Evergreen Ash	5	6	0.25	0.25	0.28	M	Good	Good	No special problems noted at time of assessment.	1.9	3	Yes	2A	H	H
267	Fraxinus griffithii Evergreen Ash	6	6	0.25	0.25	0.28	M	Good	Good	No special problems noted at time of assessment.	1.9	3	Yes	2A	H	H
268	Fraxinus griffithii Evergreen Ash	6	6	0.22	0.49	0.55	M	Good	Good	Deadwood <-5cm diameter.	2.6	5.9	Yes	2A	H	H
269	Fraxinus griffithii Evergreen Ash	6	7	0.31	0.31	0.35	M	Good	Good-Fair	Deadwood <-5cm diameter.	2.1	3.7	Yes	2A	H	H
270	Fraxinus griffithii Evergreen Ash	6	9	0.34	0.47	0.53	M	Good	Good	Deadwood <-5cm diameter. Lopped for powerlines	2.5	5.6	Yes	2A	H	H
271	Callistemon viminalis Weeping Bottlebrush	7	7	0.21	0.39	0.44	LM	Good	Fair	Deadwood <-5cm diameter. Decay Dieback-tip Epicormic growth	2.3	4.7	Yes	2A	H	H
272	Callistemon viminalis Weeping Bottlebrush	8	7	0.26	0.40	0.45	LM	Good-Fair	Good-Fair	No special problems noted at time of assessment.	2.4	4.8	Yes	2A	H	H
273	Callistemon viminalis Weeping Bottlebrush	7	8	0.24	0.46	0.52	LM	Good-Fair	Fair	Deadwood <-5cm diameter. Epicormic growth Poor pruning Wound(s)	2.5	5.5	Yes	2A	H	H
274	Callistemon viminalis Weeping Bottlebrush	9	9	0.24	0.47	0.53	LM	Good	Good-Fair	Deadwood <-5cm diameter. Lopped for powerlines	2.5	5.6	Yes	2A	H	H
275	Lophostemon confertus Queensland Box	16	13	0.64	0.75	0.84	M	Good	Good	No visual defects sited Multi-stemmed	3.1	9	Yes	2A	H	H
276	Lophostemon confertus Queensland Box	17	15	0.64	0.64	0.72	M	Good	Good-Fair	Deadwood 10cm plus diameter. Dieback-tip	2.9	7.7	Yes	2A	H	H
277	Lophostemon confertus Queensland Box	17	14	0.63	0.63	0.71	M	Good	Good	Deadwood 5 - 10cm diameter.	2.9	7.6	Yes	2A	H	H
278	Lophostemon confertus Queensland Box	16	13	0.81	0.81	0.91	M	Good	Good	Deadwood 5 - 10cm diameter.	3.2	9.7	Yes	2A	H	H
279	Lophostemon confertus Queensland Box	16	10	0.45	0.45	0.50	M	Good-Fair	Fair	Suppressed growth	2.5	5.4	Yes	2A	H	H
280	Platanus X acerifolia London Plane	24	22	0.94	0.94	1.05	M	Good	Good	Deadwood 10cm plus diameter.	3.4	11.3	?	2A	H	H

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281	Platanus X acerifolia London Plane	26	17	1.05	1.05	1.18	M	Good	Good	Deadwood 5 - 10cm diameter. Pruned for powerlines not lopped.	3.5	12.6	?	2A	H	H
282	Platanus X acerifolia London Plane	24	16	0.76	0.76	0.85	M	Good	Good	No special problems noted at time of assessment.	3.1	9.1	No	2A	H	H
283	Corymbia ficifolia West. Aust. Red Flowering Gum	4	5	0.17	0.22	0.25	M	Fair	Fair-Poor	Deadwood 5 - 10cm diameter. Dieback-general Epicormic growth	1.8	2.6	Yes	3A	M	L
284	Platanus X acerifolia London Plane	24	20	0.58	0.90	1.01	M	Good	Good	Deadwood 5 - 10cm diameter. Pruned for powerlines	3.3	10.8	?	2A	H	H
285	Corymbia gummifera Red Bloodwood	7	16	0.42	0.42	0.47	M	Good	Fair	Deadwood <-5cm diameter. Lopped for powerlines	2.4	5	Yes	2A	H	H
286	Tristaniaopsis laurina Water Gum	6	5	0.13	0.16	0.18	M	Good	Good	No special problems noted at time of assessment.	1.6	2	Yes	2A	M	M
287	Eucalyptus sp. Eucalypt	5	6	0.14	0.24	0.27	M	Fair	Fair-Poor	Deadwood <-5cm diameter. Lopped for powerlines Multi-stemmed	1.9	2.9	Yes	2A	M	M
288	Corymbia ficifolia West. Aust. Red Flowering Gum	7	11	0.38	0.38	0.43	M	Good-Fair	Fair	Deadwood 10cm plus diameter. Epicormic growth Lopped for powerlines	2.3	4.6	Yes	2A	H	H
289	Tristaniaopsis laurina Water Gum	5	4	0.12	0.16	0.18	EM	Good	Good	No visual defects sited	1.6	2	Yes	2A	M	M
290	Corymbia ficifolia West. Aust. Red Flowering Gum	8	10	0.34	0.34	0.38	M	Good-Fair	Fair	Deadwood 10cm plus diameter. Epicormic growth Lopped for powerlines	2.2	4.1	Yes	2A	H	H
291	Tristaniaopsis laurina Water Gum	3	4	0.06	0.16	0.18	SM	Good	Fair	No special problems noted at time of assessment.	1.6	2	Yes	2A	M	M
292	Corymbia ficifolia West. Aust. Red Flowering Gum	7	14	0.31	0.60	0.67	M	Good	Good-Fair	Deadwood 5 - 10cm diameter.	2.8	7.2	Yes	2A	H	H
293	Tristaniaopsis laurina Water Gum	4	3	0.44	0.44	0.49	M	Good	Good-Fair	Multi-stemmed	2.5	5.3	Yes	2A	M	M
294	Tristaniaopsis laurina Water Gum	2	3	0.21	0.21	0.24	SM	Good-Fair	Good-Fair	Deadwood <-5cm diameter. Suckers	1.8	2.5	Yes	2A	L	M
295	Corymbia ficifolia West. Aust. Red Flowering Gum	12	12	0.36	0.36	0.40	M	Fair	Fair	Deadwood <-5cm diameter. Dieback-general Epicormic growth	2.3	4.3	Yes	2A	M	M
296	Corymbia maculata Spotted Gum	14	12	0.54	0.54	0.60	M	Good-Fair	Fair	Epicormic growth Lopped for powerlines	2.7	6.5	Yes	2A	M	M
297	Ficus microcarpa var. hillii Hills Weeping Fig	14	18	0.46	0.73	0.82	M	Good	Good-Fair	Included bark Codominant Stems	3	8.8	No	2A	H	H
299	Callistemon viminalis Weeping Bottlebrush	6	7	0.15	0.56	0.63	M	Good	Good-Fair	Epicormic growth Poor pruning Lopped for powerlines	2.7	6.7	Yes	2A	M	M

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300	Callistemon viminalis Weeping Bottlebrush	6	10	0.33	0.52	0.58	M	Good	Good-Fair	Epicormic growth Poor pruning Lopped for powerlines Dia @ 1m	2.6	6.2	Yes	2A	M	M
301	Callistemon viminalis Weeping Bottlebrush	8	12	0.29	0.45	0.50	M	Good	Good-Fair	Poor pruning	2.5	5.4	Yes	2A	M	M
302	Eucalyptus saligna Sydney Blue Gum	12	14	0.63	0.63	0.71	M	Good	Good	Deadwood <-5cm diameter. tree just outside boundary peg.	2.9	7.6	?	2A	H	H
303	Corymbia maculata Spotted Gum	12	7	0.29	0.29	0.32	M	Good	Good	No special problems noted at time of assessment.	2.1	3.5	?	2A	H	H
304	Corymbia maculata Spotted Gum	14	9	0.4	0.40	0.45	M	Good	Good	No visual defects sited	2.4	4.8	?	2A	H	H
305	Corymbia maculata Spotted Gum	10	8	0.32	0.32	0.36	M	Good-Fair	Fair	No visual defects sited Codominant Stems	2.2	3.8	No	2A	H	H
306	Corymbia maculata Spotted Gum	12	7	0.36	0.36	0.40	M	Good	Good	No special problems noted at time of assessment.	2.3	4.3	No	2A	H	H
307	Corymbia maculata Spotted Gum	11	6	0.31	0.31	0.35	M	Good	Good	No visual defects sited	2.1	3.7	No	2A	M	M
308	Morus nigra Black Mulberry	6	8	0.1	0.10	0.11	M	Good	Good	Mulberry either side also of same dimensions, and celtis sp.	1.5	2	?	3A	L	L
309	Eucalyptus saligna Sydney Blue Gum	6	6	0.32	0.32	0.36	EM	Good	Good-Fair	Deadwood 5 - 10cm diameter. Lopped for powerlines Codominant Stems	2.2	3.8	Yes	2A	M	M
310	Tristaniopsis laurina Water Gum	6	8	0.12	0.12	0.13	M	Good	Good-Fair	No visual defects sited	1.5	2	Yes	2A	M	M
311	Eucalyptus saligna Sydney Blue Gum	18	12	0.83	0.83	0.93	M	Good	Good-Fair	Deadwood 5 - 10cm diameter. Epicormic growth	3.2	10	?	2A	H	H
312	Tristaniopsis laurina Water Gum	6	4	0.02	0.03	0.03	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.5	2	Yes	2A	M	M
313	Tristaniopsis laurina Water Gum	5	4	0.14	0.14	0.16	M	Good	Good-Fair	No special problems noted at time of assessment.	1.5	2	Yes	2A	M	M
314	Tristaniopsis laurina Water Gum	6	6	0.14	0.19	0.21	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.7	2.3	Yes	2A	M	M
315	Tristaniopsis laurina Water Gum	3	2	0.18	0.25	0.28	EM	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.9	3	Yes	2A	M	M
316	Eucalyptus saligna Sydney Blue Gum	14	14	0.52	0.52	0.58	M	Good	Good-Fair	Deadwood 10cm plus diameter.	2.6	6.2	?	2A	H	H
317	Corymbia ficifolia West. Aust. Red Flowering Gum	12	14	0.62	0.62	0.69	M	Good	Good-Fair	Deadwood <-5cm diameter.	2.8	7.4	Yes	2A	H	H

