

REPORT:

A): ARBORICULTURAL IMPACT ASSESSMENT

and

B). TREE MANAGEMENT PLAN (Trees to be retained and protected)

Hammondcare Greenwich Hospital

River Road, Greenwich NSW

Prepared 16 February 2018 Revised 5 August 2019 Ref: 3521.4

🌂 PH/FAX 02 8847 3586 🌂 PO Box 3687, Rouse Hill NSW 2155 🌂 ABN 28116465304 🌂 E info@redgumhrt.com.au

Contents

Page

<u>PART</u>	A: (AIA) Arboricultural Impact Assessment:	
1.0	Preface	3
2.0	Introduction	3
3.0	Summary	4
4.0	Aims	5
5.0	Objectives	5
6.0	Methodology	5
7.0	Tree AssessmentsAssessment of a stand of trees	24
8.0	Conclusion	58
9.0	Recommendations	59
	Disclaimer & References	59
<u>Table</u> 1.0 (General description of trees and Schedule of works.	7
<u>Appen</u> Append	${ m ldices}$ ix A ${ m IACA}$ Significance of a Tree, Assessment Rating System (STARS) (IACA, 2010) ${ m c}$	
Append	ix B Matrix - Sustainable Retention Index Value (S.R.I.V.), Version 4, (IACA) 2010 \odot	
Append	ix C Survey of Subject Trees – Removal vs. Retention	
<u>PART</u>	B: (TPP) TREE PROTECTION PLAN:	
10.0	Preface	74
11.0	Introduction	74
12.0	Methodology	74
13.0	Pruning Standards	74

- 13.0Pruning Standards7414.0Summary: Tree Management Plan75
 - DiscussionGeneral notes;
 - General Tree Protection works Prior to Demolition
 - Specific Tree Protection Works Prior to Demolition and Tree Removal
 - Specific Tree Protection works Post Demolition and Prior to Construction
 - Specific Tree Protection works During Construction
 - Specific Tree Protection works Post Construction

15.0	Conclusion	79
16.0	Recommendations – Retention	80

<u>Table</u>

2.0	Tree Protection Zone fencing locations					
Appen	<u>dices</u>					
Appendi	 Extract from Australian Standard AS4970 2009 Protection of trees on development sites, Section 3 - Determining the tree protection zones of the selected trees, 3.1 Tree protection zone (TPZ) and 3.3.5 Structural root zone (SRZ) 					

Appendix E Glossary of Terminology

Appendix F Site Plan - Redgum Survey of Subject Trees to be retained & Tree Protection Zones

1.0 PREFACE

Redgum Horticultural has prepared this report for Hammond Care (*the client*), for the Greenwich Hospital Concept Plan at 97-115 River Road, Greenwich NSW.

Mr. Craig Martin (*the author*) attended River Road, Greenwich (*the site*), on 18 & 19 September 2017 and 9 & 10 July 2019 to reinspect the trees included in the 2017 report and include additional trees where the trees and their growing environment were examined. This interim report has been prepared as part of the Environmental Impact Statement (EIS) and any works recommended herein are subject to a final report following receipt of final detailed architectural plans, that require approval from the consenting authority, and are to be included in a Development application. This report takes into consideration the trees within the site and within five metres of the common boundary potentially affected by the development.

2.0 Introduction

The land is situated in the Lane Cove Council (*the Council*) Local Government Area (*LGA*) and the trees are protected under Councils Development Control Plan (DCP). This report involves 297 trees (*the trees*), as indicated on Site Plan A - Survey of Subject Trees (Appendix C) and considers the removal of fifty-five (55) trees due to the proposed building footprints and considers the removal of a total of eighty-six (86) trees within the property and on the road reserve and the retention of two hundred and eleven (211) trees within the property, on the adjacent road reserve and neighbouring properties. *The Arboricultural Impact Assessment only considers the developable areas of the site. The south-western corner of the site contains a densely vegetated area extending down a steep slope towards Gore Creek. This part of the site will remain largely intact and is considered under the Ecology Impact Assessment prepared by Keytone Ecological and included in support of the EIS. When trees from this area are considered the tree retention on site will exceed required tree removal. The trees will be considered as 9 stands to encompass all trees. <i>Tree Protection Zone* fences or works are marked on the Appendix F, Trees to be Retained and Tree Protection Zones.

The site is comprised of an existing hospital with the Heritage listed Pallister House to be retained and some of the hospital structures are to be demolished and are to be replaced with a proposed hospital re-development, construction of seniors' housing parking and associated infrastructure. As part of the Landscape Plan where appropriate, the tree cover on the site will be enhanced by planting with advanced specimens/s of appropriate tree species for the space available above and below ground being soil volumes available and to prevent future conflict between trees and built structures.

The current proposed building design and its configuration and infrastructure were arrived at following the undertaking of an arboricultural assessment of the trees on the site to determine their significance by Redgum Horticultural. The plans provided do not show the location of sewer, water or electricity supply to the proposed development.

Setbacks for the new works and associated infrastructure should provide enough space to protect the existing growing environments both above and below ground for trees to be retained, and so that trees within the property and on adjoining properties will not be adversely affected. The proposed design has considered the spatial requirements for the trees to be retained based on the information available or provided at the time of compiling this report, and those areas to be protected will be discussed further. The Summary lists the general condition of trees and a summary of works in Table 1.0. In section 7.0 each individual tree is described in greater detail including protective or remedial works. Tree maintenance works including pruning, removal or transplantation are detailed in section 14.0.

3.0 SUMMARY

This report considers 297 trees, 254 trees within the site, 1 boundary tree and 8 trees within neighbouring properties and 34 trees on River Road reserve.

The total of trees recommended for retention and protection are (211):

(204) Trees 1, 2, 4, 5, 6, 7, 8A, 9, 10, 12, 13, 14, 14A, 15, 20, 21A, 22, 22A, 23, 25 to 31⁽⁷⁾, 33, 34, 35, 37, 40, 41, 44, 45, 45A^{x2}, 46 to 54, 57 to 68, 71 to 73, 74A, 75 to 81, 81A, 81B, 82, 83, 83A, 84, 85A^{*}, 86 to 91, 91A, 91B, 91C, 92, 93, 94, 95, 102, 103, 104, 107, 109 to 130, 132, 133A, 133B, 134 to 139, 142A^{x4}, 143, 147, 147A, 147B, 147C, 147D^{x3,} 147E, 148^{x5}, 149, 150, 151, 152, 153A, 154, 155, 156, 157^{x3}, 158, 159, 165, 194, 201, 209, 210, 212 to 222, 224 to 227^{x3}, 229, 231, 233 to 237, 239, 241, 249, 251, 252, 254, 258 to 266, 267, 268, 270, 271 & 272 to be retained and protected.

(4) Trees 21, 24, 108 & 211 are recommended to be retained and protected with further investigation or remedial works required independent to the proposed development.

(3) Trees 250, 253 & 255 are dead and recommended to be retained as habitat specimens.

The total of trees recommended for removal are (86):

(4) Trees 17, 19, 38 & 39 are recommended to be removed as they are in the proposed footprint for the Respite facility. (51) Trees 144, 144A, 145, 159A, 160, 160A, 161, 162, 162A^{x2}, 163, 164, 167, 168, 171 to 186, 188 to 192, 196, 197, 198, 203, 204, 207, 208, 243, 244, 245, 246, 247, 256, 257 & 269^{x2} are recommended to be removed as they are situated within the proposed building envelope and associated infrastructure.

(5) Trees 11A, 38A, 42, 43, 74, 133 & 200 are recommended to be removed as they have compromised structural integrity with the potential to collapse in part or full.

(1) Tree 16 is recommended to be removed to reduce competition for locally indigenous specimens.

(19) Trees 8, 18, 32, 36, 105, 146, 153, 187, 193, 195, 199, 206, 230, 232, 240, 242 & 248 are recommended to be removed as they are exempt specimens which are not protected under Council guidelines and to reduce competition for locally indigenous specimens.

(3) Trees 85, 202 & 205 are recommended to be removed as they are exempt specimens which are not protected under Council guidelines and have compromised structural integrity with the potential to collapse in part or full.

(3) Trees 11, 38B & 223 are dead and recommended to be removed.

(2) Trees 228 & 238 located within the Council road reserve are recommended to be removed independent to the proposed development as they are considered hazardous with decay and compromised structural integrity with the potential to collapse in part or full.

(22) Trees 3, 55, 56, 69, 70, 96, 97, 98, 99, 100, 101, 106, 107A, 107B, 107C, 131, 140, 141, 166, 169, 170 were missing in 2017 or have been removed prior to our attendance at site in 2019 and are not included in the totals above.

For trees where the alignment of the driveway or works at or above existing ground levels are an encroachment to retained specimens, the section of the proposed works within the Tree Protection Zone (TPZ) of the specimens is to be constructed using tree sensitive excavation and construction techniques such as pier and beam construction with a suspended slab to reduce any impact on the stability with piers to be dug by hand with non-motorised machinery to further assist in their protection.

Where possible, for hard landscaping within the TPZ of retained specimens this is to be constructed using tree sensitive excavation and construction techniques such as either porous or permeable paving or pier and beam construction with a suspended slab to reduce any impact on the stability with piers to be dug by hand with non-motorised machinery to further assist in their protection.

For trees where excavation is required below existing ground level within the TPZ of retained specimens the section of the excavation within the TPZ of the specimens is to be constructed using tree sensitive excavation and construction techniques such as a vertical cut with shotcrete and contiguous pilings to reduce any impact on their stability.

If associated infrastructure (pipe works) are to be installed within the Tree Protection Zone of any retained specimen, they are to be installed by hand with non-motorised machinery. If structural roots are found within the trench, they are to be left intact and dug around retaining this specimen's structural integrity. Works are to be undertaken in consultation with the project arborist.

The impacts to specimens which are to be retained and protected as per AS 4970 (2009) Section 3, 3.3.3 *Major Encroachments* from development works within >10% of the area of the Tree Protection Zone and as per discussion points in section 14 in part B of this report will be detailed in the final Arboricultural Impact Assessment report following receipt of detailed plans. Any works within TPZ must be in consultation with and when required, certified by the Project Arborist in accordance with AS4970 (2009).

4.0 AIMS

Part A: (AIA) Arboricultural Impact Assessment

4.1 Detail the condition of the trees or large shrubs on the site or on adjoining sites where such trees or large shrubs may be affected by the proposed works, by assessment of individual specimens or stands.

4.2 Provide as an outcome of the visual tree assessment (VTA), the following: a description of the trees or large shrubs, observations made, discussion of the effects the location of the proposed building works may have on the trees or large shrubs and make recommendations required for remedial or other works to the trees or large shrubs, if and where appropriate.

Part B: (TPP) Tree Protection Specification & Tree Protection Plan

4.3 Provide a detailed specification for remedial works or protection measures for their retention in a safe and healthy condition, or a condition not less than that at the time of initial inspection for this report, or in a reduced but sustainable condition due to the impact of the development but ameliorated through tree protection measures able to be applied, and will consider the location and condition of the trees or large shrubs in relation to the proposed building works, or recommend removal and replacement where appropriate.

4.4 Determine from the assessment the works or measures required to ameliorate the impact upon the trees or large shrubs to be retained, by the proposed building works or future impacts the trees or large shrubs may have upon the new building works if and where appropriate, or the benefits of removal and replacement if appropriate for the medium to long term safety and amenity of the site.

5.0 OBJECTIVES

Part A: Arboricultural Assessment Report

- 5.1 Assess the condition of the subject trees.
- 5.2 Determine impact of development on the subject trees.
- 5.3 Provide recommendations for retention or removal of the subject trees.

Part B: Tree Protection Plan

5.3 Provide recommendations for retention or removal of the subject trees or large shrubs.

6.0 METHODOLOGY (This Methodology where utilised is applied to both Parts A and B).

6.1 The method of assessment of tree/s applied is adapted from the principles of visual tree assessment undertaken from the ground, which considers:

- Tree health and subsequent stability, both long and short term
- Sustainable Retention Index Value (SRIV) Version 4 (IACA 2010) ©
- Hazard potential to people and property
- Amenity values
- Habitat values
- Significance

6.2 This assessment is undertaken using standard tree assessment criteria for each tree based on the values above and is implemented as a result of at least one comprehensive and detailed site inspection to undertake a visual tree assessment from the ground of each individual tree, or stand of trees, or a representative population sample. Any dimensions recorded as averages, or by approximation are noted accordingly.

- 6.3 This report adopts Australian Standard AS4970 2009 *Protection of trees on development sites* as a point of reference and guide for the recommended minimum setbacks (Table 2 Part B) from the centre of a tree's trunk to development works and the distances may be increased or decreased by the author in accordance with AS4970 Section 3.3.4 as a result of other factors providing mitigating circumstances or constraints as indicated by but not restricted to the following:
 - 1. Condition of individual trees,
 - 2. Tolerance of individual species to disturbance,
 - 3. Geology e.g. physical barriers in soil, rock floaters, bedrock to surface
 - 4. Topography e.g. slope, drainage,
 - 5. Soil e.g. depth, drainage, fertility, structure,
 - 6. Microclimate e.g. due to landform, exposure to dominant wind,
 - 7. Engineering e.g. techniques to ameliorate impact on trees such as structural soil, gap graded fill, lateral boring,
 - 8. Construction e.g. techniques to ameliorate impact on trees such as pier and beam, bridge footings, suspended slabs,
 - 9. Root mapping,
 - 10. Physical limitations existing modifications to the environment and any impact to tree/s by development e.g. property boundaries, built structures, houses, swimming pools, road reserves, utility services easements, previous impact by excavation, or construction in other directions, soil level changes by cutting or filling, existing landscaping works within proximity, modified drainage patterns,
 - 11. Extraneous factors e.g. potential future impacts from development on adjoining land when the tree is located on or near to a property boundary.
- 6.4 Trees in groups may be referred to as stands and a stand may exclusively contain specimens to be either retained or removed or a combination of both. A stand may be used to discuss all the trees on a given site to expedite their assessment or refer to trees growing proximate to one another or within a defined space. Stands may be comprised by mass boundary or screen plantings, to form a group of the same or a mixture of taxa. Each stand is considered as a single unit with each component tree assessed and expressed in tabular form or indicated by a given percentage as a population sample of each stand. Where it is appropriate for a stand of trees to be retained in full or part, the location and setback of Tree Protection Zone fences or works, are prescribed to provide for the preservation of the stand or selected component trees, in a condition not less than that at the time of initial inspection for its incorporation into the landscape works for the site, or in a reduced but sustainable condition due to the impact of the development but ameliorated through tree protection measures.
- 6.5 The meanings for terminology used herein are taken from the IACA Dictionary for Managing Trees in Urban Environments 2009. An extract from the IACA Dictionary forms a glossary of terms included as Appendix E.