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318	Tristaniopsis laurina Water Gum	2	2	0.07	0.07	0.08	SM	Good-Fair	Fair	Wound(s) Multi-stemmed	1.5	2	Yes	2A	M	M
319	Tristaniopsis laurina Water Gum	3	2	0.1	0.10	0.11	EM	Good-Fair	Good-Fair	Deadwood <-5cm diameter.	1.5	2	Yes	2A	M	M
320	Tristaniopsis laurina Water Gum	4	4	0.2	0.20	0.22	M	Good-Fair	Good-Fair	Deadwood <-5cm diameter. Epicormic growth	1.8	2.4	Yes	2A	M	M
321	Tristaniopsis laurina Water Gum	3	4	0.14	0.14	0.16	EM	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.5	2	Yes	2A	M	M
322	Tristaniopsis laurina Water Gum	5	3	0.19	0.19	0.21	M	Good-Fair	Good-Fair	Deadwood 5 - 10cm diameter. Epicormic growth	1.7	2.3	Yes	2A	M	M
323	Tristaniopsis laurina Water Gum	4	4	0.24	0.24	0.27	M	Fair	Fair	Decay Dieback-general Epicormic growth Wound(s) Lopped for powerlines	1.9	2.9	Yes	2A	M	M
324	Tristaniopsis laurina Water Gum	5	4	0.13	0.16	0.18	M	Fair	Fair	Deadwood <-5cm diameter.	1.6	2	Yes	2A	M	M
325	Tristaniopsis laurina Water Gum	4	3	0.21	0.21	0.24	M	Fair	Fair	Deadwood <-5cm diameter.	1.8	2.5	Yes	2A	M	M
326	Tristaniopsis laurina Water Gum	3	2	0.15	0.15	0.17	EM	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.6	2	Yes	2A	M	M
327	Tristaniopsis laurina Water Gum	6	5	0.14	0.24	0.27	M	Good-Fair	Good-Fair	Multi-stemmed	1.9	2.9	Yes	2A	M	M
328	Tristaniopsis laurina Water Gum	6	6	0.21	0.35	0.39	M	Good	Good-Fair	Deadwood <-5cm diameter. Multi-stemmed	2.2	4.2	Yes	2A	M	M
329	Agonis flexuosa Willow Myrtle/Peppermint	8	10	0.4	0.78	0.87	OM	Good-Fair	Fair-Poor	Cavity(s) Crack(s)/split(s) Included bark Multi-stemmed stems failed but pruned to make safe.	3.1	9.4	Yes	3A	L	L
330	Agonis flexuosa Willow Myrtle/Peppermint	6	10	0.78	1.12	1.25	OM	Good-Fair	Fair-Poor	Cavity(s) Crack(s)/split(s) Codominant Stems	3.6	13.4	Yes	3A	L	L
331	Agonis flexuosa Willow Myrtle/Peppermint	12	14	0.53	1.00	1.12	OM	Good-Fair	Fair-Poor	Deadwood <-5cm diameter. Crack(s)/split(s) Epicormic growth Included bark	3.5	12	Yes	3A	L	L
332	Eucalyptus robusta Swamp Mahogany	14	10	0.65	0.65	0.73	M	Good-Fair	Good-Fair	Deadwood <-5cm diameter. Epicormic growth	2.9	7.8	Yes	2A	H	H
333	Eucalyptus racemosa Scribbly Gum	14	12	0.51	0.51	0.57	M	Good-Fair	Good-Fair	Deadwood 5 - 10cm diameter. Wound(s)	2.6	6.1	Yes	2A	H	H
334	Lophostemon confertus Queensland Box	8	10	0.3	0.42	0.47	M	Good-Fair	Fair	Epicormic growth Lopped for powerlines	2.4	5	Yes	2A	H	H
335	Unknown - ID to be confirmed	2	2	0.1	0.10	0.11	EM	Fair	Fair	Pests/insect damage	1.5	2	Yes	2A	L	M

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336	Corymbia maculata Spotted Gum	14	10	0.4	0.40	0.45	M	Good	Good-Fair	No special problems noted at time of assessment.	2.4	4.8	?	2A	H	H
337	Corymbia maculata Spotted Gum	12	6	0.24	0.24	0.27	EM	Fair	Fair	Dieback-general	1.9	2.9	?	2A	H	H
338	Corymbia maculata Spotted Gum	12	6	0.32	0.32	0.36	M	Good	Good	No special problems noted at time of assessment.	2.2	3.8	?	2A	H	H
339	Corymbia maculata Spotted Gum	8	4	0.16	0.16	0.18	EM	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.6	2	No	2A	H	H
340	Corymbia maculata Spotted Gum	10	6	0.23	0.23	0.26	EM	Good	Good	No visual defects sited	1.9	2.8	?	2A	H	H
341	Corymbia maculata Spotted Gum	12	6	0.3	0.30	0.34	M	Good	Good	No special problems noted at time of assessment.	2.1	3.6	?	2A	H	H
342	Corymbia maculata Spotted Gum	12	7	0.32	0.32	0.36	M	Good	Good	No special problems noted at time of assessment.	2.2	3.8		2A	H	H
343	Corymbia maculata Spotted Gum	12	9	0.35	0.35	0.39	M	Good	Good	Deadwood <-5cm diameter.	2.2	4.2	?	2A	H	H
344	Corymbia maculata Spotted Gum	10	6	0.25	0.25	0.28	EM	Good-Fair	Good	Deadwood <-5cm diameter.	1.9	3	?	2A	H	H
345	Corymbia maculata Spotted Gum	16	8	0.51	0.51	0.57	M	Good-Fair	Good	Deadwood <-5cm diameter.	2.6	6.1	?	2A	H	H
346	Corymbia maculata Spotted Gum	12	8	0.4	0.40	0.45	M	Good	Good	No special problems noted at time of assessment.	2.4	4.8	?	2A	H	H
347	Tristaniaopsis laurina Water Gum	3	2	0.1	0.10	0.11	EM	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.5	2	Yes	2A	M	M
348	Tristaniaopsis laurina Water Gum	6	4	0.12	0.16	0.18	M	Good-Fair	Good-Fair	Deadwood <-5cm diameter. Codominant Stems	1.6	2	Yes	2A	M	M
349	Corymbia ficifolia West. Aust. Red Flowering Gum	9	9	0.34	0.34	0.38	M	Fair	Fair	Dieback-tip Epicormic growth Wound(s)	2.2	4.1	Yes	2A	H	H
350	Tristaniaopsis laurina Water Gum	4	4	0.09	0.12	0.13	EM	Fair	Fair	Dieback-tip	1.5	2	Yes	2A	M	M
351	Callistemon viminalis Weeping Bottlebrush	6	7	0.25	0.37	0.41	M	Good	Good-Fair	Lopped for powerlines Multi-stemmed	2.3	4.4	Yes	2A	M	M
352	Callistemon viminalis Weeping Bottlebrush	7	8	0.19	0.38	0.43	M	Good	Fair	Lopped for powerlines Multi-stemmed	2.3	4.6	Yes	2A	M	M
353	Callistemon viminalis Weeping Bottlebrush	7	8	0.36	0.42	0.47	M	Good	Good-Fair	Lopped for powerlines Codominant Stems	2.4	5	Yes	2A	M	M

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354	Photinia robusta Large-leaved Photinia	1.5	2	0.1	0.10	0.11	M	Good	Good	Multi-stemmed	1.5	2	Yes	2A	L	M
355	Callistemon viminalis Weeping Bottlebrush	5	4	0.18	0.18	0.20	EM	Good-Fair	Fair	No special problems noted at time of assessment.	1.7	2.2	Yes	2A	M	M
356	Photinia robusta Large-leaved Photinia	1.5	2	0.1	0.10	0.11	M	Good	Good	Multi-stemmed	1.5	2	Yes	2A	L	M
357	Banksia integrifolia Coast Banksia	6	4	0.2	0.20	0.22	M	Good-Fair	Fair	Lopped for powerlines	1.8	2.4	Yes	2A	H	H
358	Banksia integrifolia Coast Banksia	8	6	0.28	0.28	0.31	M	Good-Fair	Fair	Lopped for powerlines	2	3.4	Yes	2A	H	H
359	Banksia integrifolia Coast Banksia	8	6	0.36	0.36	0.40	M	Good-Fair	Fair	Lopped for powerlines	2.3	4.3	Yes	2A	H	H
360	Persea americana Avocado	5	3	0.08	0.08	0.09	EM	Good	Good-Fair	No special problems noted at time of assessment.	1.5	2	Yes	2A	M	M
361	Lophostemon confertus Queensland Box	11	10	0.45	0.45	0.50	M	Good-Fair	Good-Fair	Deadwood <-5cm diameter.	2.5	5.4	Yes	2A	H	H
362	Olea europaea Olive	5	4	0.17	0.17	0.19	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.6	2	Yes	2A	M	M
363	Olea europaea Olive	3	4	0.08	0.08	0.09	EM	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.5	2	Yes	2A	M	M
364	Olea europaea Olive	3	4	0.16	0.16	0.18	EM	Good-Fair	Fair	No special problems noted at time of assessment.	1.6	2	Yes	2A	M	M
365	Eucalyptus botryoides Southern Mahogany	16	15	0.69	0.69	0.77	M	Good	Good	No visual defects sited	3	8.3	Yes	2A	H	H
366	Callistemon viminalis Weeping Bottlebrush	5	5	0.16	0.22	0.25	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.8	2.6	Yes	2A	M	M
367	Casuarina glauca Swamp she-oak	20	18	0.4	0.69	0.77	M	Good	Good	Deadwood <-5cm diameter. Shared root crown. Vine up stems limiting assessment. Low branch over toward creek.	3	8.3	No	2A	H	H
368	Casuarina glauca Swamp she-oak	16	14	0.5	0.50	0.56	M	Good	Good	Multiple suckers under these specimens.	2.6	6	No	2A	M	M
377	Eucalyptus robusta Swamp Mahogany	16	12	0.37	0.65	0.73	M	Good	Good-Fair	No special problems noted at time of assessment.	2.9	7.8	Yes	2A	M	M
378	Morus nigra Black Mulberry	7	8	0.23	0.38	0.43	LM	Fair	Fair-Poor	Included bark Cross/rubbing branches	2.3	4.6	No	3A	L	L
379	Salix sp. Willow	8	4	0.2	0.20	0.22	M	Good-Fair	Fair	No special problems noted at time of assessment.	1.8	2.4	No	2A	L	M

Tree no	Botanic I Common Name	H (m)	S (m)	DBH (m)	Multi (DBH)	DAB (m)	Age	H	S	Comments	SRZ (m)	TPZ (m)	Street Tree Y/N/?	Significance of a Tree Assessment Rating System (STARS)		
														SULE	TSR	RV
380	Salix sp. Willow	6	2	0.1	0.10	0.11	EM	Fair	Fair-Poor	No special problems noted at time of assessment.	1.5	2	No	3A	L	L
381	Salix sp. Willow	8	2	0.1	0.10	0.11	EM	Fair	Fair	No special problems noted at time of assessment.	1.5	2	No	2A	L	M
382	Howea forsteriana Kentia Palm	6	7	0.2	0.15	.28	M	Good	Good	No special problems noted at time of assessment.	N/A	4	No	2A	M	M
383	Archontophoenix cunninghamiana Bangalow Palm	11	6	1.5	0.22	0.25	M	Good	Good	Dual stems at ground	N/A	4	No	2A	M	M
384	Phoenix canariensis Canary Island Date Palm	12	8	0.4	0.40	0.45	M	Good	Good	No special problems noted at time of assessment.	N/A	5	No	2A	M	M
385	Archontophoenix cunninghamiana Bangalow Palm	7	6	0.12	0.16	0.18	EM	Good	Good	Dual stems at ground.	N/A	4	No	2A	M	M
386	Archontophoenix cunninghamiana Bangalow Palm	7	6	0.1	0.10	0.11	EM	Good	Good	No special problems noted at time of assessment.	N/A	4	No	2A	M	M
387	Morus nigra Black Mulberry	7	10	0.1	0.10	0.11	M	Good	Good	No special problems noted at time of assessment.	1.5	2	No	2A	M	M
388	Corymbia citriodora Lemon-scented Gum	14	12	0.475	0.48	0.54	M	Good	Good-Fair	Included bark Codominant Stems	2.6	5.8	No	2A	M	M
389	Persea americana Avocado	6	6	0.2	0.20	0.22	SM	Good	Good-Fair	Deadwood 5 - 10cm diameter.	1.8	2.4	No	2A	M	M
390	Unknown - ID to be confirmed	8	4	0.1	0.18	0.20	M	Good	Good-Fair	No special problems noted at time of assessment.	1.7	2.2	No	2A	M	M
391	Syagrus romanzoffiana Cocos Palm	12	7	0.4	0.40	0.45	M	Good	Good	No special problems noted at time of assessment.	N/A	4	No	2A	M	M
392	Lagerstroemia indica Crepe Myrtle	6	7	0.05	0.10	0.11	EM	Good	Good-Fair	No special problems noted at time of assessment.	1.5	2	No	2A	M	M
393	Archontophoenix cunninghamiana Bangalow Palm	7	6	0.15	0.15	0.17	EM	Good	Good	No special problems noted at time of assessment.	N/A	4	No	2A	M	M
394	Plumeria sp. Frangipani	4	6	0.15	0.15	0.17	EM	Good-Fair	Good-Fair	No special problems noted at time of assessment.	1.6	2	No	2A	M	M
395	Acacia sp. Wattle	4	5	0.05	0.09	0.10	Y	Good	Good	No special problems noted at time of assessment.	1.5	2	No	2A	M	M
396	Morus nigra Black Mulberry	8	8	0.2	0.20	0.22	M	Good	Good-Fair	DBH estimated no access.	1.8	2.4	No	2A	M	M

Tree no	Botanic I Common Name	H (m)	S (m)	DBH (m)	Multi (DBH)	DAB (m)	Age	H	S	Comments	SRZ (m)	TPZ (m)	Street Tree Y/N/?	Significance of a Tree Assessment Rating System (STARS)		
														SULE	TSR	RV
397	Unknown - ID to be confirmed	5	8	0.125	0.25	0.28	M	Good	Good-Fair	Exotic species.	1.9	3	No	2A	M	M
398	Mangifera indica Mango	5	10	0.5	0.50	0.56	LM	Good-Fair	Fair	Epicormic growth Poor pruning Wound(s). Diameter at base	2.6	6	No	2A	M	M
399	Camellia sp. Camellia	5	10	0.1	0.14	0.16	LM	Good	Fair	No special problems noted at time of assessment.	1.5	2	No	2A	M	M
400	Plumeria sp. Frangipani	4	4	0.2	0.20	0.22	LM	Good	Good	Diameter at base.	1.8	2.4	No	2A	L	M
401	Syagrus romanzoffiana Cocos Palm	14	6	0.35	0.35	0.39	M	Good	Good-Fair	No special problems noted at time of assessment.	N/A	4	No	2A	L	M
402	Syagrus romanzoffiana Cocos Palm	14	6	0.35	0.35	0.39	M	Good	Good-Fair	No special problems noted at time of assessment.	N/A	4.	No	2A	L	M
403	Murraya paniculata Orange Jessamine	5	8	0.15	0.15	0.17	M	Good	Good-Fair	Diameter taken at base	1.6	2	No	2A	L	M
404	Howea forsteriana Kentia Palm	8	6	0.15	0.15	0.17	M	Good	Good	No special problems noted at time of assessment.	N/A	4	No	2A	M	M
405	Cupressus sp. Cypress	14	10	0.2	0.20	0.22	M	Good	Good-Fair	No access	1.8	2.4	No	2A	M	M
406	Syagrus romanzoffiana Cocos Palm	16	6	0.23	0.23	0.26	M	Good	Good	In private property.	N/A	4	No	2A	L	M
407	Chamaecyparis sp.	8	6	0.6	0.60	0.67	LM	Good	Good-Fair	No special problems noted at time of assessment.	2.8	7.2	No	2A	M	M
408	Callistemon viminalis Weeping Bottlebrush	7	10	0.15	0.18	0.20	M	Good-Fair	Good-Fair	Dieback-tip Epicormic growth Poor tree form	1.7	2.2	No	2A	M	M
409	Casuarina glauca Swamp she-oak	11	8	0.2	0.20	0.22	EM	Good	Good	No visual defects sited	1.8	2.4	No	2A	H	H
410	Pittosporum undulatum Sweet Pittosporum	6	18	0.1	0.17	0.19	M	Good	Good-Fair	Multi-stemmed	1.6	2	No	2A	M	M
411	Eucalyptus botryoides Southern Mahogany	10	6	0.33	0.33	0.37	EM	Good	Fair	Epicormic growth Included bark Codominant Stems	2.2	4	No	2A	M	M
412	Pittosporum undulatum Sweet Pittosporum	4	4	0.075	0.08	0.09	EM	Good	Good-Fair	No special problems noted at time of assessment.	1.5	2	No	2A	M	M
413	Casuarina glauca Swamp she-oak	5	10	0.07	0.15	0.17	EM	Good	Fair	Epicormic growth Poor tree form Multi-stemmed reshoots from stump	1.6	2	No	2A	M	M
414	Eucalyptus botryoides Southern Mahogany	10	6	0.35	0.35	0.39	M	Good	Good-Fair	Deadwood 5 - 10cm diameter. Epicormic growth Hanger(s)	2.2	4.2	No	2A	M	M
415	Pittosporum undulatum Sweet Pittosporum	6	10	0.1	0.16	0.18	M	Good	Fair	No special problems noted at time of assessment.	1.6	2	No	2A	M	M

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														SULE	TSR	RV
416	Pittosporum undulatum Sweet Pittosporum	7	10	0.22	0.22	0.25	M	Good	Good	Actually 3 trees. Average taken.	1.8	2.6	No	2A	M	M
417	Phoenix canariensis Canary Island Date Palm	14	8	0.5	0.50	0.56	M	Good-Fair	Good	Nutrient deficiency noted.	2.6	6	No	2A	M	M
418	Erythrina x sykesii Common Coral Tree	12	16	0.12	0.55	0.62	M	Good	Fair	Epicormic growth Suckers Multi-stemmed	2.7	6.6	No	2A	L	M
419	Melaleuca armillaris Bracelet Honey Myrtle	5	10	0.2	0.20	0.22	OM	Fair	Fair-Poor	Deadwood 10cm plus diameter. Decay Dieback-tip	1.8	2.4	No	3A	M	L
420	Lophostemon confertus Queensland Box	16	12	0.15	0.29	0.32	EM	Good	Good	Covered in vine	2.1	3.5	No	2A	H	H
421	Glochidion ferdinandi Cheese Tree	10	8	0.3	0.30	0.34	M	Good	Good	Included bark	2.1	3.6	No	2A	H	H
422	Syzygium sp. Lilly Pilly	7	6	0.25	0.25	0.28	M	Good	Good	Strelitzia noted growing under this specimen.	1.9	3	No	2A	M	M
423	Dead Tree	16	12	0.5	0.50	0.56	M	Poor	Poor	Dead	2.6	6	No	3A	L	L
424	Callistemon viminalis Weeping Bottlebrush	6	5	0.17	0.17	0.19	M	Good	Good-Fair	No special problems noted at time of assessment.	1.6	2	No	2A	M	M
425	Lophostemon confertus Queensland Box	16	12	0.32	0.32	0.36	M	Good	Good	Codominant stems noted.	2.2	3.8	No	2A	H	H
426	Agonis flexuosa Willow Myrtle/Peppermint	10	14	1.27	1.27	1.42	LM	Good	Good-Fair	Included bark, Multi-stemmed.	3.8	15	No	2A	H	H
427	Acacia longifolia Sallow Wattle	8	18	0.125	0.19	0.21	LM	Fair	Fair	Spread for whole group.	1.7	2.3	No	2A	M	M
428	Acacia elata Cedar Wattle	15	14	1	1.00	1.12	LM	Fair	Fair-Poor	Deadwood 10cm plus diameter. Dieback-general Epicormic growth.	3.5	12	No	3A	M	L
429	Pinus radiata Monterey Pine	10	8	0.4	0.40	0.45	M	Good	Good-Fair	No special problems noted at time of assessment.	2.4	4.8	Yes	2A	H	H
430	Callistemon viminalis Weeping Bottlebrush	9	6	0.28	0.30	0.34	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	2.1	3.6	Yes	2A	H	H
431	Lophostemon confertus Queensland Box	9	12	0.44	0.44	0.49	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	2.5	5.3	Yes	2A	H	H
432	Callistemon viminalis Weeping Bottlebrush	8	12	0.42	0.44	0.49	LM	Good	Good-Fair	No special problems noted at time of assessment.	2.5	5.3	No	2A	M	M
433	Ficus macrophylla Moreton Bay Fig	12	22	1.3	1.30	1.46	M	Good-Fair	Fair	Deadwood 10cm plus diameter. Gum within tree but TPZ of T433 will protect it.	3.9	15	No	2A	H	H
434	Ficus benjamina Weeping Fig	12	18	0.3	0.58	0.65	M	Good	Good	No special problems noted at time of assessment.	2.8	7	No	2A	M	M