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done
1	Cinnamomum camphora	Camphor Laurel	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
2	Pinus radiata	Radiata Pine	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
3	MISSING		М	Missing at time of inspection
4	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
5	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
6	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
7	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
8	Cinnamomum camphora	Camphor Laurel	F	Remove – Inappropriate species
9	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
10	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
11	Acacia		D	Dead - Remove
12	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
13	Pittosporum undulatum	Native Daphne	Р	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
14	Agathis robusta	Queensland Kauri Pine	G	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
15	Eucalyptus pilularis	Blackbutt	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
16	Phoenix canariensis	Date Palm	F	Remove – self-sown
17	Eucalyptus saligna	Sydney Blue Gum	F	Remove due to Respite building and replace with new plantings as per Landscape Plan
18	Erythrina x sykesii	Coral tree	F	Remove - exempt species

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done
19	Angophora bakeri	Small Leaf Apple	F	Remove due to Respite building and replace with new plantings as per Landscape Plan
20	Glochidion ferdinandi	Cheese Tree	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
21	Eucalyptus pilularis	Blackbutt	F	Retain – Further investigation required
22	Eucalyptus saligna x botryoides	Wollongong Wollybutt	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
23	Eucalyptus saligna x botryoides	Wollongong Wollybutt	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
24	Eucalyptus pilularis	Blackbutt	F	Retain – Further investigation required
25	Eucalyptus botryoides	Bangalay Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
26	Eucalyptus botryoides	Bangalay Gum	Р	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
27	Eucalyptus saligna	Sydney Blue Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
28	Glochidion ferdinandi/ Eucalyptus saligna x botryoides – two species entwined	Cheese Tree/ Wollongong Wollybutt	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
29	Eucalyptus saligna	Sydney Blue Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
30	Glochidion ferdinandi/ Eucalyptus saligna x botryoides – two species entwined	Cheese Tree/ Wollongong Wollybutt	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
31	Phoenix canariensis	Date Palm	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
32	Cinnamomum camphora	Camphor Laurel	F	Remove – Inappropriate species
33	Pittosporum undulatum	Native Daphne	Р	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
34	Pittosporum undulatum	Native Daphne	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
35	Eucalyptus saligna x botryoides	Wollongong Wollybutt	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
36	Erythrina x sykesii	Coral tree	F	Remove - exempt species

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done
37	Eucalyptus pilularis	Blackbutt	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
38	Angophora costata	Sydney Red Gum	Р	Remove due to Respite building and replace with new plantings as per Landscape Plan
39	Eucalyptus pilularis	Blackbutt	F	Remove due to Respite building and replace with new plantings as per Landscape Plan
40	Eucalyptus saligna	Sydney Blue Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
41	Eucalyptus saligna	Sydney Blue Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
42	Eucalyptus resinifera	Red Mahogany	F	Remove – Bracket fungi
43	Pittosporum undulatum	Native Daphne	Р	Remove – overmature / cavity
44	Glochidion ferdinandi	Cheese Tree	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
45	Eucalyptus pilularis	Blackbutt	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
46	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
47	Glochidion ferdinandi	Cheese Tree	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
48	Eucalyptus pilularis	Blackbutt	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. habitat tree that will require pruning
49	Eucalyptus resinifera	Red Mahogany	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
50	Acacia falcata	Hickory Wattle	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
51	Eucalyptus resinifera	Red Mahogany	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
52	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
53	Eucalyptus resinifera	Red Mahogany	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
54	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done
55	Missing		М	Missing at time of inspection
56	Missing		М	Missing at time of inspection
57	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
58	Eucalyptus resinifera	Red Mahogany	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
59	Pittosporum undulatum	Native Daphne	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
60	Cinnamomum camphora	Camphor Laurel	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
61	Cinnamomum camphora	Camphor Laurel	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
62	Grevillea robusta	Silky Oak	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan Exempt species
63	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
64	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
65	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
66	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
67	Cinnamomum camphora	Camphor Laurel	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
68	Cinnamomum camphora	Camphor Laurel	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
69	Missing		М	Missing at time of inspection
70	Missing		М	Missing at time of inspection
71	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
72	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done
73	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
74	Allocasuarina torulosa	Forest She Oak	Р	Remove as failed at base
75	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
76	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
77	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
78	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
79	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
80	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
81	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
82	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
83	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
84	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
85	Erythrina x sykesii	Coral tree	F	Remove - exempt species
86	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
87	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
88	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
89	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done
90	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
91	Jacaranda mimosifolia	Jacaranda	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
92	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
93	Cedrus deodara	Himalayan Cedar	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
94	Camellia japonica	Camellia	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
95	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
96	Missing		М	Missing at time of inspection
97	Missing		М	Missing at time of inspection
98	Missing		М	Missing at time of inspection
99	Missing		М	Missing at time of inspection
100	Missing		М	Missing at time of inspection
101	Missing		М	Missing at time of inspection
102	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
103	Platanus digitata	Plane Tree	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
104	Jacaranda mimosifolia	Jacaranda	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
105	Schefflera actinophylla	Large Leaf Umbrella	Р	Remove – exempt species
106	Missing		М	Missing at time of inspection
107	Thuja orientalis	Bookleaf Conifer	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done
108	Eucalyptus pilularis	Blackbutt	F	Retain – Further investigation required
109	Eucalyptus microcorys	Tallowwood	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
110	Eucalyptus grandis	Rose gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
111	Liquidambar styraciflua	Sweet Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – Exempt species
112	Celtis sp.	Hackberry	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
113	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
114	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
115	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
116	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
117	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
118	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
119	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
120	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
121	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
122	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
123	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
124	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done
125	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
126	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
127	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
128	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
129	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
130	Cupressus torulosa	Bhutan Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
131	Missing			Missing at time of inspection
132	Glochidion ferdinandi	Cheese Tree	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
133	Pinus patula	Mexican Weeping Pine	Р	Remove - OVERMATURE
134	Cupressus cashmeriana	Kashmir Cypress	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
135	Cedrus deodara	Himalayan Cedar	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
136	Cedrus deodara	Himalayan Cedar	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
137	Callistemon salignus	Willow Bottlebrush	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
138	Eucalyptus saligna	Sydney Blue Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
139	Livistona chinensis	Chinese Fan Palm	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
140	Missing		М	Missing at time of inspection
141	Missing		М	Missing at time of inspection
142	Eucalyptus scoparia	Wallangarra White Gum	Р	Now removed at time of 2019 inspection

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done					
143	Phoenix canariensis	Date Palm	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
144	Ginkgo biloba	Maidenhair Tree	F	Remove and replace with new plantings as per Landscape Plan					
145	Ginkgo biloba	Maidenhair Tree	F	Remove and replace with new plantings as per Landscape Plan					
146	Cinnamomum camphora	Camphor Laurel	F	Remove – exempt species					
147	Eucalyptus saligna	Sydney Blue Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
148/2	Hymenosporum flavum x5	Native Frangipani	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
149	Eucalyptus microcorys	Tallowwood	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
150	Liquidambar styraciflua	Sweet Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
151	Acer negundo	Box Elder Maple	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – Exempt species					
152	Acer negundo	Box Elder Maple	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – Exempt species					
153	Acer negundo	Box Elder Maple	F	Remove – exempt species					
154	Magnolia grandiflora	Bull Bay Magnolia	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
155	Magnolia grandiflora	Bull Bay Magnolia	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
156	Jacaranda mimosifolia	Jacaranda	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
157/3	Acer negundo x3	Box Elder Maple	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – Exempt species					
158	Triadica sebifera	Chinese Tallowwood	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
159	Brachychiton acerifolius	Illawarra Flame Tree	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
160	Cedrus atlantica	Atlantic Cedar	Р	Remove and replace with new plantings as per Landscape Plan					
161	Pyrus	Ornamental Pear	F	Remove and replace with new plantings as per Landscape Plan					

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done
162	Pyrus	Ornamental Pear	F	Remove and replace with new plantings as per Landscape Plan
163	Angophora costata	Sydney Red Gum	F	Remove and replace with new plantings as per Landscape Plan
164	Jacaranda mimosifolia	Jacaranda	F	Remove and replace with new plantings as per Landscape Plan
165	Jacaranda mimosifolia	Jacaranda	Р	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
166	Cinnamomum camphora	Camphor Laurel	Р	Now removed at time of 2019 inspection
167	Ficus rubiginosa	Port Jackson Fig	F	Remove and replace with new plantings as per Landscape Plan
168	Eucalyptus sideroxylon	Pink Flowering Ironbark	F	Remove and replace with new plantings as per Landscape Plan
169	Missing		М	Missing at time of inspection
170	Missing		М	Missing at time of inspection
171	Acer negundo	Box Elder Maple	F	Remove and replace with new plantings as per Landscape Plan
172	Acer negundo	Box Elder Maple	F	Remove and replace with new plantings as per Landscape Plan
173	Acer negundo	Box Elder Maple	F	Remove and replace with new plantings as per Landscape Plan
174	Acer negundo	Box Elder Maple	F	Remove and replace with new plantings as per Landscape Plan
175	Acer negundo	Box Elder Maple	F	Remove and replace with new plantings as per Landscape Plan
176	Eucalyptus pilularis	Blackbutt	F	Remove and replace with new plantings as per Landscape Plan
177	Eucalyptus pilularis	Blackbutt	F	Remove and replace with new plantings as per Landscape Plan
178	Phoenix canariensis	Date Palm	F	Remove and replace with new plantings as per Landscape Plan
179	Phoenix canariensis	Date Palm	F	Remove and replace with new plantings as per Landscape Plan
180	Phoenix canariensis	Date Palm	F	Remove and replace with new plantings as per Landscape Plan
181	Phoenix canariensis	Date Palm	F	Remove and replace with new plantings as per Landscape Plan
182	Phoenix canariensis	Date Palm	F	Remove and replace with new plantings as per Landscape Plan
183	Phoenix canariensis	Date Palm	F	Remove and replace with new plantings as per Landscape Plan

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done
184	Eucalyptus pilularis	Blackbutt	F	Remove and replace with new plantings as per Landscape Plan
185	Eucalyptus sideroxylon	Pink Flowering Ironbark	F	Remove and replace with new plantings as per Landscape Plan
186	Eucalyptus sideroxylon	Pink Flowering Ironbark	F	Remove and replace with new plantings as per Landscape Plan
187	Syagrus romanzoffianum	Cocos Palm	F	Remove - exempt species
188	Syzygium smithii	Lilly Pilly	F	Remove and replace with new plantings as per Landscape Plan
189	Ficus rubiginosa	Port Jackson Fig	F	Remove and replace with new plantings as per Landscape Plan
190	Ficus rubiginosa	Port Jackson Fig	F	Remove and replace with new plantings as per Landscape Plan
191	Cinnamomum camphora	Camphor Laurel	F	Remove; environmental weed species in building footprint
192	Cinnamomum camphora	Camphor Laurel	F	Remove; environmental weed species in building footprint
193	Olea europaea var. africana	African Olive	E	Remove – exempt species
194	Populus deltoids	Eastern Cottonwood	E	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
195	Celtis	Hackberry	F	Remove - exempt species
196	Triadica sebifera	Chinese Tallowwood	F	Remove and replace with new plantings as per Landscape Plan
197	Triadica sebifera	Chinese Tallowwood	F	Remove and replace with new plantings as per Landscape Plan
198	Pittosporum undulatum	Native Daphne	F	Remove and replace with new plantings as per Landscape Plan
199	Acer negundo	Box Elder Maple	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – exempt species
200	Melia azedarach	White Cedar	Р	Remove and replace with new plantings as per Landscape Plan.
201	Triadica sebifera	Chinese Tallowwood	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
202	Erythrina x sykesii	Coral tree	Р	Remove - exempt species with compromised structural integrity
203	Acer negundo	Box Elder Maple	F	Remove - in building footprint (exempt if under 6 metres)
204	Ficus rubiginosa	Port Jackson Fig	F	Remove and replace with new plantings as per Landscape Plan

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done				
205	Erythrina x sykesii	Coral tree	F	Remove - exempt species with compromised structural integrity				
206	Privet		W	Remove – weed species				
207	Stenocarpus sinuatus	Firewheel Tree	F	Remove and replace with new plantings as per Landscape Plan				
208	Phoenix canariensis	Date Palm	F	Remove and replace with new plantings as per Landscape Plan				
209	Pittosporum undulatum	Native Daphne	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
210	Leptospermum sp.	Tea Tree	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
211	Eucalyptus botryoides	Bangalay Gum	F	Retain – Further investigation required. – Road reserve specimen				
212	Pittosporum undulatum	Native Daphne	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
213	Lophostemon confertus	Queensland Brush Box	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
214	Allocasuarina torulosa	Forest She Oak	Р	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
215	Lophostemon confertus	Queensland Brush Box	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
216	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
217	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
218	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
219	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
220	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
221	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				
222	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>				

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done					
223	Allocasuarina torulosa	Forest She Oak	D	Remove – Dead specimen. – Road reserve specimen					
224	Lophostemon confertus	Queensland Brush Box	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					
225	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					
226	Corymbia citriodora	Lemon Scented Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					
227/4	Glochidion ferdinandi x3	Cheese Tree	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					
228	Eucalyptus pilularis	Blackbutt	Р	Remove – structural weakness / potentially hazardous – Road reserve specimen					
229	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					
230	Celtis occidentalis	Hackberry	F	Remove - exempt species - Road reserve specimen					
231	Banksia integrifolia	Coastal Banksia	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					
232	Cotoneaster franchettii	Cotoneaster	F	Remove - exempt species - Road reserve specimen					
233	Jacaranda mimosifolia	Jacaranda	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – Road reserve specimen					
234	Syncarpia glomulifera	Turpentine	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					
235	Eucalyptus haemastoma	Scribbly Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					
236	Lophostemon confertus	Queensland Brush Box	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					
237	Lophostemon confertus	Queensland Brush Box	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					
238	Banksia integrifolia	Coastal Banksia	D	Remove – dead tree/ potentially hazardous – Road reserve specimen					
239	Rhaphiolepis sp.	Hawthorn	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					
240	Celtis occidentalis	Hackberry	F	Remove - exempt species / road reserve - Road reserve specimen					
241	Melia azedarach	White Cedar	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – <i>Road reserve specimen</i>					