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435	Banksia integrifolia Coast Banksia	14	14	0.9	0.90	1.01	LM	Good-Fair	Fair-Poor	Included bark Poor tree form	3.3	10.8	No	3A	H	H
436	Ficus benjamina Weeping Fig	8	10	0.9	0.90	1.01	M	Good	Good-Fair	Multi-stemmed at ground level.	3.3	10.8	No	2A	M	M
437	Casuarina glauca Swamp she-oak	16	8	0.43	0.43	0.48	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	2.4	5.2	No	2A	M	M
438	Casuarina glauca Swamp she-oak	16	8	0.54	0.54	0.60	M	Good	Good-Fair	No special problems noted at time of assessment.	2.7	6.5	No	2A	H	H
439	Casuarina glauca Swamp she-oak	18	18	0.44	0.56	0.63	LM	Good	Good	No special problems noted at time of assessment.	2.7	6.7	No	2A	H	H
440	Eucalyptus microcorys Tallowwood	16	12	0.36	0.36	0.40	M	Good	Good-Fair	Deadwood 5 - 10cm diameter.	2.3	4.3	No	2A	H	H
441	Corymbia maculata Spotted Gum	18	14	0.91	0.91	1.02	M	Good	Good	No special problems noted at time of assessment.	3.3	10.9	No	2A	H	H
442	Corymbia maculata Spotted Gum	18	14	0.55	0.55	0.62	M	Good	Good	No special problems noted at time of assessment.	2.7	6.6	No	2A	H	H
443	Eucalyptus microcorys Tallowwood	15	14	0.53	0.53	0.59	M	Good	Fair	Deadwood 5 - 10cm diameter. Included bark Previous failures	2.7	6.4	No	2A	H	H
444	Corymbia maculata Spotted Gum	17	12	0.27	0.27	0.30	M	Good	Fair	Deadwood 5 - 10cm diameter.	2	3.2	No	2A	H	H
445	Eucalyptus botryoides Southern Mahogany	18	14	0.48	0.48	0.54	M	Good	Fair	Previous failures noted.	2.6	5.8	No	2A	H	H
446	Eucalyptus microcorys Tallowwood	18	11	0.62	0.62	0.69	M	Good	Good-Fair	No special problems noted at time of assessment.	2.8	7.4	No	2A	H	H
447	Casuarina glauca Swamp she-oak	14	6	0.3	0.30	0.34	M	Good	Good	No special problems noted at time of assessment.	2.1	3.6	No	2A	H	H
448	Eucalyptus robusta Swamp Mahogany	14	12	0.7	0.70	0.78	M	Good-Fair	Good-Fair	Deadwood <-5cm diameter. Bleeding/sap flow	3	8.4	No	2A	H	H
449	Casuarina glauca Swamp she-oak	15	10	0.12	0.12	0.13	M	Good	Good-Fair	No special problems noted at time of assessment.	1.5	2	No	2A	H	H
450	Casuarina glauca Swamp she-oak	16	12	0.5	0.50	0.56	M	Good-Fair	Good-Fair	Deadwood 5 - 10cm diameter. Epicormic growth Hanger(s)	2.6	6	No	2A	H	H
451	Eucalyptus robusta Swamp Mahogany	14	16	0.3	0.54	0.60	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	2.7	6.5	No	2A	H	H
452	Acacia longifolia Sallow Wattle	5	20	0.3	0.42	0.47	OM	Good	Poor	Previous failures Heaved root plate, tree failed still growing.	2.4	5	No	4C	M	L

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														SULE	TSR	RV
453	Lophostemon confertus Queensland Box	8	7	0.2	0.38	0.43	EM	Good	Good-Fair	Deadwood 5 - 10cm diameter. Decay	2.3	4.6	No	3A	M	L
453 A	Acacia longifolia Sallow Wattle	5	18	0.3	0.42	0.47	OM	Good-Fair	Poor	Deadwood 10cm plus diameter. Epicormic growth Previous failures Heaved root plate tree failed	2.4	5	No	4C	M	L
454	Acacia binervia Coast Myall	14	20	0.64	0.75	0.84	OM	Fair-Poor	Poor	Deadwood 10cm plus diameter.	3.1	9	No	3A	M	L
455	Casuarina glauca Swamp she-oak	20	12	0.56	0.56	0.63	M	Good	Good	No special problems noted at time of assessment.	2.7	6.7	No	2A	H	H
456	Acacia binervia Coast Myall	8	10	0.3	0.41	0.46	M	Fair	Fair	No special problems noted at time of assessment.	2.4	4.9	No	3A	M	L
457	Eucalyptus robusta Swamp Mahogany	12	14	0.62	0.62	0.69	M	Good-Fair	Good-Fair	No special problems noted at time of assessment.	2.8	7.4	No	2A	H	H
458	Eucalyptus microcorys Tallowwood	16	14	0.64	0.64	0.72	M	Good	Good-Fair	Deadwood 10cm plus diameter.	2.9	7.7	No	2A	H	H
459	Acacia binervia Coast Myall	14	16	0.45	0.59	0.66	LM	Good-Fair	Fair	No special problems noted at time of assessment.	2.8	7.1	No	3A	M	L
460	Acacia binervia Coast Myall	16	14	0.73	0.73	0.82	LM	Fair	Poor	Dieback-general Included bark, tree is actively failing.	3	8.8	No	4C	L	L
461	Casuarina glauca Swamp she-oak	12	10	0.45	0.57	0.64	OM	Good	Poor	Previous failures, previously lost two leaders	2.7	6.8	No	3A	M	L
462	Sapium sebiferum Chinese Tallow Tree	12	14	0.7	0.70	0.78	LM	Good-Fair	Good-Fair	Deadwood 5 - 10cm diameter. Dieback-general Epicormic growth dia taken at ground	3	8.4	No	2A	M	M
463	Sapium sebiferum Chinese Tallow Tree	12	14	0.67	0.67	0.75	LM	Good	Good-Fair	Epicormic growth noted.	2.9	8	No	2A	M	M

Tree Group Assessments																	
Group No.	Tree No.	Botanic Common Name	H (m)	Sp (m)	DBH (m)	Multi DBH (m)	DAB (m)	Age	H	S	Comments	Group Total	SRZ (m)	TPZ (m)	Significance of a Tree Assessment Rating System (STARS) – AS GROUP NOT INDIVIDUAL TREES		
															ULE	TSR	RV
1	1	Casuarina glauca Swamp she-oak	12	6	0.23	0.23	0.25	EM	Good	Good	No visual defects sited. Tree group of Casuarina glauca. Multiple suckering growth. 16 specimens, roughly 14m in height.	18	1.9	2.7	2A	H	H
1	2	Casuarina glauca Swamp she-oak	11		0.45	0.45	0.51	M	Good	Good-Fair	Co-dominant @ 1.5m AGL.		2.5	5.4			

Tree Group Assessments																	
Group No.	Tree No.	Botanic Common Name	H (m)	Sp (m)	DBH (m)	Multi DBH (m)	DAB (m)	Age	H	S	Comments	Group Total	SRZ (m)	TPZ (m)	Significance of a Tree Assessment Rating System (STARS) – AS GROUP NOT INDIVIDUAL TREES		
															ULE	TSR	RV
2	1	Eucalyptus botryoides Southern Mahogany	12	5	0.28	0.28	0.31	EM	Good	Fair	3 Eucalyptus robusta, 1 Unknown Eucalyptus sp. and 38 Casuarina cunninghamiana.	48	2	3.3	2A	M	M
2	2	Species as discussed in comments	6 - 12		0.28	0.28	0.31	M					2	3.3			
2	3	Species as discussed in comments	6 - 12		0.25	0.25	0.28	M					1.9	3			
2	4	Species as discussed in comments	6 - 12		0.38	0.38	0.42	M					2.3	4.5			
3	1	Species as discussed in comments	8 - 14		0.33	0.33	0.37	M			7 Grevillea robusta. Approx. 24 x Casuarina cunninghamiana and approx. 14 dead trees.	38	2.2	3.9	2A	M	M
3	2	Species as discussed in comments	8 - 14		0.33	0.33	0.37	M					2.2	3.9			
3	3	Species as discussed in comments	8 - 14		0.38	0.38	0.42	M					2.3	4.5			
3	4	Species as discussed in comments	8 - 14		0.43	0.43	0.48	M					2.4	5.1			
3	5	Species as discussed in comments	8 - 14		0.25	0.25	0.28	M					1.9	3			
3	6	Species as discussed in comments	8 - 14		0.28	0.28	0.31	M					2	3.3			
3	7	Species as discussed in comments	8 - 14		0.35	0.35	0.39	M					2.2	4.2			
4	1	Casuarina cunninghamiana River She-oak	12 --4		0.4	0.4	0.45	M			Group of 5x Casuarina cunninghamiana. All mature to late mature. Large dead branches on ground.	9	2.4	4.8	2A	M	M
4	2	Species as discussed in comments	12 - 14		0.45	0.45	0.51	M					2.5	5.4			
4	3	Species as discussed in comments	12 - 14		0.4	0.45	0.5	M					2.5	5.4			
4	4	Species as discussed in comments	12 - 14		0.2	0.34	0.38	M					2.2	4.1			
5	1	Cupaniopsis anacardioides Tuckaroo	6	4	0.18	0.18	0.2	SM	Good	Good-Fair	Stem diameter @ 1m AGL for Tree 1. Group of 5 x Cupaniopsis anacardioides, one Tuckaroo and 1 x Lophostemon confertus.	10	1.7	2.1	2A	M	M
5	2	Species as discussed in comments			0.13	0.16	0.18	Y					1.6	2			
5	3	Species as discussed in comments			0.08	0.13	0.14	Y					1.5	2			
6	1	Casuarina glauca Swamp she-oak	8	6	0.3	0.3	0.34	M	Fair	Poor	Group of Casuarina glauca located in drainage line. Multiple suckers and 38 trees in total. Range from 50mm - 300mm stem diameter. Trees are in good health and condition.	38	2.1	3.6	2A	H	H
6	2	Casuarina glauca Swamp she-oak			0.23	0.23	0.25	M					1.9	2.7			
6	3	Species as discussed in comments			0.2	0.2	0.23	M					1.8	2.4			
6	4	Species as discussed in comments			0.2	0.2	0.23	M					1.8	2.4			
6	5	Species as discussed in comments			0.2	0.2	0.23	M					1.8	2.4			
7	1	Species as discussed in comments			0.15	0.25	0.28	M					1.9	3	2A	H	H

Tree Group Assessments																	
Group No.	Tree No.	Botanic Common Name	H (m)	Sp (m)	DBH (m)	Multi DBH (m)	DAB (m)	Age	H	S	Comments	Group Total	SRZ (m)	TPZ (m)	Significance of a Tree Assessment Rating System (STARS) – AS GROUP NOT INDIVIDUAL TREES		
															ULE	TSR	RV
7	2	Species as discussed in comments			0.2	0.2	0.23	M			Edge trees potted of trees located in Environmental Protection Zone. Various species.		1.8	2.4			
7	3	Species as discussed in comments			0.13	0.17	0.19	EM					1.6	2			
7	4	Species as discussed in comments			0.45	0.45	0.51	M					Already captured as individual tree	2.5			
7	5	Casuarina glauca Swamp she-oak			0.2	0.2	0.23	M			Edge trees potted of trees located in Environmental Protection Zone – Tree 6 and 7 are not located in EPZ. Various species.	24	1.8	2.4			
7	6	Species as discussed in comments			0.38	0.38	0.42	M					2.3	4.5			
7	7	Species as discussed in comments			0.18	0.38	0.43	M					2.3	4.5			
7	8	Species as discussed in comments			0.3	0.3	0.34	M					2.1	3.6			
7	9	Species as discussed in comments			0.3	0.3	0.34	M					2.1	3.6			
7	10	Species as discussed in comments			0.38	0.38	0.42	M					2.3	4.5			
7	11	Species as discussed in comments			0.43	0.43	0.48	M			Stem diameter taken @ 1m		2.4	5.1			
7	12	Species as discussed in comments			0.5	0.5	0.56	M			Stem diameter taken @ .5m agl		2.6	6			
7	13	Species as discussed in comments			0.38	0.38	0.42	M			Group of trees, 24 trees mainly Mel. styphelioides with other Melaleuca sp. All Melaleuca sp. mature in good health and condition. Other species potted and details taken.		2.3	4.5			
7	14	Species as discussed in comments			0.33	0.44	0.5	M					2.5	5.3			
7	15	Species as discussed in comments			0.13	0.13	0.14	Y					1.5	2			
7	16	Species as discussed in comments			0.35	0.35	0.39	M					2.2	4.2			
7	17	Species as discussed in comments			0.35	0.35	0.39	M					2.2	4.2			
7	18	Species as discussed in comments			0.13	0.13	0.14	Y					1.5	2			
7	19	Species as discussed in comments			0.43	0.65	0.74	M			Edge trees potted of trees located in Environmental Protection Zone. Various species.		2.9	7.8			
7	20	Species as discussed in comments			0.1	0.1	0.11	Y					1.5	2			
8	1	Angophora costata Smooth-barked Apple Myrtle	6	4	0.10	0.10	0.11	Y	Good-Fair	Good-Fair	Group of trees, 24 trees mainly Mel. styphelioides with other Melaleuca. All Melaleuca sp. mature in good health and condition. Other species potted and details taken.	24	1.5	2	2A	M	M
8	2	Eucalyptus botryoides Southern Mahogany	14	8	0.33	0.33	0.37	M	Good	Good-Fair			2.2	4			
8	3	Angophora costata Smooth-barked Apple Myrtle			0.25	0.25	0.28						1.9	3			
8	4	Angophora costata Smooth-barked Apple Myrtle	7		0.20	0.20	0.22						1.8	2.4			

Tree Group Assessments																	
Group No.	Tree No.	Botanic Common Name	H (m)	Sp (m)	DBH (m)	Multi DBH (m)	DAB (m)	Age	H	S	Comments	Group Total	SRZ (m)	TPZ (m)	Significance of a Tree Assessment Rating System (STARS) – AS GROUP NOT INDIVIDUAL TREES		
															ULE	TSR	RV
8	5	Melaleuca styphelioides Prickly-leaved Paperbark	5	6	0.22	0.22	0.25						1.8	2.6			
8	6	Melaleuca styphelioides Prickly-leaved Paperbark	4	4	0.18	0.18	0.20						1.7	2.2			
8	7	Melaleuca linariifolia Snow in Summer	4	6	0.10	0.10	0.11						1.5	2			
9	1	Eucalyptus microcorys Tallowwood			0.15	0.15	0.17				Group of mixed species. 34 Casuarina glauca. plus suckering growth. 3 Euc. bot. 3 Angophora costata. 10 Melaleuca styphelioides. Age range early to mature. All good to fair health and structure. 2 dead early mature trees. Several saplings of cheese trees, pittosporum and Syzygium smithii.	50	1.6	2	2A	H	H
9	2	Casuarina glauca Swamp she-oak			0.25	0.25	0.28				Syzygium smithii - a total of 14 was counted but some previously counted.		1.9	3			
9	3	Eucalyptus botryoides Southern Mahogany			0.38	0.38	0.43						2.3	4.6			
9	4	Eucalyptus tereticornis Forest Red Gum			0.33	0.33	0.37						2.2	4			
9	5				0.25	0.25	0.28						1.9	3			
9	6	Melaleuca styphelioides Prickly-leaved Paperbark			0.24	0.24	0.27						DBH taken at base	1.9			
9	7	Eucalyptus sp. Eucalypt	6	5	0.24	0.24	0.27	SM	Good-Fair	Fair-Poor	Previously failed.		1.9	2.9			
9	8	Casuarina glauca Swamp she-oak			0.10	0.10	0.11						1.5	2			
10	1	Casuarina glauca Swamp she-oak	16	8	0.23	0.23	0.26	SM	Good	Good	15 Cas glauca and suckering growth.	15	1.9	2.8	2A	M	M
10	2				0.38	0.38	0.43						2.3	4.6			
10	3	Casuarina glauca Swamp she-oak			0.13	0.13	0.15						1.5	2			
11	1	Eucalyptus robusta Swamp Mahogany	10	11	0.45	0.45	0.50	M	Good	Good-Fair	Branches around 4-6m above ground level over pathway may require crown raising. Less than 10% total live canopy.	18	2.5	5.4	2A	M	M
11	2	Corymbia maculata Spotted Gum	7	3	0.15	0.15	0.17	SM	Good-Fair	Fair	DBH @_1m ag. Dense sucking growth path side.		1.6	2			
11	3	Casuarina glauca Swamp she-oak	16	10	0.55	0.55	0.62	M	Good	Good			2.7	6.6			

Tree Group Assessments																					
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															ULE	TSR	RV				
11	4	Casuarina glauca Swamp she-oak	16	10	0.60	0.60	0.67	M	Good	Good-Fair	In pathway, oval side .28m diameter low branch will require pruning for clearance. 3 x .1m slightly higher in canopy will require crown raising. Suckering below along bank. Minor low branches over path. Less than 10% dia. Cas. glauca suckering below. All of canopy is low over pathway. Tree will require removal. Wattle to 5m below. crown raise or remove. Low small diameter branches over path. Dense suckering below, this may have affected reading at stem also. Minor branches over pathway. Dense suckers path side. Dense suckers below. Low branches over path. Heavy pruning or removal required. Hard against path and sign near bridge. End of group 11. Group of several species. Total number of trees and Cas. glauca suckers. Suckering growth below.		2.8	7.2							
11	5	Corymbia maculata Spotted Gum	14	6	0.35	0.35	0.39	M	Good	Good-Fair			2.2	4.2							
11	6	Casuarina glauca Swamp she-oak	18	12	0.53	0.53	0.59	M	Good	Fair			2.7	6.4							
11	7	Eucalyptus tereticornis Forest Red Gum	16	14	0.41	0.41	0.46	M	Good	Good-Fair			2.4	4.9							
11	8		16	12	0.80	0.80	0.90	M	Good	Good			3.2	9.6							
11	9	Eucalyptus sp. Eucalypt	16	6	0.46	0.46	0.52	M	Good	Good-Fair			2.5	5.5							
11	10	Acacia sp. Wattle	5	6	0.18	0.18	0.20	M	Good	Good-Fair			1.7	2.2							
11	12	Corymbia maculata Spotted Gum	14	5	0.22	0.22	0.25	SM	Good	Good			1.8	2.6							
11	13	Casuarina glauca Swamp she-oak	16	12	0.90	0.90	1.01	M	Good	Good-Fair			3.3	10.8							
11	14	Casuarina glauca Swamp she-oak	14	12	0.70	0.70	0.78	M	Good	Good-Fair			3	8.4							
11	15	Eucalyptus sp. Eucalypt	14	5	0.33	0.33	0.36	EM	Good	Good-Fair			2.2	3.9							
11	16	Melaleuca styphelioides Prickly-leaved Paperbark	5	5	0.40	0.40	0.45	M	Good	Good			2.4	4.8							
11	17	Melaleuca linariifolia Snow in Summer	3	2	0.10	0.10	0.11	EM	Good	Good			1.5	2							
12	1	Melaleuca styphelioides Prickly-leaved Paperbark	9	6	0.18	0.18	0.20	M	Good	Good			10	1.7				2.2	2A	M	M
12	2	Casuarina glauca Swamp she-oak	12	5	0.18	0.18	0.20	M	Good	Good-Fair				1.7				2.2			
12	3	Eucalyptus microcorys Tallowwood	10	8	0.30	0.30	0.34	EM	Good	Good				2.1				3.6			
12	4	Melia azedarach White Cedar	6	5	0.14	0.14	0.16	SM	Good-Fair	Good-Fair				1.5				2			