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done					
242	Celtis occidentalis	Hackberry	F	Remove - exempt species / road reserve - Road reserve specimen					
243	Araucaria cunninghamii	Hoop Pine	F	Remove and replace with new plantings as per Landscape Plan					
244	Cupaniopsis anacardioides	Tuckeroo	F	Remove and replace with new plantings as per Landscape Plan					
245	Magnolia grandiflora	Bull Bay Magnolia	F	Remove and replace with new plantings as per Landscape Plan					
246	Eucalyptus pilularis	Blackbutt	F	Remove and replace with new plantings as per Landscape Plan					
247	Eucalyptus pilularis	Blackbutt	F	Remove and replace with new plantings as per Landscape Plan					
248	Cinnamomum camphora	Camphor Laurel	F	Remove; environmental weed species in building footprint					
249	Ulmus procera	English Elm	Р	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
250	Eucalyptus sp.	Eucalypt	D	Dead specimen – retain for habitat					
251	Ficus rubiginosa	Port Jackson Fig	G	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
252	Cinnamomum camphora	Camphor Laurel	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
253	Eucalyptus sp.	Eucalypt	D	Dead specimen – retain for habitat					
254	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
255	Eucalyptus sp.	Eucalypt	D	Dead specimen – retain for habitat					
256	Callistemon citrinus	Crimson Bottlebrush	F	Remove and replace with new plantings as per Landscape Plan					
257	Dracaena marginata	Dragon tree	F	Remove and replace with new plantings as per Landscape Plan					
258	Melaleuca styphelioides	Prickly Paperbark	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
259	Salix matsudana 'tortuosa'	Tortured Willow	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
260	Erythrina x hybrida	Coral tree	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – Exempt species					
261	Syzygium australe	Scrub Cherry	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
262	Magnolia grandiflora	Bull Bay Magnolia	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done					
263	Grevillea robusta	Silky Oak	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
264	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
265	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
266	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
267	Ravenala madagascariensis	Traveller's Palm	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
268	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
269 / 5	Archontophoenix cunninghamiana x2	Bangalow Palm	F	Remove and replace with new plantings as per Landscape Plan					
270	Syzygium luehmannii	Small Leafed Lilly Pilly	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
271	Phoenix canariensis	Date Palm	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
272	Pittosporum undulatum	Native Daphne	F						
8A	Glochidion ferdinandi	Cheese Tree	Р	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
11A	Acacia falcata	Hickory Wattle	Р	Already removed – overmature specimen					
14A	Glochidion ferdinandi	Cheese Tree	Р	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
21A	Pittosporum undulatum	Native Daphne	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
22A	Cupaniopsis anacardioides	Tuckeroo	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
38A	Angophora costata	Sydney Red Gum	F	Remove – overmature specimen					
38B	Angophora costata	Sydney Red Gum	D	Remove – Dead specimen					
45A/6	Ficus rubiginosa x2	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done					
74A	Angophora costata	Sydney Red Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
81A	Stenocarpus sinuatus	Firewheel Tree	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
81B	Acer negundo	Box Elder Maple F Retain and protect within Tree Protection Plan							
83A	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
85A	Ficus rubiginosa	Port Jackson Fig	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
91A	Lagerstroemia indica	Crepe Myrtle	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – Exempt species					
91B	Lagerstroemia indica	Crepe Myrtle	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan. – Exempt species					
91C	Photinia glabra	Photinia	Р	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
107A	Jacaranda mimosifolia	Jacaranda	F	Now removed at time of 2019 inspection					
107B	Robinia pseudoacacia	Golden Rain Tree	F	Now removed at time of 2019 inspection					
107C	Lagerstroemia indica	Crepe Myrtle	F	Now removed at time of 2019 inspection					
133A	Melaleuca bracteata 'Revolution Green'	Revolution Green Paperbark	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
133B	Melaleuca bracteata 'Revolution Green'	Revolution Green Paperbark	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
142A/7	Phoenix canariensis x4	Date Palm	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
144A	X Cupressocyparis leylandii	Leyland Cypress	F	Remove and replace with new plantings as per Landscape Plan					
147A	Phoenix canariensis	Date Palm	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
147B	Celtis	Hackberry	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					
147C	Liquidambar styraciflua	Sweet Gum	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.					

Tree / Stand No.	Genus and species	Common name	Condition G = Good, F = Fair P = Poor, D = Dead W= Weed/Exempt	Description of work to be done
147D/8	Acer negundo x3	Box Elder Maple	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
147E	Acer negundo	Box Elder Maple	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan exempt species
153A	Magnolia grandiflora	Bull Bay Magnolia	F	Retain and protect within a Tree Protection Zone (TPZ) as per the Tree Protection Plan.
159A	Syzygium australe	Lilly Pilly	F	Remove and replace with new plantings as per Landscape Plan
160A	Syzygium australe	Lilly Pilly	F	Remove and replace with new plantings as per Landscape Plan
162A/9	Archontophoenix cunninghamiana x2	Bangalow Palm	F	Remove and replace with new plantings as per Landscape Plan

7.0 TREE ASSESSMENT – 7.1 - Assessment of a stand of Trees

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spr app me Orien N=r S= S E=I	own read orox. tres / tation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
1	Cinnamomum camphora	м	LV	F	MLVF - 4 2	С	12	6 N	6 S	5 E	5 W	80 70	800 R	1/R ST	5 1-S, 1-E	YES	NO	G	2
·	Camphor Laurel	Comments:	Dieback	upper cro	wn, various you	ng specimens	of Prive	et, Cam	phor l	Laurel	in und	lerstorey, ha	ngers		•				
	Pinus radiata	М	GV	F	MGVF - 9 2	С	12	4.5 N	4.5 S	3.5 E	3.5 W	60 70	600 R	2/NW ST	5 1-S, 2-NE	YES	NO	G	2
2	Radiata Pine	Comments: decay.	Scalped	surface ro	pots to north eas	st, wild olive ur	nderstor				stub de	ecay. Scalpe	ed surface roc	ts to north eas	st, wild olive und	derstorey,	localised	dead s	tub
3	Missing	Comments:	Missing	at time of	assessment														
	Ficus rubiginosa	м	LV	F	MLVF – 4	с	9	5	5	4.5	4.5	70	1100	5/R	5 - 1-NE/SE,	YES	YES	G	1
4				•	1	-		Ν	S	E	W	70	R	ST	1-E/SW	120	120	0	1
	Port Jackson Fig	Comments:	Shallow	, soil expo	sed sandstone	shelving. Fig p	syllid/dr	ought s	stress,				4500 0400		1	T	1	1	
5	Ficus rubiginosa	м	GV	F	MGVF – 9 1	C	10	7 N	7 S	6.5 E	6.5 W	90 80	1500 DARB R	5/R ST	3	YES	YES	G	1
	Port Jackson Fig	Comments:	Low leve	el Fig psyl	lid/drought stres	s, recommend	l remove	e Privet	t saplir	ng fron	n SRZ.								
	Ficus rubiginosa	М	LV	F	MLVF – 4	С	14	14	14	14	14	80	1800 DARB	5/R	5	YES	YES	G	1
6	Jackson Fig	Commonto:	Modorot	to loval fig	1 psyllid/ drough	t atraca CES/D		N	S	E	W	60	R	ST	5-S, 4-NW				1
	5	Comments:	Nodera	le level, liç	MGVF – 9		15 – mo 1	6	6	e epico	5	80	1, sunace roo 1300#	5/R		T			1
7	Ficus rubiginosa	М	GV	F	1	- 1	11	N	S	E	W	80	R	ST	3	YES	YES	G	1
'	Port Jackson Fig	Comments:	Low leve	el Fig psyl	lid/drought stres	s, failing brand	ch north	west lo	ower c	rown.	Nest b	ox lower cro	wn requires r	epair/removal/	replace.	1			
	Cinnamomum camphora	Y/M	GV	F	Y/MGVF – 9.5	s	8	3	3	2	2	80	280	1/R	3	NO	NO	Р	3
8		.,		•	2	-	-	Ν	S	Е	W	80	R	ST	-		NO	Г	4
	Camphor Laurel	Comments:	Self-sov	vn SRZ of	tree 7 – rubbing	, damaging br	anches			-					ot invasive weed	d species.			
9	Ficus rubiginosa	М	GV	F	MGVF – 9 1	D	16	7 N	7 S	6.5 E	6.5 W	60 70	1400 DARB R	5/R ST	3	YES	YES	G	1
	Port Jackson Fig	Comments:	Moderat	te level dro	ought stress, wo	und/cavity at 3	3m north	n west s	stem, s	storm	lamag	e hangers n	nid crown.						
10	Ficus rubiginosa	м	LV	F	MLVF – 4	- I	9	1.5 N	1.5 S	3 E	3 W	90 70	900 DARB R	1/R ST	5 2-S, 2-W	YES	NO	G	2
	Port Jackson Fig	Comments:	Extensiv	/e SRZ, M	oderate high-vo	lume epicormi	cs throu	II						_	· · · · · · · · · · · · · · · · · · ·	L	L		I

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres	Sp ap m Orie N= S= E=	own read prox. etres / ntation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
11	Acacia	Comments:	Dead st	ump, bore	r.													
12	Ficus rubiginosa	м	GV	F	MGVF – 9 1	С	12	5.5 5.5 N S	4 E	4 W	90 80	1400# DARB	2/NW SC	3	YES	YES	G	1
. –	Port Jackson Fig	Comments:	Recomm	nend remo	ove Privet in Stru	ctural root zo	ne				•				•			
13	Pittosporum undulatum	М	LV	Р	MLVP - 2 3	S	7	2.5 2.5 N S	2.5 E	2.5 W	90 60	6x 150# R	1/R ST	1	YES	YES	Ρ	3
10	Native Daphne	Comments:	6x basa	I stems, P	syllid/Honey dew	, Drought stre	ess.	11					•	L				
14	Agathis robusta	М	GV	G	MGVG – 10 1	D	18	4 4 N S	3 E	3 W	60 80	700 R	1/R ST	1	NO	NO	G	1
	Queensland Kauri Pine	Comments:	Majority	root syste	m likely truncate	d back into ba	ank to n	orth west.										
15	Eucalyptus pilularis	М	LV	F	MLVF - 4 2	С	17	6 6 N S	4.5 E	4.5 W	60 60	600 R	1/R ST	1	YES	NO	Ρ	2
10	Blackbutt	Comments:	Nastutit	ermes wal	<i>lkeri</i> termite nest	in first branch	n union,	Recommend	d furthe	er inves	stigation.							
16	Phoenix canariensis	Y	GV	F	YGVF – 8 2	S	4	2.5 2.5 N S	2.5 E	2.5 W	90 80	800 R	1/R ST	1	NO	NO	G	3 4
10	Date Palm	Comments:	Likely se	elf-sown, r	ecommend remo	ove to reduce	compet	tion for local	ly indig	genous	species.			I				
17	Eucalyptus saligna	М	GV	F	MGVF – 9 2	D	18	7 7 N S	7 E	7 W	80 70	750 R	1/R ST	1	NO	NO	G	1
	Sydney Blue Gum	Comments:	Fill in SF	RZ, specie	s less likely rem	nant than Euc	alyptus	pilularis.						I				
18	Erythrina x sykesii	Y/M	GV	F	Y/MGVF - 8.5 2	I	11	4.5 4.5 N S	3.5 E	3.5 W	80 D	650@300 R	5/R ST	1	NO	YES	Ρ	3 4
	Coral tree	Comments:	Week u	nion @ 60	0mm – REC rem	noval reduce o	competi	ion locally in	digenc	us spe	ecies. – Exer	mpt species	•		•			
19	Angophora bakeri	М	LV	F	MLVF - 4 2	D	12	4.5 4.5 N S	4.5 E	4.5 W	60 60	400 R	2/NE ST	1	NO	NO	G	2
	Small Leaf Apple	Comments:	Moderat	te volume	epicormics mid o	crown.			•		·	•	•		·	•		
20	Glochidion ferdinandi	М	GV	F	MGVF – 9 2	I	7	3.5 3.5 N S	2.5 E	2.5 W	70 70	450@300 R	5/R ST	1	NO	YES	G	2
	Cheese Tree	Comments:	Twin ba	sal stems.				• • • •										

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spr app me Orien N=r S= S E=1	own read rrox. tres / tation north South East Nest		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
21	Eucalyptus pilularis	М	GV	F	MGVF – 9 2	D	15	7.5 N	7.5 S	4 E	4 W	60 60	520 R	1/R ST	3	YES	NO	G	2
	Blackbutt	Comments:	Not on s	urvey, Lo	west branch to tl	he north, heav	y end w	eight;	recom	mend	prune	to trunk colla	ar. Basal cavi	ty, termite dan	nage. Recomme	end Resis	tograph t	esting.	
22	Eucalyptus saligna x botryoides	Y/M	GV	F	Y/MGVF – 8.5 2	С	13	4.5 N	4.5 S	2.5 E	2.5 W	30 70	400@300 R	2/NE ST	1	NO	YES	G	2
	Wollongong Wollybutt	Comments:	Contribu	ites to ave	nue street scap	e of St Vincen	ťs Roac	Ι.							•				
23	Eucalyptus saligna x botryoides	Y	LV	F	YLVF – 3 3	S	9	3 N	3 S	2 E	2 W	70 50	200 R	2/E ST	1	NO	NO	Ρ	2
	Wollongong Wollybutt	Comments:	Suppres	sed speci	men.		1	1		I	1				1		1		
24	Eucalyptus pilularis	М	GV	F	MGVF – 9 2	D	18	7.5 N	7.5 S	6.5 E	6.5 W	60 50	900 R	2/NE ST	1	YES	NO	Ρ	1 3
	Blackbutt	Comments:	Likely re	mnant, de	veloping habitat	tree (hollow f	ormatio	n), tern	nite ev	idence	recor	nmends Res	sistograph tes	ting.					
25	Eucalyptus botryoides	М	GV	F	MGVF – 9 2	С	15	5 N	5 S	4 E	4 W	50 70	480 R	2/E SC	1	YES	NO	G	1 1
	Bangalay Gum	Comments:	Basal w	ound, bore	er, good wound	wood but in-ro	lling. Co	ontribut	es to a	avenue	e stree	t scape of S	t Vincents Ro	ad.					
26	Eucalyptus botryoides	Y	LV	Р	YLVP – 1 3	S	9	4 N	4 S	2 E	2 W	50 50	180 R	1/R ST	1	NO	NO	Ρ	3
	Bangalay Gum	Comments:	Thin cro	wn, suppr	essed specimen	l.													
27	Eucalyptus saligna	Y/M	GV	F	Y/MGVF – 8.5 2	- I	11	2.5 N	2.5 S	1.5 E	1.5 W	50 70	240 R	1/R ST	1	NO	NO	G	2
	Sydney Blue Gum	Comments:	Two low	est brancl	nes dead, mode	rate volume e	picormic	s mid o	crown.										
	Glochidion ferdinandi/ Eucalyptus saligna x	Y/M	GV	F	Y/MGVF – 8.5	S	9	2.5	2.5	2.5	2.5	70	500@300	5/R	1	NO	YES	G	2
28	botryoides				2			Ν	S	E	W	70	R	ST					2
	Cheese Tree/ Wollongong Woollybutt	Comments:	Recomn	nend remo	ove Lantana fron	n SRZ (two sp	ecies er												
29	Eucalyptus saligna	М	GV	F	MGVF - 9 2	D	20	4.5 N	4.5 S	4.5 E	4.5 W	60 70	600 R	2/N ST	3	NO	NO	G	1 1
	Sydney Blue Gum	Comments:	Co-dom	inant stem	union @ 3 met	res													
30	Glochidion ferdinandi/ Eucalyptus saligna x botryoides	М	GV	F	MGVF – 9 2	. 1	9	2.5 N	2.5 S	1.5 E	1.5 W	80 70	300 R	2/N SC	. 1	YES	NO	G	2
	Cheese Tree/ Wollongong Woollybutt	Comments:	Termite	fluting at s	stub wound at 90)0mm.	1					•			•		•		