Tree Group Assessments																	
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															ULE	TSR	RV
13	1	Casuarina glauca Swamp she-oak	14	8	0.35	0.35	0.39	M	Good	Poor	10 Casuarina glauca to NW. Range Y to LM. 1 Eucalyptus spp. South and suckering C. glauca. 2 Wattles.	126	2.2	4.2	2A	H	H
13	2	Eucalyptus robusta Swamp Mahogany	12	14	0.70	0.70	0.78	LM	Good-Fair	Poor	1 Banksia Integrifolia. 2 Casuarina glauca and suckering growth to South between tree 2-3.		3	8.4			
13	3	Ficus macrophylla Moreton Bay Fig	16	14	0.51	0.51	0.57	EM	Good	Good	1 Ficus macrophylla. 2 Mature Euc. botryoides to South between tree 3-4.		2.6	6.1			
13	4	Eucalyptus parramattensis Parramatta Red Gum	16	6	0.33	0.33	0.37	M	Good	Good	3 young Eucalyptus parramattensis. 3 young Casuarina glauca plus suckering and understorey of various natives South between tree 4-5.		2.2	4			
13	5	Eucalyptus pilularis Blackbutt	16	12	0.04	0.04	0.04	M	Good	Good-Fair	6 young Acacia spp. 2 dead Euc. spp. 1 SM Euc. parramattensis. 3 mature Euc. botryoides. To South between tree 5-6. 1 Euc. spp leaning over pond.		1.5	2			
13	6	Eucalyptus botryoides Southern Mahogany	17	10	0.38	0.38	0.43	M	Good	Fair	20 Euc sp. SM/M Euc. botryoides. 2 dead trees. 4 Y Callistemon vim.		2.3	4.6			
13	7	Eucalyptus botryoides Southern Mahogany	16	6	0.35	0.35	0.39	M	Fair	Poor	28 M Euc. botryoides. Several Y Acacia spp. and Callistemon vim. South between 7-8.		2.2	4.2			
13	8	Eucalyptus botryoides Southern Mahogany	8	12	0.51	0.51	0.57	M	Fair	Poor	6 M/LM Euc. botryoides. 2 M Celtis. South between tree 8-9.		2.6	6.1			
13	9	Eucalyptus botryoides Southern Mahogany	16	18	0.69	0.69	0.77	M	Good	Good-Fair	8 M Euc. botryoides. 1 Dead. South between tree 9-10.		3	8.3			
13	10	Eucalyptus botryoides Southern Mahogany	16	12	0.42	0.42	0.47	M	Good-Fair	Good-Fair	6 Casuarina glauca plus suckering growth. 5 M Euc. botryoides. South between tree 10-11.		2.4	5			
13	11	Eucalyptus botryoides Southern Mahogany	14	12	0.30	0.30	0.34	M	Good	Fair	Last tree in group.		2.1	3.6			
14	1	Casuarina glauca Swamp she-oak	10	6	0.15	0.15	0.17	SM	Good	Good	17 SM Cas. glauca plus suckers. 6 Y Mel. linariifolia. Between T1-2	375	1.6	2	2A	H	H
14	2	Melaleuca styphelioides Prickly-leaved Paperbark	10	6	0.24	0.24	0.27	M	Good	Good	21 Y/EM Cas. glauca. 10 Mel. spp. 2 EM Euc. sp. north between 2-3.		1.9	2.9			
14	3	Eucalyptus sp. Eucalypt	14	5	0.27	0.27	0.30	EM	Fair-Poor	Fair-Poor	8 SM Cas. glauca. 1 M Euc. sp. 8 M Mel. styphelioides. North between tree 3-4.		2	3.2			
14	4	Eucalyptus sp. Eucalypt	12	6	0.18	0.18	0.20	SM	Good	Good	14 SM/M Cas. glauca. 2 SM/M Euc. sp. 1 M Angophora costata. 23 SM/M Melaleuca sp. North between tree 4-5.		1.7	2.2			

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															ULE	TSR	RV
14	5	Casuarina glauca Swamp she-oak	14	5	0.32	0.32	0.36	M	Good	Good-Fair	11 SM Cas. glauca. 2 SM Angophora costata. 5 EM Euc. sp. 8 SM/M Melaleuca sp. North between tree 5-6.	64	2.2	3.8	2A	H	H
14	6	Casuarina glauca Swamp she-oak	12	4	0.28	0.28	0.31	M	Good	Good-Fair	North of Tree 6-7. 1 x Dead tree. 10 x Y-SM Euc. sp. 22 x SM-M Melaleuca sp. 37 x EM-M Eucalyptus botryoides. 1 SM x Banksia integrifolia. 8 x Syzygium smithii.		2	3.4			
14	6	Eucalyptus tereticornis Forest Red Gum	17	7	0.37	0.37	0.41	M	Good	Fair			2.3	4.4			
14	7	Eucalyptus grandis Flooded Gum	20	10	0.43	0.43	0.48	M	Good	Good			2 SM Euc. grandis. 28 Y/M Euc. botryoides. 2 Y Cas glauca. 13 EM/M Melaleuca sp. North of tree 7-8	2.4			
14	8	Eucalyptus botryoides Southern Mahogany	12	8	0.20	0.20	0.22	EM	Good-Fair	Good	31 Y/SM Euc. botryoides. 6 Y Cas. glauca. 2 M Angophora costata. 1 M Euc tereticornis. North of tree 8-9.		1.8	2.4			
14	9	Eucalyptus botryoides Southern Mahogany	7	4	0.12	0.12	0.13	EM	Good	Good	58 Y/SM Euc. botryoides. 1 Y Syzygium smithii. 12 SM/M Melaleuca sp. 12 Y/SM Cas. glauca. North of tree 9-10.		1.5	2			
14	10	Eucalyptus botryoides Southern Mahogany	7	5	0.18	0.18	0.20	EM	Good-Fair	Good-Fair			1.7	2.2			
14	11	Eucalyptus grandis Flooded Gum	18	14	0.38	0.38	0.42	M	Good	Good-Fair	Largest diameter stem on fence line.		2.3	4.5			
President Avenue Bridge																	
15	1	Eucalyptus robusta Swamp Mahogany	16	22	0.42	0.42	0.47	M	Good	Good-Fair	1 M Euc. robusta. South of Tree 1-2. Several Y Acacia sp. 1 Y Mel. linariifolia.	64	2.4	5	2A	H	H
15	2	Eucalyptus botryoides Southern Mahogany	16	18	0.32	0.32	0.36	M	Good	Good-Fair	3 M Euc. botryoides. 2 M Euc pilularis (both in a state of failure). 4 SM Angophora costata. 3 Y Cas. glauca. Understorey of Y Acacia. South of tree 2-3		2.2	3.8			
15	3	Eucalyptus botryoides Southern Mahogany	16	11	0.41	0.41	0.46	M	Good	Good	15 M Euc. botryoides. 2 M Banksia integrifolia. South of tree 3-4.		2.4	4.9			
15	4	Eucalyptus botryoides Southern Mahogany	14	10	0.27	0.27	0.30	M	Good-Fair	Good-Fair	7 M Euc. botryoides. 1 M Euc. grandis. 1 M Banksia integrifolia. Understorey if Acacia sp. South of tree 4-5		2	3.2			
15	5	Eucalyptus botryoides Southern Mahogany	18	20	0.32	0.32	0.36		Good	Fair	14 M Euc. botryoides. 3 EM Euc. pilularis. Understorey of Acacia sp. South of Tree 5-6		2.2	3.8			
15	6	Eucalyptus botryoides Southern Mahogany	16	12	0.43	0.43	0.48		Good	Good-Fair	Edge of group to South.		2.4	5.2			
15	7	Eucalyptus pilularis Blackbutt	14	9	0.37	0.37	0.41	M	Fair	Fair			2.3	4.4			

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															ULE	TSR	RV	
15	8	Eucalyptus botryoides Southern Mahogany	18	8	0.34	0.34	0.38	M	Good	Good			2.2	4.1				
15	9	Eucalyptus botryoides Southern Mahogany	16	16	0.29	0.29	0.32	M	Good-Fair	Good-Fair			2.1	3.5				
15	10	Eucalyptus botryoides Southern Mahogany	16	14	0.40	0.40	0.45	M	Good	Good-Fair			2.4	4.8				
15	11	Eucalyptus robusta Swamp Mahogany	18	18	0.57	0.57	0.64	M	Good-Fair	Good-Fair			2.7	6.8				
16	1	Species as listed in comments				0.10					Impenetrable as mainly under water and dense with weeds. Species noted -Willow, Camphor laurel, Celtis, Corals noted of mature age. Casuarina glauca also noted Bay street side. Nominal DBH given to note trees. Likely in part to be Swamp Oak Floodplain Forest EEC.		1.5	2				
17	1	Eucalyptus botryoides Southern Mahogany			0.34	0.34	0.38				5 S. paniculatum between Tree 6-7. All Y-EM. Good health/structure. max .04m in diameter.	139	2.2	4.1	2A	H	H	
17	2	Eucalyptus botryoides Southern Mahogany			0.33	0.33	0.37						2.2	4				
17	3	Eucalyptus botryoides Southern Mahogany			0.26	0.26	0.29						2	3.1				
17	4	Eucalyptus sp. Eucalypt			0.29	0.29	0.32						2.1	3.5				
17	5	Angophora costata Smooth-barked Apple Myrtle			0.33	0.33	0.37						2.2	4				
17	6	Casuarina glauca Swamp she-oak			0.13	0.13	0.15						1.5	2				
17	7	Eucalyptus botryoides Southern Mahogany			0.21	0.21	0.24						1.8	2.5				
17	8	Eucalyptus parramattensis Parramatta Red Gum			0.25	0.25	0.28						Unsure of gum species. One S. panic b/ween T7-8. Young-Em. dbh .04 max. 5 Cas glauca & Allocasuarina torulosa. 5 Euc sp. EM-M. 8 Melaleuca sp.	1.9				3
17	9	Melaleuca styphelioides Prickly-leaved Paperbark			0.10	0.10	0.11						7 EM S.panic between T8-9. Between 8-9 24 EM- M Euc. sp, (mainly E.bot & Cor mac. 14 EM-M Cas. glauca, 12 Melaleuca sp.	1.5				2
17	10	Casuarina glauca Swamp she-oak			0.16	0.16	0.18						10 EM S. panic b/tween T9-10. Max dia .05mm	1.6				2
17	11	Syzygium smithii Lilly Pilly			0.06	0.06	0.07					1.5	2					