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.inca.org.au / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Sp apj me Orie N= S= E= W=	own read prox. etres / north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
31	Pittosporum undulatum	м	LV	F	MLVF - 9 2	I	9	2.5 N	2.5 S	2.5 E	2.5 W	70 60	450 DARB R	2/N SC	1	YES	YES	Ρ	3
01	Native Daphne	Comments:	Pruned	to east for	powerlines.														
32	Cinnamomum camphora	Y	GV	F	YGVF – 8 2	S	4	.5 N	.5 S	.5 E	.5 W	60 80	120 R	1/R ST	1	NO	NO	Ρ	3 4
	Camphor Laurel	Comments:	Self-sov	vn, recomn	nend removal. –	Exempt invas	sive wee	ed spec	cies.										
33	Pittosporum undulatum	0	LV	Р	OLVP – 0 3	I	10	3 N	3 S	2 E	2 W	70 40	300 R	1/R ST	5 1-W	YES	YES	Ρ	3 3
	Native Daphne	Comments:	Thin cro	wn.															
34	Pittosporum undulatum	М	LV	F	MLVF – 4 2	D	5	3 N	3 S	2 E	2 W	50 80	220 R	5/R ST	1	YES	NO	G	2 3
	Native Daphne	Comments:	Trimme	d for powe	rlines, Psyllids, I	noneydew.													
35	Eucalyptus saligna x botryoides	м	GV	F	MGVF – 9 2	С	16	4 N	4 S	4 E	4 W	40 80	350 R	1/R ST	3	NO	NO	G	2 3
	Wollongong Woollybutt	Comments:	•													•			
36	Erythrina x sykesii	м	GV	F	MGVF – 9 2	I	11	5.5 N	5.5 S	4.5 E	4.5 W	80 D	800 DARB R	5/R ST	3	NO	YES	Ρ	3 3
	Coral tree	Comments:	- Exemp	t species															
37	Eucalyptus pilularis	М	LV	F	MLVF – 4 2	I	18	4.5 N	4.5 S	4 E	4 W	60 60	520 R	2/SE SC	1	YES	NO	Ρ	2 2
	Blackbutt	Comments:	Moderat	e volume	epicormics throu	ighout crown,	localise	d bore	r.										
38	Angophora costata	Y	LV	Р	YLVP - 1 3	S	8	1 N	1 S	.5 E	.5 W	40 50	180 R	1/R ST	1	YES	NO	Ρ	3 3
	Sydney Red Gum	Comments:	Suppres	sed, epico	ormic crown.														
39	Eucalyptus pilularis	М	LV	F	MLVF – 4 2	С	17	8 N	8 S	6 E	6 W	70 50	1300@300 R	5/R ST	3	YES	NO	Ρ	2 2
	Blackbutt	Comments:	Evidenc	e termites,	garden refuse l	ouild-up in SR	Z, co-do			n union	at 1.2								
40	Eucalyptus saligna	М	GV	F	MGVF – 9 2	I	17	4.5 N	4.5 S	4 E	4 W	70 60	500 R	2/SE SC		NO	NO	Ρ	2 2
	Sydney Blue Gum	Comments:	2x Abru	pt changes	s in stem direction	on lower to mic	d crown	Privet	SRZ.										

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Met Orien N= r S= S E= E	ead rox. tres / tation north		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
41	Eucalyptus saligna	м	GV	F	MGVF – 9 1	D	22	9 N	9 S	7 E	7 W	60 70	800 R	1/R ST	3	YES	NO	G	1
	Sydney Blue Gum	Comments:	Wound	at 5m			1	1						1			1		
42	Eucalyptus resinifera	м	LV	F	MLVF – 4 2	С	16	5.5 N	5.5 S	4 E	4 W	60 70	500 R	1/R ST	1	YES	NO	Ν	3 4
	Red Mahogany	Comments:	Dieback	mid crow	n wound bracket	fungi at 8m.													
43	Pittosporum undulatum	0	LV	Р	OLVP - 0 3	S	8	3 N	3 S	2.5 E	2.5 W	70 60	450 R	3/S SC	1	YES	NO	Ρ	3 4
	Native Daphne	Comments:	Crown c	leclining, b	asal cavity.										•				
44	Glochidion ferdinandi	М	GV	F	MGVF - 9 2	С	8	5 N	5 S	5 E	5 W	70 70	1000 R	5/R ST	1	NO	YES	G	2 2
	Cheese Tree	Comments:	Lopped	to east for	powerlines. Red	commend rem	ove lvy	, privet	SRZ.										
45	Eucalyptus pilularis	М	LV	F	MLVF - 4 2	С	10	5 N	5 S	4 E	4 W	60 60	700@300 R	5/R ST	3	YES	YES	Р	2
_	Blackbutt	Comments:	Moderat	e volume	epicormics, basa	al co-dominan	t stems,	scale.											
46	Angophora costata	Y/M	GV	F	Y/MGVF - 8.5 2	С	12	3 N	3 S	2.5 E	2.5 W	45 70	280 R	1/R ST	3	NO	NO	G	2 2
	Sydney Red Gum	Comments:	Moderat	e kink low	er stem.									•		•	•		
47	Glochidion ferdinandi	м	GV	F	MGVF - 9 2	С	8	4 N	4 S	3.5 E	3.5 W	60 60	350 R	1/R ST	1	NO	NO	G	2 2
	Cheese Tree	Comments:	Drought	stress, lov	wer branches lop	oped.									•				
48	Eucalyptus pilularis	0	LV	F	OLVF – 2 2	D	12	8 N	8 S	6 E	6 W	50 50	1000 DARB R	5/R ST	3	YES	YES	Ρ	1 2
	Blackbutt	Comments:	Extensiv	e hollow h	abitat resource	however will r	equire c	rown r	edirec	tion to	make	safe.			•				
49	Eucalyptus resinifera	м	LV	F	MLVF - 4 2	D	13	3 N	3 S	3 E	3 W	70 70	500@300 R	5/R ST	1	NO	YES	G	2
	Red Mahogany	Comments:	Basal co	o-dominan	t stems twiggy d	ieback.	•			•	•	•	•			•			
50	Acacia falcata	м	LV	F	MLVF - 4 2	С	12	3.5 N	3.5 S	2.5 E	2.5 W	60 60	550 R	1/R ST	3	YES	NO	G	2
00	Hickory Wattle	Comments:	Approac	hing over	maturity, localise	ed borer, mod	erate di	eback.				1	1	1	1				

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.inec.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Crc Spr app mei / Orien N= r S= S E= E W=V	ead rox. tres / tation north Gouth East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
51	Eucalyptus resinifera	М	GV	F	MGVF - 9 2	D	15	7 N	7 S	6 E	6 W	70 70	700 R	1/R ST	1	YES	NO	G	1
0.	Red Mahogany	Comments:	Bark mu	udding								•				•			•
52	Angophora costata	Y/M	GV	F	Y/MGVF - 8.5	S	13	3 N	3 S	2 E	2 W	50 50	280 R	2/W ST	1	NO	NO	Р	2
52	Sydney Red Gum	Comments:	1						-										1
53	Eucalyptus resinifera	М	LV	F	MLVF – 4	I	14	4.5 N	4.5 S	3.5 E	3.5 W	50 60	550 R	2/W SC	1	YES	YES	Р	2
53	Red Mahogany	Comments:	Phototro	pic learn t					0	-		00	, K	00					-
54	Angophora costata	м	GV	F	MGVF – 9 2	С	16	8.5 N	8.5 S	8.5 E	8.5 W	50 80	900 R	2/NW SC	1	YES	NO	G	22
54	Sydney Red Gum	Comments:	Lowest	branch de	ad, minor borer,	wound at 4m,	bracket	fungi.	Recor	nmena	l furthe	er investigat	ion.						1
55	Missing	Comments:	Missing	at time of	assessment – F	ïg stump													
56	Missing	Comments:	Missing	at time of	assessment														
	Angophora costata	Y	LV	F	YLVF – 3		10	3.5	3.5	2.5	2.5	60	280	2/N	1	YES	YES	Р	2
57					2	I	10	Ν	S	Е	W	70	R	ST	I	120	120		2
	Sydney Red Gum	Comments:			MLVF - 3	[4.5	4.5	4.5	4.5	60	600	1/R		1			2
58	Eucalyptus resinifera	М	LV	F	2	D	14	4.5 N	4.5 S	4.3 E	4.5 W	70	R	ST	1	NO	NO	G	2
	Red Mahogany	Comments:	Modera	te volume,	dead wood mid	crown.							(00.000		1	1			
59	Pittosporum undulatum	М	LV	F	MLVF – 4 2	S	8	3.5 N	3.5 S	3.5 E	3.5 W	80 70	400@300 R	5/R ST	1	YES	YES	G	3 3
	Native Daphne	Comments:	DS. Psy	llid honey															
60	Angophora costata	М	GV	F	MGVF – 9 2	C	11	3.5 N	3.5 S	2.5 E	2.5 W	50 70	450@300 R	5/R ST	1	NO	YES	G	2
	Sydney Red Gum	Comments:	•		•	•						•	•	•	•				

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		app me Orien N=r S= S E=1 W=V	read prox. tres / tation horth South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitous 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
61	Cinnamomum camphora	м	GV	F	MGVF - 9 2	С	13	3.5 N	3.5 S	3 E	3 W	70 70	400@300 R	2/SW SC	6 1-E	NO	YES	Р	3
01	Camphor Laurel	Comments:										•					•		·
62	Grevillea robusta	Y	GV	F	YGVF – 8 2	I	3	1.5 N	1.5 S	1.5 E	1.5 W	40 60	180 R	1/R ST	3	NO	NO	G	3
02	Silky Oak	Comments: -	Exempt	species											1				<u> </u>
63	Angophora costata	Y/M	LV	F	Y/MLVF – 8.5 2	S	12	2 N	2 S	2 E	2 W	40 60	260 R	2/NE SC	1	YES	NO	Ρ	2
00	Sydney Red Gum	Comments:	Minor bo	orer.											1				<u> </u>
64	Angophora costata	М	GV	F	MGVF – 9 2	D	15	5.5 N	5.5 S	5.5 E	5.5 W	40 80	450 R	1/R ST	1	YES	NO	G	1
0.	Sydney Red Gum	Comments:	Minor bo	orer.								•					•		·
65	Ficus rubiginosa	М	GV	F	MGVF - 9 2	С	11	5.5 N	5.5 S	4 E	4 W	80 80	450# R	1/R ST	5 1-S	NO	NO	G	2
	Port Jackson Fig	Comments:	Engulfin	ig 350mm	DBH Angophora	i costata.					•	•			•		•		
66	Angophora costata	Y	GV	F	YGVF - 8 2	S	10	2 N	2 S	2 E	2 W	40 70	200 R	3/N ST	3	NO	NO	Ρ	2
	Sydney Red Gum	Comments:		•								•			•		•		
67	Cinnamomum camphora	М	GV	F	MGVF - 9 2	С	14	4.5 N	4.5 S	3.5 E	3.5 W	70 70	700@300 R	5/R ST	5 2-W, 2-S	NO	YES	Ρ	3
	Camphor Laurel	Comments:	Bushlan	id weed bu	t provides some	screening to	property	to sou	ıth.										
68	Cinnamomum camphora	М	GV	F	MGVF – 9 2	С	15	8 N	8 S	8 E	8 W	80 70	3000 DARB R	5/R ST	5 See comments	NO	YES	Ρ	3 3
	Camphor Laurel	Comments:	Large si	urface root	plate, numerous	s basal stems	likely fr	om stur	np Bu	ishlano	d weed	l but provide	es some scree	ening to proper	ty to south.				
69	Missing	Comments:	Missina	at time of	assessment														
70	Missing	Comments:																	
		comments.	missing	at time of	assessment														

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Sp app me Orier N= S= : E= W=	own read prox. etres / ttation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
71	Angophora costata	М	GV	F	MGVF – 9 2	С	14	7 N	7 S	6 E	6 W	60 70	1000 DARB R	5/R ST	5 See comments	YES	YES	G	2
	Sydney Red Gum	Comments:	Twin ba	sal stems	from stump, ver	y large root fla	re, surfa	ace roo	t to so	outh ea	st, bor	rer.							
72	Angophora costata	м	GV	F	MGVF – 9 2	С	14	6 N	6 S	5 E	5 W	50 70	380 R	1/R ST	3	YES	NO	G	2 2
. –	Sydney Red Gum	Comments:	Cavity w	ound at 5	metres, copious	s kino, good w	ound wo	ood.											
73	Angophora costata	М	GV	F	MGVF - 9 2	D	15	5 N	5 S	3 E	3 W	60 70	300 R	2/N ST	3	NO	NO	G	2 2
	Sydney Red Gum	Comments:																	
74	Allocasuarina torulosa	0	LV	F	OLVF – 2 3	С	8	2 N	2 S	1.5 E	1.5 W	60 50	250 R	2/N SC	3	YES	NO	Ρ	3 4
	Forest She Oak	Comments:	Has faile	ed at base								•			•				
75	Angophora costata	Y/M	GV	F	Y/MGVF – 8.5 2	I	9	2.5 N	2.5 S	2.5 E	2.5 W	50 60	280 R	1/R ST	1	YES	NO	G	2 2
	Sydney Red Gum	Co	omment	s: Minor bo	orer							•							
76	Angophora costata	М	GV	F	MGVF – 9 2	С	12	3.5 N	3.5 S	2 E	2 W	80 70	450@300 R	5/R ST	1	YES	NO	G	2 2
	Sydney Red Gum	Comments:	Twin ba	sal stems,	minor borer.							•			•				
77	Angophora costata	м	GV	F	MGVF – 9 2	С	9	3 N	3 S	2 E	2 W	60 70	400 R	1/R ST	1	YES	NO	G	2
	Sydney Red Gum	Comments:	Minor bo	orer.															
78	Angophora costata	М	GV	F	MGVF - 9 2	С	12	2.5 N	2.5 S	2 E	2 W	40 70	280 R	1/R ST	1	YES	NO	G	2 2
	Sydney Red Gum	Comments:	Minor bo	orer.								•			•				
79	Angophora costata	М	GV	F	MGVF - 9 2	С	11	5 N	5 S	5 E	5 W	70 70	600 R	5/R ST	1	YES	NO	G	2 2
	Sydney Red Gum	Comments:	Wound	bracket fur	ngi at 6 metres r	orth, co-domi	nant ste	m, Mis	tletoe	lower	crown	to west.				•			
80	Angophora costata	м	GV	F	MGVF - 9 2	С	12	4 N	4 S	3.5 E	3.5 W	50 70	300 R	1/R ST	1	NO	NO	G	2
00	Sydney Red Gum	Comments:		1		1		1						1	1				1

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating Www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spi app me Orier N= S= S E=	own read rrox. tres / tation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1-High 2=Medium 3=Low / Retention Value 1-High 2=Medium 3=Low 4=Remove
81	Angophora costata	М	GV	F	MGVF - 9 2	С	14	3.5 N	3.5 S	3.5 E	3.5 W	40 70	350 R	2/SW SC	1	YES	NO	G	2
01	Sydney Red Gum	Comments:	Minor b	orer.	_					_		10							
82	Corymbia citriodora	М	GV	F	MGVF - 9 2	С	14	3.5 N	3.5 S	2 E	2 W	40 70	300 R	2/SW SC	1	YES	NO	Ρ	2 3
	Lemon Scented Gum	Comments:	Wound	with juveni	le Ficus rubigino	sa growing at 3	metres,	change	direct	ion of s	tem, b	orer.							
83	Angophora costata	М	GV	F	MGVF - 9 3	С	13	5 N	5 S	3.5 E	3.5 W	50 70	500 R	1/R ST	1	YES	NO	G	2
	Sydney Red Gum	Comments:	Wound	with brack	et fungi at 3 met	res, Recomm	end furt	ner inve	estiga	tion.									
84	Angophora costata	М	GV	F	MGVF - 9 1	С	14	5 N	5 S	5 E	5 W	60 80	450 R	1/R ST	5 2-W	NO	NO	G	1 1
	Sydney Red Gum	Comments:	Located	top rock f	ace.														
85	Acacia falcata	М	GV	F	MGVF - 9 2	D	12	7 N	7 S	5 E	5 W	80 D	1300 DARB R	5/R ST	5 See comments	YES	YES	Ρ	34
	Hickory Wattle	Comments:	Large d	iameter su	rface roots, wea	k basal union	, basal c	lecay.											
86	Corymbia citriodora	М	GV	F	MGVF - 9 2	С	14	4.5 N	4.5 S	4.5 E	4.5 W	50 70	450 R	1/R ST	1	NO	NO	G	2
	Lemon Scented Gum	Comments:																	
87	Corymbia citriodora	М	GV	F	MGVF - 9 2	С	13	10 N	10 S	4.5 E	4.5 W	60 70	1000# R	5/R ST	1	NO	NO	Ρ	1 2
-	Lemon Scented Gum	Comments:	Central	stem previ	ously lost / remo	oved, 2x lowes	st branc	hes be	come	co-don	ninant	stems north	n south axis.						
88	Corymbia citriodora	М	GV	F	MGVF - 9 2	· I	12	4 N	4 S	2 E	2 W	50 70	300 R	1/R ST	1	NO	NO	G	2
	Lemon Scented Gum	Comments:																	
89	Corymbia citriodora	М	LV	F	MLVF - 4 2	· 1	10	4.5 N	4.5 S	3.5 E	3.5 W	70 60	400 R	5/R ST	3	YES	NO	Ρ	2
	Lemon Scented Gum	Comments:	Woundi	ng / dead l	oranches lower	crown.													
90	Corymbia citriodora	М	GV	F	MGVF - 9 2	D	15	6.5 N	6.5 S	5.5 E	5.5 W	70 70	700 R	2/SW ST	3	YES	NO	G	1
	Lemon Scented Gum	Comments:	Multiple	stem graft	, mid-stem. min	or borer at gra	aft. Herit	age Cu	ırtilage	e Pallis	ter Ho	use. Minor I	borer damage	at graft.	•				·

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating <u>www.iaca.org.au</u> / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spi app me Orier N= S=S E=	own read prox. etres / ttation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
91	Jacaranda mimosifolia	м	LV	F	MLVF - 4 2	I	8	4 N	4 S	2.5 E	2.5 W	60 D	600@300 R	5/R ST	1	NO	YES	Ρ	23
01	Jacaranda	Comments:	Numero	us basal w	ounds, weak ba	sal union. He	ritage C	urtilage	Pallis	ster Ho	use.								
92	Angophora costata	м	GV	F	MGVF - 9 1	D	14	15 N	15 S	8.5 E	8.5 W	70 70	1300# R	2/N ST	3	YES	NO	G	1
92	Sydney Red Gum	Comments:	Large re	emnant spe	ecimen adjoining	site however	r 60% cr		-					01					
00	Cedrus deodara	м	GV	F	MGVF - 9 2	С	10	4.5 N	4.5 S	4 E	4 W	70 70	500 R	1/R ST	5 1-W, 1-E	NO	YES	G	1
93	Himalayan Cedar	Comments:	Moderat	te volume	deadwood lower	to mid crown	n. (<i>co-do</i>								,				
94	Camellia japonica	м	GV	F	MGVF - 9 1	I	4	1.5 N	1.5 S	1.5 E	1.5 W	90 80	300@300 R	5/R ST	1	YES	YES	G	1
34	Camellia	Comments:	Some le	af chloros	is. Heritage Curt	ilage Pallister	r House.										1		
95	Ficus rubiginosa	М	GV	F	MGVF - 9 1	D	13	8 N	8 S	8 E	8 W	70 70	1500# R	5/R ST	5 See comments	YES	YES	G	1
55	Port Jackson Fig	Comments:	Four bas	sal stems,	lower stem prur	ing wounds,	good wo	und wo	od. D	rive ov	er roo	ts Low FS/D	S. Heritage C	Curtilage Pallis	ter House.				
96	Missing	Comments:	Missing	at time of	assessment														
97	Missing	Comments:	Missing	at time of	assessment														
98	Missing	Comments:																	
99	Missing	Comments:																	
100	Missing	Comments:	Missing	at time of	assessment														

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Crow Spre appr metr / Orient: N= no S= So E= E W=W	ad rox. res ation orth outh cast		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
101	Missing																		
		Comments:			assessment MLVF - 4			10	10	10	10	70	3000 DARB	5/R		1			1
102	Ficus rubiginosa	М	LV	F	1	D	19	N	S	E	W	70	R	ST	3	YES	YES	G	1
_	Port Jackson Fig	Comments:	Moderat	te Fig psyl	lid/drought stres	s, upper crow	n twiggy								ts.				
103	Platanus digitate	м	LV	F	MLVF - 4	С	10	4.5 N	4.5 S	4.5 E	4.5 W	80 D	800@300 R	5/R ST	3	NO	YES	Р	2
103	Plane Tree	Comments:	Dead br	anch to ea	ast, saprophytic f	ungal bracket	t Heritag						IX.	01					2
104	Jacaranda mimosifolia	м	LV	F	MLVF - 4	с	10		2.5 S	2.5 E	2.5 W	75 D	450 R	5/R ST	1	NO	NO	G	2
104	Jacaranda	Comments:	Heritage	e Curtilage	Pallister House		l		U	-		D	, N	01					-
105	Schefflera actinophylla	0	LV	Р	OLVP - 0 3	I	8	1 N	1 S	1 E	1 W	30 40	280 R	1/R ST	3	NO	YES	Р	3 4
105	Large Leaf Umbrella	Comments:	Declinin	g, weak u	nions, suppressi	ng crown to n	orth of ti	ree 104.	– Exe	empts	pecie	s		1					1
106	Missing	Comments:	Missing	at time of	assessment														
	Thuja orientalis	м	GV	F	MGVF - 9	1	7	2	2	1.5	1.5	80	300@300	5/R	1	NO	YES	G	2
107	Bookleaf Conifer	Comments:			2	-		Ν	S	Е	W	70	R	ST	-			-	2
					MGVF - 9			9	9	7	7	70	1100	1/R					1
108	Eucalyptus pilularis	М	GV	F	2	D	18	N	S	E	W	70	R	ST	1	YES	NO	Р	3
	Blackbutt	Comments:	North st	em topped	at 4-5 metres, i	ecommend fu	urther inv	vestigati			-	-		-		-	-		
109	Eucalyptus microcorys	м	GV	F	MGVF - 9 2	С	18	8 N	8 S	6 E	6 W	80 80	800 R	2/NE ST	1	NO	NO	G	2 2
	Tallowwood	Comments:	•	•		-								•		·			
110	Eucalyptus grandis	м	GV	F	MGVF - 9	С	20	6 N	6 S	5 E	5 W	80 80	1000 R	1/R ST	1	NO	NO	G	1
110	Rose gum	Comments:		1	1							1		1	1	1			

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spr app me Orien N= 1 S= 5 E= W=1	own read orox. tres / tation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
111	Liquidambar styraciflua	Y/M	GV	F	Y/MGVF – 8.5 2	S	9	3 N	3 S	3 E	3 W	80 D	300 R	1/R ST	1	NO	NO	G	2
	Sweet Gum	Comments:	- Exemp	ot species		•							•		•				
112	Celtis sp.	м	GV	F	MGVF – 9 2	I	16	3 N	2 S	3 E	2 W	60 60	200 R	5/R ST	1	NO	YES	F	3 3
	Hackberry	Comments:	Exposed	d root plate	9														
113	Cupressus torulosa	м	GV	F	MGVF - 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2 2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south exis	ting carpark.	Asymmet	rical cr	owns	to nor	th.				•				
114	Cupressus torulosa	м	GV	F	MGVF – 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2 2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south exis	ting carpark.	Asymmet	rical cr	owns	to nor	th.		•			•			
115	Cupressus torulosa	м	GV	F	MGVF - 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2 2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south exis	ting carpark.	Asymmet	rical cr	owns	to nor	th.		•			•			
116	Cupressus torulosa	м	GV	F	MGVF – 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2 2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south exis	ting carpark.	Asymmet	rical cr	owns	to nor	th.								
117	Cupressus torulosa	м	GV	F	MGVF – 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2 2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south exis	sting carpark.	Asymmet	rical cr	owns	to nor	th.								
118	Cupressus torulosa	м	GV	F	MGVF – 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2 2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south exis	ting carpark.	Asymmet	rical cr	owns	to nor	th.				•				
119	Cupressus torulosa	м	GV	F	MGVF – 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south exis	sting carpark.	Asymmet	rical cr	owns	to nor	th.								
120	Cupressus torulosa	м	GV	F	MGVF - 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south exis	ting carpark.	Asymmet	rical cr	owns	to nor	th.					·			

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spr app mei Orien N= r S= S E= F W=V	tres / tation horth Gouth East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
121	Cupressus torulosa	М	GV	F	MGVF – 9 2	м	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2
121	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south ex	isting carpark.	Asymme	etrical c	rowns	to nor	th.								
122	Cupressus torulosa	М	GV	F	MGVF – 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south ex	isting carpark.	Asymme	etrical c	rowns	to nor	th.				•				
123	Cupressus torulosa	М	GV	F	MGVF – 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south ex	isting carpark.	Asymme	etrical c	rowns	to nor	th.				•				
124	Cupressus torulosa	М	GV	F	MGVF – 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south ex	isting carpark.	Asymme	etrical c	rowns	s to nor	th.								
125	Cupressus torulosa	М	GV	F	MGVF – 9 2	м	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2 2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south ex	isting carpark.	Asymme	etrical c	rowns	s to nor	th.								
126	Cupressus torulosa	М	GV	F	MGVF – 9 2	м	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2 2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south ex	isting carpark.	Asymme	etrical c	rowns	s to nor	th.								
127	Cupressus torulosa	М	GV	F	MGVF – 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2 2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south ex	isting carpark.	Asymme	etrical c	rowns	s to nor	th.								
128	Cupressus torulosa	М	GV	F	MGVF – 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2 2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south ex	isting carpark.	Asymme	etrical c	rowns	s to noi	th.								
129	Cupressus torulosa	М	GV	F	MGVF – 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2 2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south ex	isting carpark.	Asymme	etrical c	rowns	to nor	th.								
130	Cupressus torulosa	М	GV	F	MGVF - 9 2	М	10-12	1.5 N	1.5 S	1.5 E	1.5 W	70 80	200-300 R	1/R ST	1	NO	YES	G	2
	Bhutan Cypress	Comments:	Linear p	lanting gro	oup to south ex	isting carpark.	Asymme	etrical c	rowns	to nor	th.								