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															ULE	TSR	RV
17	12	Eucalyptus botryoides Southern Mahogany			0.42	0.42	0.47				End of group. light pole right next to tree. Between T9-12. Approx 13 Euc. sp. 14 Cas. glauca, 8 Melaleuca sp. - all trees Y- EM.		2.4	5			
18	1	Eucalyptus botryoides Southern Mahogany	20	12	0.64	0.64	0.72	M	Good-Fair	Good-Fair	Branches over SPW approx. 10m. Can be pruned to AS4373 .	5	2.9	7.7	2A	H	H
18	2	Eucalyptus botryoides Southern Mahogany	20	15	0.56	0.56	0.63	M	Good-Fair	Fair	AS4373 yes. similar tree to north b/ween T1&2.		2.7	6.7			
18	3	Corymbia citriodora Lemon-scented Gum	22	13	0.51	0.51	0.57	M	Good	Good	Clearance to 15m above path. Weed species (Sapium) between tree and path.		2.6	6.1			
18	4	Corymbia citriodora Lemon-scented Gum	22	14	0.52	0.52	0.58	M	Good	Good	Sapium between tree and path.		2.6	6.2			
18	5	Eucalyptus botryoides Southern Mahogany	18	14	0.54	0.54	0.60	M	Good-Fair	Good-Fair	3m branch clearance but can be pruned to AS4373.		2.7	6.5			
19	1	Eucalyptus botryoides Southern Mahogany	20	22	0.40	0.40	0.45	M	Good-Fair	Good-Fair	Branches 8m AGL but ample room to east to go around tree.	15	2.4	4.8	2A	H	H
19	2	Eucalyptus botryoides Southern Mahogany	20	13	0.40	0.40	0.45	M	Good-Fair	Good-Fair	Low branches over path but can be pruned to AS4373.		2.4	4.8			
19	3	Eucalyptus botryoides Southern Mahogany	20		0.89	0.89	1.00	M	Good	Good-Fair	Branches clear of path. Less than 5m young native species below canopies. All less than 0.04mm DBH. weed (Sapium) trees also noted.		3.3	10.7			
19	4	Eucalyptus botryoides Southern Mahogany	20	15	0.66	0.66	0.74	M	Fair-Poor	Fair-Poor	Lower limb to east over path but can be pruned to AS4373.		2.9	7.9			
19	5	Eucalyptus botryoides Southern Mahogany	20	17	0.45	0.45	0.50	M	Good-Fair	Good-Fair	Low large dia limb over pathway but can be pruned to AS4373.Similar age and size Euc bot to 6m north, and 11m to south.		2.5	5.4			
19	6	Eucalyptus botryoides Southern Mahogany	18	14	0.50	0.50	0.56	M	Good-Fair	Good-Fair	Low branches over path but can be pruned to AS4373.		2.6	6			
19	7	Eucalyptus robusta Swamp Mahogany	22	22	0.88	0.88	0.99	M	Good-Fair	Good-Fair	Low branches over path but can be pruned to AS4373.		3.3	10.6			
19	8	Backhousia citriodora Lemon-scented Myrtle	22	14	0.27	0.27	0.30	M	Good-Fair	Fair	Close to path. Large dead tree to south.		2	3.2			
19	9	Eucalyptus pilularis Blackbutt	12	12	0.21	0.21	0.24	M	Good-Fair	Fair-Poor	Low branches over path and cannot be pruned to AS4373.		1.8	2.5			

Tree Group Assessments																	
Group No.	Tree No.	Botanic Common Name	H (m)	Sp (m)	DBH (m)	Multi DBH (m)	DAB (m)	Age	H	S	Comments	Group Total	SRZ (m)	TPZ (m)	Significance of a Tree Assessment Rating System (STARS) – AS GROUP NOT INDIVIDUAL TREES		
															ULE	TSR	RV
19	10	Eucalyptus botryoides Southern Mahogany	16	13	0.37	0.37	0.41	M	Good-Fair	Good-Fair	Low branches over path but can be pruned to AS4373. Native young understorey, Acacia sp. Brachychiton, Banksia integ. S. paniculatum.		2.3	4.4			
20	1	Corymbia citriodora Lemon-scented Gum	20	24	0.60	0.60	0.67	M	Good	Fair	Limited assessment vine and lantana at base blocking access. Limbs high over path.	20+	2.8	7.2	2A	M	M
20	2	Populus alba White Poplar	19	14	0.45	0.45	0.50	M	Good-Fair	Good-Fair	Large corpse of Poplar behind dense lantana and various weed vine.		2.5	5.4			
20	3	Populus alba White Poplar	18	16	0.40	0.40	0.45	M	Good-Fair	Good-Fair	as previous		2.4	4.8			
20	4	Casuarina glauca Swamp she-oak	24	12	0.60	0.60	0.67	M	Good	Good-Fair	Limited assessment due to vine etc at base.		2.8	7.2			
20	5	Casuarina glauca Swamp she-oak	24	12	0.50	0.50	0.56	M	Good	Good	Fig to northwest of stem right beside it.		2.6	6			
20	6	Populus alba White Poplar	18	14	0.42	0.42	0.47	M	Good-Fair	Good-Fair	In front of large Fig.		2.4	5			
20	7	Populus alba White Poplar	20	20	0.40	0.40	0.45	M			Several Popular with lantana and other weeds below.		2.4	4.8			
20	8	Casuarina cunninghamiana River She-oak	21	8	0.40	0.40	0.45	M	Good-Fair	Good-Fair	Lantana under, two more Cas cunn behind.		2.4	4.8			
20	9	Populus alba White Poplar	18	24	0.30	0.30	0.34	M	Good-Fair	Good-Fair	Low stem over path, extends right over path. Will require heavy pruning. Bamboo under.		2.1	3.6			
20	10	Populus alba White Poplar	18	14	0.75	0.75	0.84	LM	Good-Fair	Fair-Poor	Group of Poplars low over path. Trees will require removal.		3.1	9			
20	11	Populus alba White Poplar	10	12	0.20	0.20	0.22	EM	Good	Good-Fair			1.8	2.4			
20	12				0.20	0.20	0.22	SM			End of group. More Poplar and lantana.		1.8	2.4			
21	1	Elaeocarpus reticulatus Blueberry Ash	4.5	3	0.12	0.12	0.13	EM	Good	Fair	Planted as hedge.	12	1.5	2	2A	M	M
21	2				0.10	0.10	0.11						1.5	2			
21	3	Elaeocarpus reticulatus Blueberry Ash			0.10	0.10	0.11						1.5	2			
21	4	Elaeocarpus reticulatus Blueberry Ash			0.10	0.10	0.11						1.5	2			
22	1	Acacia elata Cedar Wattle	10	4	0.20	0.20	0.22	LM	Fair	Fair		57	1.8	2.4	2A	H	H

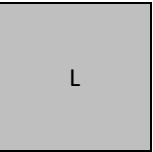
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															ULE	TSR	RV
22	2	Eucalyptus saligna Sydney Blue Gum	20	15	0.45	0.45	0.50	M	Good	Good	Between T1-4 - 17 EM Melaleuca linariifolia, 5 EM Acmena smithii var minor, 3 additional EM Acacia elata. Between T4-7. 11 EM M linariifolia, 3 Acmena smithii var minor, 3 Pittosporum undulatum, 1 Casuarina cunninghamia, 1 Castospermum australe, 1 previously failed but matured Angophora costata, 1 Acacia elata, 1 Stenocarpus sinuatis, 1 Livistona australe.		2.5	5.4			
22	3	Eucalyptus saligna Sydney Blue Gum	20	12	0.45	0.45	0.50	M	Good	Good			2.5	5.4			
22	4	Eucalyptus botryoides Southern Mahogany	16	12	0.56	0.56	0.63	M	Good	Good			2.7	6.7			
22	5	Eucalyptus saligna Sydney Blue Gum	20	12	0.70	0.70	0.78	M	Good	Good-Fair			3	8.4			
22	6	Eucalyptus saligna Sydney Blue Gum	22	16	0.70	0.70	0.78	M	Good	Good			3	8.4			
22	7	Acacia elata Cedar Wattle	9	10	0.24	0.24	0.27	M	Good	Good-Fair			1.9	2.9			
22	8	Angophora costata Smooth-barked Apple Myrtle	14	8	0.32	0.32	0.36	M	Good	Good			2.2	3.8			
22	9	Angophora costata Smooth-barked Apple Myrtle	14	6	0.25	0.25	0.28	M	Good	Good-Fair			1.9	3			
23	1	Eucalyptus tereticornis Forest Red Gum	18	8	0.43	0.43	0.48	M	Good	Good			Dense, heavily planted and self sown group of trees between oval and footpath along President. 50 x SM Melaleuca sp., 12 young Syzygium panic (in middle of group) & 13 more mature planted along road in row, 12 SM Euc bot & approx 60 Cas glauca, 8 EM Banksia integrifolia.	155			
23	2	Casuarina glauca Swamp she-oak	18	6	0.20	0.20	0.22	M	Good	Good	1.8	2.4					
23	3	Casuarina glauca Swamp she-oak	18	4	0.16	0.16	0.18	EM	Good	Good-Fair	1.6	2					
23	4	Eucalyptus botryoides Southern Mahogany	18	8	0.38	0.38	0.43	EM	Good	Good	2.3	4.6					
23	5	Casuarina glauca Swamp she-oak	9	4	0.20	0.20	0.22	EM	Good	Good	1.8	2.4					
24	1	Corymbia maculata Spotted Gum	18	12	0.41	0.41	0.46	M	Good	Good		15	2.4	4.9	2A	H	H
24	2	Eucalyptus botryoides Southern Mahogany	16	14	0.27	0.27	0.30	M	Good	Good-Fair	Between T1 & T2 - 3 young to mature Spotty, 1 mature Cas glauca and many suckering Cas glauca. 1 mature Euc botryoides.		2	3.2			
24	3	Eucalyptus botryoides Southern Mahogany	18	12	0.53	0.53	0.59	M	Good-Fair	Good-Fair	Between T2-3 there a mature Ficus rubiginosa hard against water’s edge and 3 young Euc maculata. 5 EN-M Cor maculata. 1 M suppressed Euc. botryoides, 1 mature Cas glauca with suckering		2.7	6.4			
25	1	Callistemon viminalis Weeping Bottlebrush	7	12	0.30	0.30	0.34	M	Good	Good		29	2.1	3.6	2A	H	H