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spr app me Orien N=r S= S E=1	tres / tation horth Gouth		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
131	Missing	Comments:	Missina	at time of	assessment														
132	Glochidion ferdinandi	М	GV	F	MGVF - 9 2	S	6	3 N	3 S	3 E	3 W	70 60	550@300 R	5/R ST	1	NO	YES	G	2
	Cheese Tree	Comments:	Twin ba	sal stems.															
133	Pinus patula	0	LV	D	OLVD 3	D	12	4 N	4 S	2 E	2 W	50 10	400 R	2/N ST	1	YES	NO	Ρ	3
	Mexican Weeping Pine	Comments:	90% de	ad.															
134	Cupressus cashmeriana	м	GV	F	MGVF – 9 2	D	16	5 N	5 S	5 E	5 W	90 80	900 R	5/R ST	3	NO	YES	G	2
	Kashmir Cypress	Comments:	Numero	us co-dom	ninant stems aris	sing at 3 metre	es.										•		
135	Cedrus deodara	м	LV	F	MLVF - 4 2	С	12	4.5 N	4.5 S	3.5 E	3.5 W	80 70	500 R	1/R ST	1	NO	NO	G	2
	Himalayan Cedar	Comments:	Drought	stress.	•	•										•	•		
136	Cedrus deodara	м	LV	F	MLVF - 4 2	С	9	4.5 N	4.5 S	3 E	3 W	70 70	450 R	2/NW ST	3	NO	NO	Ρ	23
	Himalayan Cedar	Comments:		•		•										•	•		
137	Callistemon salignus	м	GV	F	MGVF – 9 2	S	9	4.5 N	4.5 S	4.5 E	4.5 W	80 80	600@300 R	5/R ST	3	NO	YES	Ρ	2
	Willow Bottlebrush	Comments:	Multiple	included u	unions.	•								•			•		
138	Eucalyptus saligna	м	GV	F	MGVF – 9 2	D	15	5 N	5 S	5 E	5 W	80 60	800 R	1/R ST	3	NO	NO	G	2 2
	Sydney Blue Gum	Comments:		·						•	•	-	•		-			•	·
139	Livistona chinesis	м	GV	F	MGVF - 9 2	С	12	2 N	2 S	2 E	2 W	30 80	320 R	1/R ST	3	NO	NO	G	2
	Chinese Fan Palm	Comments:																	
140	Missing	Comments:	Missing	at time of	assessment														

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spi app me Orier N= S= S E=	own read prox. etres / ntation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1-High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
141	Missing																		
		Comments:	Missing	at time of	assessment														
	Eucalyptus scoparia	0	LV	Р	OLVP - 0 3	D	12	3.5 N	3.5 S	3.5 E	3.5 W	50 60	600 R	3/N P	1	YES	NO	Ρ	3
142	Wallangarra White Gum	Comments:	Large ba	asal wound,	decay splitting, b	orer NOW F	REMOVE	Ð	_	<u> </u>									L
143	Phoenix canariensis	М	GV	F	MGVF - 9 2	D	6	2.5 N	2.5 S	2.5 E	2.5 W	40 80	600 R	1/R ST	3	NO	NO	G	3
110	Date Palm	Comments:	Weed s	pecies.								•	•						
144	Ginkgo biloba	М	GV	F	MGVF – 9 2	С	10	3 N	3 S	3 E	3 W	70 70	350@300 R	5/R ST	1	NO	YES	G	2
	Maidenhair Tree	Comments:	Growing	restricted	area between e	extend wall an	d kerb a	ccess	road.				•			•			
145	Ginkgo biloba	М	GV	F	MGVF – 9 2	С	10	3 N	3 S	3 E	3 W	60 70	450@300 R	5/R ST	1	NO	YES	G	2
110	Maidenhair Tree	Comments:	Growing	restricted	area between e	extend wall an	d kerb a	ccess	road.						L	1			
146	Cinnamomum camphora	М	GV	F	MGVF – 9 2	D	9	6 N	6 S	4 E	4 W	70 80	600@300 R	5/R ST	3	NO	YES	Ρ	3
140	Camphor Laurel	Comments:	– Exem	pt invasive	weed species.									-					
147	Eucalyptus saligna	М	GV	F	MGVF – 9 2	С	15	5 N	5 S	4 E	4 W	80 70	580 R	1/R ST	3	NO	YES	G	2
147	Sydney Blue Gum	Comments:	Weak u	nion at 7 m	netres.					I					I				<u> </u>
148	Hymenosporum flavum	Y/M	GV	F	Y/MGVF - 8.5	S	3-5	2 N	2 S	2 E	2 W	50 70	100-140 R	1/R ST	1	NO	NO	Ρ	2
/2	Native Frangipani x5	Comments:	Linear d	Irive edge	planting. Suppre	essed by matu	re trees	to eas	st.						1				<u> </u>
149	Eucalyptus microcorys	М	GV	F	MGVF – 9 2	С	17	6 N	6 S	6 E	6 W	60 80	900 R	1/R ST	3	YES	NO	G	2 2
110	Tallowwood	Comments:	Termite	mudding b	bark.														
150	Liquidambar styraciflua	М	GV	F	MGVF - 9 2	С	16	8 N	8 S	6 E	6 W	70 70	600 R	1/R ST	5 3-W, 1-E	NO	NO	G	2
100	Sweet Gum	Comments:										•		1	1				

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iace.org.an / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Sp app me Orie N= S= E=	own read orox. ttres / ttation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
151	Acer negundo	М	GV	F	MGVF – 9 2	S	7	5 N	5 S	4 E	4 W	80 80	500 R	5/T ST	5 2-N	YES	NO	G	3
151	Box Elder Maple	Comments:	Basal s	uckers, nu	merous stub cav	vities lower cro	wn ex												
152	Acer negundo	М	GV	F	MGVF – 9 2	С	10	5.5 N	5.5 S	5 E	5 W	80 80	800 R	5/R ST	5 6-S	YES	YES	Ρ	2 3
	Box Elder Maple	Comments:	Topped	and loppe	ed to north exe	mpt species													
153	Acer negundo	М	GV	F	MGVF – 9 2	С	12	7 N	7 S	6 E	6 W	80 80	1100@300 R	5/R ST	5 3-SW	YES	YES	Ρ	2 3
	Box Elder Maple	Comments:	Triple b	asal stems	at 600mm. Top	ped at 3 metr	es exe	mpt sp	ecies										
154	Magnolia grandiflora	М	GV	F	MGVF – 9 2	С	8	1.5 N	1.5 S	1.5 E	1.5 W	80 80	400@300 R	5/R ST	3	NO	YES	G	2 2
	Bull Bay Magnolia	Comments:	Triple in	cluded ba	sal stems.														
155	Magnolia grandiflora	М	GV	F	MGVF – 9 2	С	8	2 N	2 S	2 E	2 W	80 80	400 R	1/R ST	3	YES	NO	G	2 2
	Bull Bay Magnolia	Comments:	Minor fo	liar diseas	se.														
156	Jacaranda mimosifolia	М	GV	F	MGVF – 9 2	D	12	3.5 N	3.5 S	3.5 E	3.5 W	70 D	600@300 R	5/R ST	1	NO	YES	Ρ	2
	Jacaranda	Comments:	Topped	at 900mm	1.														
157/	Acer negundo x3	М	GV	F	MGVF – 9 2	С	9	4 N	4 S	3.5 E	3.5 W	80 80	150-300 R	5/R ST	1	NO	YES	Ρ	2 3
3	Box Elder Maple	Comments:	All spec	imens like	ly topped at 1.5-	2.5 metres	exempt s	pecies											
158	Triadica sebifera	м	LV	F	MLVF - 4 2	D	12	4 N	4 S	4 E	4 W	70 70	600@300 R	5/R ST	1	YES	YES	G	2 2
	Chinese Tallowwood	Comments:	Basal c	o-dominan	t stems, high vo	lume epicorm	CS.												
159	Brachychiton acerifolius	м	GV	F	MGVF – 9 2	D	8	2.5 N	2.5 S	2 E	2 W	80 80	350 R	1/R ST	1	NO	NO	G	2
	Illawarra Flame Tree	Comments:			•														
160	Cedrus atlantica	м	LV	Р	MLVP - 2 3	С	11	6 N	6 S	6 E	6 W	60 50	600 R	1/R ST	1	YES	YES	G	2 3
	Atlantic Cedar	Comments:	Extensi	ve decline,	drought stress,	root loss from	constru	iction S	SRZ.			•	•	•	•	•	•		

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating Www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Crc Spr app mei Orien N= r S= S E= E W=V	ead rox. tres tation north couth East Vest		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
161	Pyrus	М	GV	F	MGVF – 9 2	С	8	2.5 N	2.5 S	2.5 E	2.5 W	60 70	280 R	1/R ST	1	NO	NO	G	3
	Ornamental Pear	Comments:	•			•								•	•				
162	Pyrus	М	GV	F	MGVF – 9 2	С	8	2 N	2 S	2 E	2 W	60 70	300@300 R	5/R ST	1	NO	YES	G	3
102	Ornamental Pear	Comments:													1				
163	Angophora costata	М	LV	F	MLVF - 4 2	D	13	5.5 N	5.5 S	4.5 E	4.5 W	50 50	700 R	1/R ST	3	YES	NO	Ρ	1
105	Sydney Red Gum	Comments:	Cracking	g basal ste	m area, further	investigation.											1		
164	Jacaranda mimosifolia	Y/M	GV	F	Y/MGVF - 8.5 2	1	8	1.5 N	1.5 S	1 E	1 W	60 D	200 R	2/NE SC	1	NO	NO	Р	3
104	Jacaranda	Comments:													1				
165	Angophora costata	М	LV	Р	MLVP - 2 3	С	9	3 N	3 S	1.5 E	1.5 W	50 70	300 R	1/R ST	3	YES	NO	Р	23
100	Sydney Red Gum	Comments:	Extensiv	ve basal w	ound, borer, thir	rown.								•					
166	Cinnamomum camphora	О	LV	Р	OLVP - 0 3	D	9	4 N	4 S	3 E	3 W	80 20	500 R	1/R ST	3	YES	NO	Ρ	3 3
100	Camphor Laurel	Comments:	Extensiv	ve dieback	. – Exempt inva	sive weed spe	cies.												
167	Ficus rubiginosa	М	LV	F	MLVF - 4 2	D	11	7.5 N	7.5 S	6 E	6 W	70 60	1800 DARB R	5/R ST	1	YES	YES	G	1
107	Port Jackson Fig	Comments:	Climbing	g succulen	t to mid crown (I	recommend re	emoval).	Moder	ate vo		picorr	nics mid-cro	wn, moderate	e Fig psyllid/dr	ought stress				
168	Eucalyptus sideroxylon	М	LV	F	MLVF - 4 2	D	9	4.5 N	4.5 S	3 E	3 W	80 50	420 R	1/R ST	1	YES	YES	Р	23
100	Pink Flowering Ironbark	Comments:	Twiggy	dieback.										•		•			
169	Missing	Commonte:	Suckore	off.ctump	Eucalyptus sider	ovylon													
170	Missing	Comments.	CUCKEIS	i on stump		олуюн													
		Comments:	Missing	at time of	assessment														

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating <u>www.iaca.org.an</u> / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spr app me Orien N=1 S= S E=	own read prox. ttres / ttation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
171	Acer negundo	М	GV	F	MGVF – 9 2	С	8	3 N	3 S	2.5 E	2.5 W	80 80	250 R	5/R ST	- 1	NO	NO	G	3
171	Box Elder Maple	Comments:	- Exemp	ot species	I				-							1	I		
172	Acer negundo	М	GV	F	MGVF – 9 2	С	9	3 N	3 S	2.5 E	2.5 W	80 80	400@300 R	5/R ST	3	NO	NO	G	3
	Box Elder Maple	Comments:	- Exemp	ot species	·												•		
173	Acer negundo	М	GV	F	MGVF – 9 2	С	9	4 N	4 S	3 E	3 W	80 80	400@300 R	5/R ST	1	NO	YES	G	3
170	Box Elder Maple	Comments:	- Exemp	ot species										•	•	•			
174	Acer negundo	Y/M	GV	F	YMGVF - 8.5 2	С	6	N	S	E	W	80 80	300@300 R	5/R ST	1	NO	YES	Ρ	3 3
	Box Elder Maple	Comments:	- Exemp	ot species	•														
175	Acer negundo	М	GV	F	MGVF – 9 2	С	7	N	S	E	w	80 80	550@300 R	5/R ST	- 3	NO	YES	G	3
	Box Elder Maple	Comments:	- Exemp	ot species	•														
176	Eucalyptus pilularis	М	GV	F	MGVF – 9 2	С	10	N	S	E	w	80 60	550 R	2/NW ST	- 1	YES	NO	G	2
	Blackbutt	Comments:	Localise	ed borer.	•														
177	Eucalyptus pilularis	0	LV	F	OLVF - 2 2	С	12	N	S	E	w	80 50	1000 R	5/R ST	- 3	YES	NO	Ρ	1 1
	Blackbutt	Comments:	Termite	/borer dam	nage, wildlife hol	lows, long end	d weight	stems											
178	Phoenix canariensis	Y/M	GV	F	YMGVF - 8.5	С	4	N	S	E	w	40 80	900 R	1/R ST	- 1	NO	NO	G	2
	Date Palm	Comments:			•														
179	Phoenix canariensis	Y/M	GV	F	YMGVF - 8.5	С	3	N	S	E	w	40 80	600 R	1/R ST	- 1	NO	NO	G	2
	Date Palm	Comments:																	
180	Phoenix canariensis	Y/M	GV	F	YMGVF - 8.5	С	3	N	S	E	w	40 80	800 R	1/R ST	1	NO	NO	G	2
	Date Palm	Comments:																	