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															ULE	TSR	RV
25	2	Casuarina glauca Swamp she-oak	9	4	0.24	0.24	0.27	M	Good-Fair	Fair-Poor	12 M Mel bracteata, 2 M A. costata, 1 M Castanospermum, 2 EM Call vim, 12 M Cas glauca with suckers under.		1.9	2.9			
25	3	Schinus areira Peppercorn	16	20	0.68	0.68	0.76	LM	Good-Fair	Fair			2.9	8.2			
25	4	Melaleuca bracteata Black Tea Tree	8	12	0.30	0.30	0.34	M	Good	Good-Fair			2.1	3.6			
25	5	Casuarina glauca Swamp she-oak	7	4	0.10	0.10	0.11	SM	Good	Good			1.5	2			
26	1	Podocarpus elatus Brown Pine	7	5	0.12	0.12	0.13	SM	Good	Good-Fair	7 EM-M Call vim, 7 EM-M Podocarpus, 1 M Euc sideroxylon, 1 EM Euc botryoides.	20	1.5	2	2A	H	H
26	2	Eucalyptus scoparia Wallangarra White Gum	14	10	0.41	0.41	0.46	M	Fair	Poor			2.4	4.9			
26	3	Eucalyptus scoparia Wallangarra White Gum	14	8	0.33	0.33	0.37	M	Good-Fair	Fair			2.2	4			
26	4	Eucalyptus scoparia Wallangarra White Gum	16	14	0.70	0.70	0.78	M	Fair-Poor	Poor			3	8.4			
27	1	Melaleuca bracteata Black Tea Tree	8	8	0.48	0.48	0.54	M	Good	Good	8 Castanospermum australe, 3 M Podocarpus elatus, 3 Call vim.	17	2.6	5.8	2A	H	H
27	2	Ficus microcarpa var. hillii Hills Weeping Fig	16	14	0.72	0.72	0.81	M	Good	Fair-Poor	Previously failed and kept growing, stable now.		3	8.6			
27	3	Callistemon viminalis Weeping Bottlebrush	7	6	0.17	0.17	0.19	M	Good	Good-Fair			1.6	2			
28	1	Celtis sinensis Chinese Hackberry	5	5	0.10	0.10	0.11					5	1.5	2	2A	L	L
28	2	Erythrina crista-galli Cockscomb Coral Tree	6	6	0.20	0.20	0.22						1.8	2.4			
28	3	Morus nigra Black Mulberry	5	5	0.10	0.10	0.11						1.5	2			
28	4	Lantana camara Lantana	3	8	0.05	0.05	0.06				Lantana clump		1.5	2			
28	5	Lantana camara Lantana	3	8	0.01	0.01	0.01						1.5	2			
28	6	Lantana camara Lantana	3	8	0.01	0.01	0.01						1.5	2			
28	7	Lantana camara Lantana	3	8	0.01	0.01	0.01						1.5	2			
28	8	Cinnamomum camphora Camphor Laurel	7	4	0.15	0.15	0.17						1.6	2			

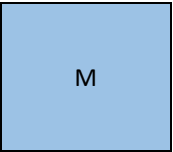
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															ULE	TSR	RV
28	9	Celtis sinensis Chinese Hackberry	6	5	0.10	0.10	0.11				Group to be closed with line. Group contains numerous weeds. Celtis, Camphor, Lantana and understory impenetrable.		1.5	2			
29	1	Casuarina glauca Swamp she-oak	7	5	0.10	0.10	0.11	SM	Good	Good	Fallen limb from large Cas. glauca located other side of creek noted to south. May require pruning for clearances. Rest of group is Cas. glauca and suckers with Cestrum under. Total count of 16 standalone trees with multiple suckers.	16	1.5	2	2A	H	H
29	2	Casuarina glauca Swamp she-oak	14	6	0.30	0.30	0.34						2.1	3.6			
29	3	Casuarina glauca Swamp she-oak	16	12	0.30	0.30	0.34	M			Likely in part to be Swamp Oak Floodplain Forest EEC.		2.1	3.6			
29A	1	Casuarina glauca Swamp she-oak	-	-	0.10	-	-	-	-	-	Limited assessment as impenetrable in area. Weed species and Swamp Oak noted. Nominal DBH given to note trees. Likely in part to be Swamp Oak Floodplain Forest EEC.		1.5	2	2A	H	H
30	1	-	6	12	0.10	0.10	0.11	M	Good	Good	Group of trees or shrubs. bamboo, strelitzia.		1.5	2	2A	L	L
31	1	Archontophoenix cunninghamiana Bangalow Palm	12	6	0.15	0.15	0.17	M	Good	Good	Group of 4. No access.		0	7	2A	M	M
32	1	Cupressus sp.	5	10	0.15	0.15	0.17	EM	Good	Good	Limited assessment due to access, two trees. In private property.	2	1.6	2	2A	M	M
33	1	Populus nigra 'Italica' Lombardy Poplar	16	10	0.35	0.35	0.39	M	Good-Fair	Good-Fair	Spread as group. Around 4 trees and their suckers.	4	2.2	4.2	2A	M	M
34	1	Eucalyptus botryoides Southern Mahogany	10	8	0.42	0.42	0.47	M	Good	Fair	4 in group	4	2.4	5	2A	M	M
34	2	Casuarina glauca Swamp she-oak	10	6	0.20	0.20	0.22	EM	Good	Fair	2 in group	2	1.8	2.4	2A	M	M
35	1	Erythrina x sykesii Common Coral Tree			0.30	0.30	0.34	M	Good	Fair	12 Cas glauca up to 300mm dia, 15 euc bot and euc bot x saligna up to 500mm dia. Cockscomb Coral along water edge in places.	27	2.1	3.6	2A	M	M
35	1	Eucalyptus saligna x botryoides Hybrid Sydney Blue Gum	12	12	0.40	0.40	0.45	EM	Good	Good			2.4	4.8	2A	M	M
36	1	Melaleuca ericifolia Swamp Paperbark	6		0.05	0.05	0.06	M	Good	Good	In excess of 50 small trees/shrubs. Likely in part to be Swamp Oak Floodplain Forest EEC.	50+	1.5	2	2A	H	H
37	1	Erythrina crista-galli Cockscomb Coral Tree	5		0.07	0.07	0.08				Group of scattered Corals, weedy undergrowth and grasses. Estimated, impenetrable. possible Fig next to it, rest is weedy understory.	2?	1.5	2	2A	L	L
37	2	Radermachera sinica China Doll	16	20	0.40	0.40	0.45						2.4	4.8			
38	1	Casuarina glauca Swamp she-oak	16	18	0.30	0.30	0.34	M	Good	Good	5 x Cas glauca, 1 x Banksia serrata.	31	2.1	3.6	2A	M	M

Tree Group Assessments																	
Group No.	Tree No.	Botanic Common Name	H (m)	Sp (m)	DBH (m)	Multi DBH (m)	DAB (m)	Age	H	S	Comments	Group Total	SRZ (m)	TPZ (m)	Significance of a Tree Assessment Rating System (STARS) – AS GROUP NOT INDIVIDUAL TREES		
															ULE	TSR	RV
38	2	Casuarina glauca Swamp she-oak	20	20	0.45	0.45	0.50	M	Good	Good-Fair	8 x Cas glauca, 1 x Mel quin, 1 x Banksia integrifolia		2.5	5.4	2A	M	M
38	3	Casuarina glauca Swamp she-oak	20	20	0.55	0.55	0.62	M	Good	Good-Fair	5 x Banksia integrifolia, 1 x Mel quin, 9 x Cas glauca.		2.7	6.6	2A	M	M
39	1	Casuarina glauca Swamp she-oak	20	26	0.30	0.30	0.34	M	Good	Fair	Spread is for whole group west to east. Limited access and assessment.	10	2.1	3.6	2A	M	M
40	1	Cupressus sp.	12	4	0.25	0.25	0.28	M	Good	Good	2 trees of similar proportions located at rear of residential property.	3	1.9	3	2A	M	M
41	1	Dead Tree									Trees removed. looks like young trees replanted.	-					L
42	1	Eucalyptus pilularis Blackbutt	18	16	0.96	0.96	1.08				Ang costata x 14, 2 x Euc pil	16	3.4	11.5	2A	M	M
42	2	Angophora costata Smooth-barked Apple Myrtle	14		0.33	0.33	0.37						2.2	4			
42	3	Angophora costata Smooth-barked Apple Myrtle	12	10	0.23	0.23	0.26						1.9	2.8			
42	4	Angophora costata Smooth-barked Apple Myrtle	16	12	0.55	0.55	0.62						2.7	6.6			
43	1	Avicennia marina Grey Mangrove	6	10	0.35	0.35	0.39	M	Good-Fair	Fair	10 trees and multiple suckers between T1 & 2. Mangroves protected under Fisheries Management Act 1994.	10	2.2	4.2	2A	H	H
43	2	Avicennia marina Grey Mangrove	10	20	0.35	0.35	0.39										
44	1	Casuarina glauca Swamp she-oak	9	5	0.15	0.15	0.17				Group of trees. Likely in part to be Swamp Oak Floodplain Forest EEC. 16 Casuarina glauca and suckers. Mangrove species noted too. Mangroves protected under Fisheries Management Act 1994.	16	1.6	2	2A	H	H
44	2	Casuarina glauca Swamp she-oak			0.15	0.15	0.17										
44	3	Casuarina glauca Swamp she-oak			0.40	0.40	0.45										
45	1	Viburnum odoratissimum Sweet Viburnum	2	5	0.10	0.10	0.11				Planted under bridge. Hedged, spread calculated for whole group.	8	1.5	2	2A	M	M
45	2	Viburnum odoratissimum Sweet Viburnum	2	10	0.10	0.10	0.11										
45	3	Callistemon viminalis Weeping Bottlebrush	4	11	0.10	0.10	0.11	M	Good	Good-Fair							

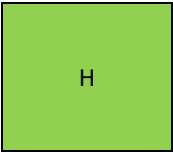
KEY



Low Retention Value-These trees are not considered important for retention.



Medium Retention Value-These trees may be retained & protected.



High Retention Value -These trees are considered important for retention and should be retained and protected.

* DBH is visually estimated (usually adjoining trees or those that are hard to access). AB – above *buttress roots*. AGL - above ground level.

** Determined by the largest number found (i.e. broadest branch spread or highest DBH) within a tree group to ensure ample tree protection zone.

H	refers to the approximate height of a tree in metres, from base of stem to top of tree crown.
Sp	refers to the approximate and average spread in metres of branches/canopy (the ‘crown’) of a tree.
DBH	refers to the approximate diameter of tree stem at breast height i.e. 1.4 metres above ground (unless otherwise noted) and expressed in millimetres.
Age	refer to Appendix A -Terms and Definitions for more detail.
C	refers to the tree’s structural condition. Refer to Appendix A-Terms and Definitions for more detail.
V	refers to the tree’s vigour (health) Refer to Appendix A -Terms and Definitions for more detail.
C	refers to the tree’s structural condition. Refer to Appendix A -Terms and Definitions for more detail.
ULE	refers to the estimated <i>Useful Life Expectancy</i> of a tree. Refer to Appendix B for details.
TSR	The <i>Tree Significance Rating</i> considers the importance of the tree as a result of its prominence in the landscape and its amenity value, from the point of view of public benefit. Refer to Appendix C – Significance of a Tree Assessment Rating for more detail.
RV	Refers to the retention value of a tree, based on the tree’s ULE <i>and</i> Tree Significance. Refer to Appendix C – Significance of a Tree Assessment Rating for more detail.
SRZ	Structural Root Zone (SRZ) refers to the critical area required to maintain stability of the tree. Refer to Appendix A -Terms and Definitions for more detail.
TPZ	Tree Protection Zone (TPZ) refers to the <i>tree protection zones</i> for trees to be retained. Refer to Appendix A -Terms and Definitions for more detail.