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spr app me Orien N= (S= 5 E= W=1	own read orox. tres / tation north Bouth East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive SC = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
181	Phoenix canariensis	Y/M	GV	F	Y/MGVF - 8.5	С	3	2.5 N	2.5 S	2.5 E	2.5 W	40 80	800 R	1/R ST	1	NO	NO	G	2
101	Date Palm	Comments:	1		1		1			1									
182	Phoenix canariensis	Y/M	GV	F	Y/MGVF - 8.5	С	5	2.5 N	2.5 S	2.5 E	2.5 W	30 80	800 R	1/R ST	1	NO	NO	G	2
102	Date Palm	Comments:			•														
183	Phoenix canariensis	Y/M	GV	F	Y/MGVF - 8.5	С	6	3 N	3 S	3 E	3 W	30 80	1400 R	1/R ST	- 1	NO	NO	G	2
100	Date Palm	Comments:											•	•	•				
184	Eucalyptus pilularis	М	GV	F	MGVF – 9 2	D	18	8 N	8 S	7 E	7 W	60 80	800 R	1/R ST	5 1-SE	NO	NO	G	1 1
	Blackbutt	Comments:													<u>.</u>				
185	Eucalyptus sideroxylon	Y/M	LV	F	Y/MLVF - 3.5 2	I	10	3.5 N	3.5 S	3.5 E	3.5 W	60 60	320 R	1/R ST	- 1	YES	NO	G	2
	Pink Flowering Ironbark	Comments:	Localise	ed borer.															
186	Eucalyptus sideroxylon	Y/M	LV	F	Y/MLVF - 3.5 2	S	8	3 N	3 S	1.5 E	1.5 W	60 50	300 R	1/R ST	- 1	YES	NO	G	2
	Pink Flowering Ironbark	Comments:																	
187	Syagrus romanzoffianum	М	GV	F	MGVF – 9	D	8	2.5 N	2.5 S	2.5 E	2.5 W	25 80	280 R	1/R ST	1	NO	NO	G	2
	Cocos Palm	Comments:	- Exemp	ot species									•	•	•				
188	Syzygium smithii	Y/M	GV	F	Y/MGVF - 8.5 2	С	10	3 N	3 S	2 E	2 W	50 70	800@300 R	5/R ST	1	NO	YES	Ρ	2
	Lilly Pilly	Comments:	Multiple	stems 150	Omm diameter fr	om stump, be	ing engu	lfed b	y tree	189.									
189	Ficus rubiginosa	М	GV	F	MGVF – 9 2	С	7	6 N	6 S	3.5 E	3.5 W	60 90	900 R	5/R ST	5 3-SW, 3-NW	YES	YES	Ρ	1 1
	Port Jackson Fig	Comments:	Low lev	el Fig psyll	lid/drought stres	S													
190	Ficus rubiginosa	М	GV	F	MGVF - 9 2	D	12	6 N	6 S	4.5 E	4.5 W	90 70	800@300 R	5/R ST	5 2-NW, 3-SW	YES	YES	G	1
	Port Jackson Fig	Comments:	Twin ba	sal stems	at 500mm Mode	erate volume e	picormi	cs sho	ots lov	v level	Fig ps	yllid/drought	t stress.						

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Crc Spr app met Orien N=r S=S E=E W=V	ead rox. tres tation north couth East		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
191	Cinnamomum camphora	М	GV	F	MGVF – 9 2	С	12	5.5 N	5.5 S	4.5 E	4.5 W	80 80	1000 DARB R	5/R ST	1	YES	YES	Ρ	2 3
	Camphor Laurel	Comments:	4x basa	l stems, to	pped at 2-3 met	res with termit	te dama	ge dea	d low	branch	ı.								
192	Cinnamomum camphora	М	GV	F	MGVF – 9 2	C	12	6 N	6 S	5 E	5 W	70 80	1100 DARB R	5/R ST	5 2-NW, 1-E	NO	YES	Ρ	2 3
	Camphor Laurel	Comments:	Triple ba	asal grafte	d stems. Toppe	d at 2 metres.													
193	Olea europaea var. Africana African Olive	Comments:	EXEMP	T SPECIE	s														
	Populus deltoides	Y/M	GV	F	Y/MGVF - 8.5	D	8	4	4	6	6	80	600@300	5/R	5	NO	YES	Р	3
194		Comments:	Colf cou		2			Ν	S	Е	W	70	R	ST	2-W				3
	Eastern Cottonwood	Comments.	Sell-SOV	vri.															
195	Celtis Hackberry	Comments:	EXEMP	T - Termite	e damage / basa	al cavities													
	,		ſ	1	YGVF – 8	1	_	1.5	1.5	1.5	1.5	60	150	1/R				_	2
196	Triadica sebifera	Y	GV	F	2	С	7	Ν	S	E	W	70	R	ST	1	NO	NO	G	2
	Chinese Tallowwood	Comments:	Celtis sa	apling in S	RZ recommend	removal of sa	pling.												
197	Triadica sebifera	М	GV	F	MGVF – 9 3	D	8	2.5 N	2.5 S	1.5 E	1.5 W	70 80	400@300 R	5/R ST	1	NO	YES	Ρ	3
	Chinese Tallowwood	Comments:	Previous	sly topped	, crown rubbing	on existing bu	ilding. P	rivet ir	SRZ.										
198	Pittosporum undulatum	М	LV	Р	MLVP - 2 3	S	7	3 N	3 S	1.5 E	1.5 W	60 70	450@300 R	5/R ST	1	YES	YES	Ρ	3 3
	Native Daphne	Comments:	Drought	stress.	•														
199	Acer negundo	М	GV	F	MGVF - 9	С	8	4 N	4 S	3.5 E	3.5 W	60 80	150 R	5/R ST	1	YES	YES	F	3 3
	Box Elder Maple	Comments:	- Exemp	t species	•														
200	Melia azedarach	М	GV	Р	MGVP - 6	S	9	2.5 N	2.5 S	2.5 E	2.5 W	60 60	140 R	5/R P	3	NO	NO	Ρ	3
200	White Cedar	Comments:	Partial r	oot plate fa	ailure	1													

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spr app me Orien N=r S= S E=1	own read rrox. tres / tation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
201	Triadica sebifera	М	GV	F	MGVF – 9	С	8	1.5 N	1.5 S	1.5 E	1.5 W	60 80	220 R	1/R ST	3	NO	NO	G	2
201	Chinese Tallowwood	Comments:							0	-		00	i.	01					
202	Erythrina x sykesii	М	GV	Р	MGVP - 2	- 1	7	3.5 N	3.5 S	3.5 E	3.5 W	60 70	550@300 R	5/R ST	3	NO	YES	Ρ	3 4
202	Coral tree	Comments:	Multiple	weak bas	al stems. – Exe	mpt species							•			•	•		
203	Acer negundo	М	GV	F	MGVF – 9	- 1	7	3 N	3 S	2 E	2 W	60 70	280 R	5/R ST	3	NO	YES	F	3
200	Box Elder Maple	Comments:	- Exemp	ot species	(if under 6 metre	es)		1		1								1	
204	Ficus rubiginosa	М	GV	F	MGVF – 9	S	8	4.5 N	4.5 S	3 E	3 W	80 80	450@300 R	5/R ST	3	NO	YES	G	2
204	Port Jackson Fig	Comments:	1					1		1								1	
205	Erythrina x sykesii	М	GV	F	MGVF – 9 3	D	11	4.5 N	4.5 S	4.5 E	4.5 W	70 80	900@300 R	5/R ST	3	NO	YES	Ρ	3 4
205	Coral tree	Comments:	Weak b	asal union	. – Exempt spec	ies	I	1	-	1								1	
206	Privet	Comments:	Exempt	species															
007	Stenocarpus sinuatus	М	GV	F	MGVF – 9 2	D	8	2.5 N	2.5 S	2.5 E	2.5 W	80 80	300 R	1/R ST	1	NO	YES	G	2
207	Firewheel Tree	Comments:			2				0	-		00	IX.	01					2
208	Phoenix canariensis	м	GV	F	MGVF – 9 2	S	7	3 N	3 S	3 E	3 W	40 80	700 R	1/R ST	3	NO	NO	G	2
200	Date Palm	Comments:										1	1	1		1			
209	Pittosporum undulatum	М	LV	F	MLVF – 4 3	- 1	5	2 N	3 S	2 E	3 W	70 60	260 R	5/R ST	3	YES	NO	Ρ	3 3
	Native Daphne	Comments:	Topped	at 2.5 met	res. 120mm dia	meter Ficus ro	oot in St	ructura	I Root	Zone.	Twigg				ots would be er	ncountere	d on site.		
210	Leptospermum sp.	М	GV	F	MGVF – 9 2	- 1	5	2.5 N	1 S	2 E	3 W	50 70	300 @g R	5/R ST	1	NO	YES	F	2
2.0	Tea Tree	Comments:	– Unlike	ly roots wo	ould be encount	ered on site.						·	·	·	·				•

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating <u>www.iaca.org.au</u> / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Sp app me Orie N= S= : E=	own read prox. etres / ttation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
	Eucalyptus botryoides	М	GV	F	MGVF – 9 2	С	10	4 N	0 S	7 E	2 W	50 70	600 @g R	5/R ST	1	YES	YES / R	Р	2
211	Bangalay Gum				vn to north, will i duce pressure							likely roots v			e.				
212	Pittosporum undulatum	М	GV	F	MGVF – 9 2	S	5	2 N	1 S	1 E	1 W	80 60	180 R	5/R ST	1	YES	NO	F	3
212	Native Daphne	Comments:	Some u	pper crowi	n dieback. Basa	suckers. – U	nlikely ro	oots w			untere	d on site.							
213	Lophostemon confertus	М	GV	F	MGVF – 9 2	С	9	5 N	2 S	3 E	1 W	60 80	280 R	1/R ST	3	NO	NO	G	2
210	Queensland Brush Box	Comments:	- Likely	roots on si	ite				1					1					
214	Allocasuarina torulosa	0	LV	Р	OLVP - 0 3	S	9	2 N	1 S	0 E	1 W	25 60	200 R	1/R ST	3	NO	NO	Ρ	3
	Forest She Oak	Comments:	High cro	own only –	lower crown su	opressed by T	214 & 2	16– U	nlikely	roots	vould	be encounte	ered on site.						
215	Lophostemon confertus	М	GV	F	MGVF – 9 2	D	12	4 N	5 S	4 E	4 W	80 80	420 R	1/R ST	3	NO	NO	G	2 2
	Queensland Brush Box	Comments:	70mm c	liameter Fi	icus root in struc	tural root zon	e Likel	ly root	s on si	te									
216	Corymbia citriodora	М	LV	F	MLVF - 2 2	С	16	7 N	3 S	6 E	5 W	60 70	400 R	1/R ST	3	NO	NO	G	2 2
2.0	Lemon Scented Gum	Comments:	Twiggy	dieback, a	symmetrical cro	wn to north. –	Unlikely	/ roots	would	be en	counte	ered on site.							-
217	Corymbia citriodora	Y	LV	F	YLVF - 3 2	S	8	2 N	1 S	3 E	0 W	30 70	90 R	1/R ST	3	NO	NO	F	3
211	Lemon Scented Gum	Comments:	- Likely	roots on si	ite														
218	Corymbia citriodora	М	GV	F	MGVF – 9 2	D	18	8 N	3 S	5 E	0 W	60 70	450 R	1/R ST	3	NO	NO	F	2
210	Lemon Scented Gum	Comments:	Asymm	etrical crow	vn to north-east.	- Likely roots	on site	•					1	1	1	•			<u> </u>
219	Corymbia citriodora	Y/M	GV	F	Y/MGVF - 8.5		10	6 N	0 S	3 E	4 W	70 70	260 R	1/R ST	1	NO	NO	F	2
	Lemon Scented Gum	Comments:	Asymm	etrical crow	vn to north Lik	ely roots on s	te									•			
220	Corymbia citriodora	Y/M	GV	F	Y/MGVF - 8.5 2		10	5 N	2 S	3 E	2 W	50 70	220 R	1/R ST	1	NO	NO	F	2
0	Lemon Scented Gum	Comments:	- Likely	roots on si	ite	•		•	•				•		•				

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spi app me Orier N= S=S E=	own read prox. etres / ttation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
221	Corymbia citriodora	М	GV	F	MGVF - 9 2		19	9 N	3 S	8 E	5 W	50 80	580 R	1/R ST	1	YES	NO	F	2
221	Lemon Scented Gum	Comments:	Slight b	ulge, Kino	flow at wound b	asal stem. Co	-domina	int stem	ns at 4	4.5 met	res	Likely roots	on site	•	•				
222	Corymbia citriodora	М	GV	F	MGVF - 9 2		18	5 N	4 S	3 E	4 W	60 70	380 R	1/R ST	3	NO	NO	F	2
	Lemon Scented Gum	Comments:2	2 x self-s	sown suck	ers Corymbia citr	odora in struct	ural root	zone									•		
223	Allocasuarina torulosa																		3
	Forest She Oak	Comments:	Dead at	time of as	sessment														
224	Lophostemon confertus	М	GV	F	MGVF - 9 2		11	5 N	3 S	3 E	2 W	80 80	380 R	1/R ST	3	NO	NO	G	22
	Queensland Brush Box	Comments:	Young <i>I</i>	<i>icu</i> s in str	uctural root zone.	- Likely roots o	on site												
225	Corymbia citriodora	Y/M	GV	F	Y/MGVF – 8.5 2		8	2 N	2 S	4 E	4 W	30 70	150 R	1/R ST	1	NO	NO	F	2
	Lemon Scented Gum	Comments:	Suppres	sed by <i>E</i> l	ıcalyptus pilulari	s to south. – L	Jnlikely	roots w	ould b	be enco	ounter	ed on site.							
226	Corymbia citriodora	М	GV	F	MGVF - 9 2		17	7 N	1 S	4 E	6 W	60 80	450 R	1/R ST	3	NO	NO	F	2
-	Lemon Scented Gum	Comments:	Asymme	etrical crov	vn to north. – Ur	likely roots w	ould be	encoun	tered	on site									
227	Glochidion ferdinandi	Y/M	GV	F	Y/MGVF - 8.5		3.5	1 N	1 S	1 E	1 W	70 70	200 to 400 DARB	5/R ST	3	NO	YES	F	2 2
/ 4	Cheese Tree x3	Comments:	Group o	f 3 specim	ens, likely suck	ers from stum	ps. – Un	likely ro	oots v	vould b	e enco	ountered on	site.						
228	Eucalyptus pilularis	Y/M	GV	Р	Y/MGVP - 5.5 3		7	3 N	1 S	2 E	3 W	80 70	600 R	5/R ST	3 Decayed	YES	YES / H	Ρ	3 4
	Blackbutt	Comments:	Crown c	onsists of	suckers from te	rmite damage	d stump	- weal	kly att	ached					•				
229	Ficus rubiginosa	Y/M	GV	F	Y/MGVF – 8.5 2	I	5	2 N	1 S	2 E	2 W	70 70	140 R	5/R ST	3	NO	YES	F	22
	Port Jackson Fig	Comments:	Located	2 metres	below rockface t	o north of pat	h. – Unl	ikely ro	ots w	ould be	enco	untered on s	site.	·		•			
230	Celtis occidentalis	Y	GV	F	YGVF - 9 2	D	6	1 N	1 S	1.5 E	1 W	80 70	90 R	1/R ST	1	NO	NO	F	3 4
200	Hackberry	Comments:	Likely se	elf-sown –	lifting concrete	oath – Enviror	nmental	weed s	pecie	s. – Ur	likely	roots would	be encounter	ed on site.		•			

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating <u>www.iaca.org.an</u> / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Crow Sprea appro metre / Oriental N= nor S= Sou E= Ea W=We	ad ox. es tion rth uth ust		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form F = Fair Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
231	Banksia integrifolia	Y/M	GV	F	Y/MGVF - 8.5 2	С	7	1 N	1 S	1 E	1 W	60 70	110 R	1/R ST	1	NO	NO	F	2 2
201	Coastal Banksia	Comments:	– Unlike	ly roots w	ould be encounted	ered on site.									•				
232	Cotoneaster franchettii	М	GV	F	MGVF - 9 2	S	3	4 N	2 S	3 E	3 W	80 80	400 @g R	5/R ST	3	NO	YES	F	3 4
202	Cotoneaster	Comments:	– Enviro	nmental v	veed species	Unlikely roots	would b	e encour	ntered	l on s	ite.	•		•		•			
233	Jacaranda mimosifolia	Y	GV	F	YGVF - 8 2	С	8		1.5 S	1.5 E	1 W	70 80	180 @g R	5/R ST	1	NO	YES	F	2
200	Jacaranda	Comments:	- Likely	roots on s	ite										•				
234	Syncarpia glomulifera	Y/M	LV	F	Y/MLVF - 3.4	· I	9	1 N	2 S	2 E	1 W	80 70	200 R	1/R ST	1	YES	NO	F	2 2
_0.	Turpentine	Comments:	Growing	, halfway o	down road emba	nkment. Devil	's Twine	and soc	oty mo	ould	- Unlik	kely roots wo	ould be encou	intered on site					
235	Eucalyptus haemastoma	М	GV	F	MGVF - 9 2	- 1	11	6 N	0 S	6 E	3 W	60 70	600 R	2/NE R	1	NO	NO	F	2 2
	Scribbly Gum	Comments:	Growing	halfway o	down road emba	nkment. Phot	otropic a	symmet	ry to r	north-	east	- Unlikely ro	ots would be	encountered o	n site.				
236	Lophostemon confertus	М	GV	F	MGVF - 9 2	С	14	3 N	4 S	3 E	2 W	80 80	450 R	1/R ST	3	NO	NO	F	2
200	Queensland Brush Box	Comments:	- Likely	roots on s	ite										•				
237	Lophostemon confertus	М	GV	F	MGVF - 9 2	С	13	4 N	4 S	2 E	4 W	90 80	500 R	1/R ST	3	NO	NO	F	2 2
201	Queensland Brush Box	Comments:	- Likely	roots on s	ite							•		•	•				
238	Banksia integrifolia			D															3 4
	Coastal Banksia	Comments:	Slight le	an to the r	north over River	Road – risk c	of failure	as root	syste	em d	ecay								
239	Rhaphiolepis indica	м	GV	F	MGVF - 9 2	S	3	3 N	1 S	4 E	2 W	90 80	350 R	5/R ST	3	NO	YES	F	3 3
	Indian Hawthorn	Comments:	- Likely	roots on s															
240	Celtis occidentalis	м	GV	F	MGVF - 9 2	S	10	7 N	3 S	4 E	4 W	80 D	750 @g R	5/R ST	3	NO	YES	Ρ	3 3
-	Hackberry	Comments:	Will req	uire future	River Road vehi	icle clearance	pruning	, has bee	en pre	evious	ly lop	ped Likely	roots on site	- Exempt spe	cies				

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Sp app me Orie N= S= : E=	rown read prox. etres / ntation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
241	Melia azedarach	Y/M	GV	F	Y/MGVF - 8.5	Ι	7	3 N	1 S	5 E	4 W	70 70	220 R	5/R ST	1	YES	NO	F	3
241	White Cedar	Comments:	Located	close to F	River Road and v	vill require on	going cle	earanc	e prur	ning. U	oper c	rown branch	sunburn. – L	Inlikely roots w	ould be encou	ntered on	site.		
242	Celtis occidentalis	Y/M	GV	F	Y/MGVF - 8.5 2	D	6	3 N	2 S	2 E	2 W	90 D	250 @g R	5/R ST	1	NO	YES	Ρ	3 4
	Hackberry	Comments:	Likely s	elf-sown,	included basal s	tems. – Enviro	onmenta	al weed	l spec	ies L	ikely r	oots on site	 Exempt spe 	ecies					
243	Araucaria cunninghamii	Y	GV	F	YGVF - 8 2	D	5	2 N	2 S	2 E	2 W	60 80	220 R	1/R ST	3	NO	NO	G	2
	Hoop Pine	Comments:																	
244	Cupaniopsis anacardioides	Y/M	GV	F	Y/MGVF - 8.5 2	D	5	2.5 N	2 S	2 E	2.5 W	60 70	250 @g R	5/R ST	3	NO	YES	F	2 2
	Tuckeroo	Comments:		•	•												•		
245	Magnolia grandiflora	Y	GV	F	YGVF - 8 2	S	5	1 N	1 S	1 E	1 W	50 80	120 R	1/R ST	1	YES	NO	G	2
	Bull Bay Magnolia	Comments:																	
246	Eucalyptus pilularis	Y/M	GV	F	Y/MGVF - 8.5 2	I	9	0 N	7 S	1 E	5 W	50 70	300 R	2/S SC	1	NO	NO	F	2 2
	Blackbutt	Comments:	Hanger.	Basal wo	und with good w	oundwood.													
247	Eucalyptus pilularis	Y	GV	F	YGVF - 8 2	S	8	2 N	2 S	1 E	0 W	60 70	150 R	1/R ST	1	NO	NO	F	2 2
	Blackbutt	Comments:																	
248	Cinnamomum camphora	Y/M	GV	F	Y/MGVF - 8.5 2	S	7	3 N	3 S	4 E	4 W	70 80	700 @g R	5/R ST	3	NO	YES	Ρ	3 4
	Camphor Laurel	Comments:	Multiple	suckers fr	rom stump – com	petition for m	ore sigr	nificant	adjac	ent tre	es. – E	Exempt invas	sive weed spe	cies.					
249	Ulmus procera	Y/M	LV	Р	Y/MLVP – 1.5	D	6	1 N	2 S	4 E	1 W	90 D	400 @ g R	5/R ST	3	YES	YES	Ρ	3 4
-	English Elm	Comments:	Bushlar	d invasive	species. High V	olume epicor	mics												
250	Eucalyptus						12	5 N	5 S	5 E	5 W								2
	DEAD	Comments:	Dead sp	pecimen –	retain specimen	for habitat													

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Sp app me Orier N= S= S E=	own read prox. ttres / ttation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
251	Ficus rubiginosa	М	GV	G	MGVG – 10 1	D	13	4 N	6 S	5 E	4 W	70 90	500 R	1/R ST	3	NO	NO	G	1
201	Port Jackson Fig	Comments:	Covered	d lower ste	m weed species	vine.	1		_				I	_		1			L
252	Cinnamomum camphora	Y/M	GV	F	Y/MGVF - 8.5 2	S	9	2 N	2 S	2 E	3 W	50 70	400 @g R	5/R ST	1	NO	YES	F	3 3
	Camphor Laurel	Comments:	– Exem	pt invasive	e weed species.														
253	Eucalyptus						11	3 N	3 S	3 E	3 W								
	DEAD	Comments:	Dead sp	pecimen –	retain specimen	for habitat									•				
254	Ficus rubiginosa	М	GV	F	MGVF – 9 2	D	12	6 N	7 S	5 E	5 W	70 70	700 @g R	5/R ST	3	NO	NO	G	1
	Port Jackson Fig	Comments:																	
255	Eucalyptus						10	5 N	5 S	5 E	5 W								
	DEAD	Comments:	Dead sp	pecimen –	retain specimen	for habitat	1						-		n.		1		
256	Callistemon citrinus	М	GV	F	MGVF – 9 2	D	4.5	2 N	2 S	1 E	1 W	60 70	300 @g R	5/R ST	3	NO	YES	F	3
	Crimson Bottlebrush	Comments:								-		1		1					
257	Dracaena marginata	М	GV	F	MGVF – 9 2	S	4	1 N	1 S	1 E	0 W	50 60	400 @R R	5/R ST	1	NO	YES	F	3 3
	Dragon Tree	Comments:	Topped	at 900mm			_			-			-	-					
258	Melaleuca styphelioides	М	GV	F	MGVF - 9 2	С	9	2 N	2 S	4 E	3 W	60 70	500 R	1/R ST	1	YES	YES	F	2 2
	Prickly Paperbark	Comments:	Covered	d in Lantar	na to mid crown.	Fill 100% of 1	ree prot	ection	zone										
259	Salix matsudana 'tortuosa'	м	GV	F	MGVF – 9 2	D	10	4 N	5 S	6 E	6 W	70 D	600 @g R	5/R ST	3	NO	YES	F	3 3
	Tortured Willow	Comments:	Environ	mental we	ed species														
260	Erythrina x hybrida	М	GV	F	MGVF - 2	С	8	3 N	3 S	5 E	5 W	70 D	800 @g R	5/R ST	3	NO	YES	F	3 3
	Coral tree	Comments: -	Exempt	species															

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spr app me Orier N= S= S E=	own read rrox. tres / ttation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
261	Syzygium australe	Y/M	GV	F	Y/MGVF - 8.5	D	5	1.5 N	1.5 S	1.5 E	1.5 W	90 80	200 @g R	5/R ST	3	NO	YES	F	2
201	Scrub Cherry	Comments:			2				0			00	, N	01					
262	Magnolia grandiflora	М	GV	F	MGVF - 9 2	D	8	3 N	3 S	4 E	2.5 W	70 70	300 R	1/R ST	3	NO	NO	F	2
	Bull Bay Magnolia	Comments:	Adjoinin	g site															
263	Grevillea robusta	М	LV	F	MLVF - 4 2	С	16	5 N	6 S	4 E	6 W	70 60	580 R	1/R ST	3	NO	NO	F	2 2
	Silky Oak	Comments:	Adjoinin	g site															
264	Angophora costata	М	GV	F	MGVF - 9 2	С	13	3 N	3 S	5 E	6 8	50 70	450 R	1/R ST	1	NO	NO	G	1
	Sydney Red Gum	Comments:	Adjoinin	g site															
265	Angophora costata	М	GV	F	MGVF - 9 2	С	14	5 N	6 S	9 E	7 W	60 70	700 R	1/R ST	3	YES	NO	G	1
	Sydney Red Gum	Comments:	Adjoinin	g site – m	inor borer														
266	Angophora costata	М	GV	F	MGVF - 9 2	С	14	5 N	4 S	7 E	5 W	60 80	620 R	1/R ST	3	NO	NO	G	1
	Sydney Red Gum	Comments:	Adjoinin	g site															
267	Ravenala madagascariensis	м	GV	F	MGVF – 9 2	S	5	2.5 N	2.5 S	2.5 E	2.5 W	90 80	900 @g R	5/R ST	1	NO	NO	G	3 3
	Traveller's Palm	Comments:			•														
268	Angophora costata	м	GV	F	MGVF – 9 2	I	11	6 N	7 S	5 E	5 W	50 70	480 R	5/R ST	1	NO	NO	G	1
	Sydney Red Gum	Comments:	Adjoinin	g site											•				
269	Archontophoenix cunninghamiana x2	м	GV	F	MGVF – 9 2	С	14	2.5 N	2.5 S	2.5 E	2.5 W	30 80	200 R	1/R ST	1	NO	NO	G	2
/5	Bangalow Palm	Comments:	2 specir	nens	•			1				•				•	•		
270	Syzygium luehmannii	М	GV	F	MGVF – 9 2	S	3	2 N	2 S	2 E	3 W	70 80	180 @g R	5/R ST	1	NO	NO	F	2 2
-	Small Leafed Lilly Pilly	Comments:																	

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spi app me Orier N= S=S E=	own read prox. tres / tation north South East West		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
074	Phoenix canariensis	м	GV	F	MGVF – 9 2	S	8	2 N	2 S	2 E	2 W	40 80	800 R	1/R ST	1	NO	NO	F	2
271	Date Palm	Comments:	Adioinin	a site	Z			N	5	E	VV	80	ĸ	51					2
272	Pittosporum undulatum	Y/M	LV	F	Y/MLVF -3.5	S	6	1 N	1 S	1 E	1 W	60 60	150 R	1/R ST	1	NO	NO	Ρ	3
	Native Daphne	Comments:																	
8A	Glochidion ferdinandi	Y/M	LV	Р	Y/MLVP – 1.5 3	S	6	2 N	2 S	2 E	2 W	70 40	300@300 R	2/NE ST	3	NO	YES	Р	3
0/1	Cheese Tree	Comments:	Suppres	sed by 3 a	adjacent fig trees	s, crown dieba	ack, drou	ught str	ess.						I				
11A	Acacia falcata	0	LV	Р	OLVP - 0 3	S	7	1.5 N	1.5 S	1.5 E	1.5 W	40 60	180 R	3/NE SC	3	YES	NO	Ρ	3
	Hickory Wattle	Comments:	Borer, 4	0% crown	dieback.										•				•
14A	Glochidion ferdinandi	м	LV	F	MLVF – 4 2	I	8	4 N	4 S	3 E	3 W	60 50	350 R	1/R ST	1	YES	YES	G	2
	Cheese Tree	Comments:	30% cro	wn diebao	k likely drought	stress.													
21A	Pittosporum undulatum	м	LV	F	MLVF – 4 2	S	8	3 N	3 S	7.5 E	7.5 W	70 70	300 R	3/NE SC	1	YES	YES	Ρ	3 3
	Native Daphne	Comments:	Psyllids,	sooty mo	uld.														
22A	Cupaniopsis anacardioides	Y	GV	F	YGVF – 8 2	D	6	2 N	2 S	1.5 E	1.5 W	60 80	160 R	5/R ST	3	NO	YES	Ρ	3
	Tuckeroo	Comments:	Weak u	nion at 900)m.										•				•
38A	Angophora costata	0	LV	Р	OLVP – 0 3	S	8	2.5 N	2.5 S	2.5 E	2.5 W	50 70	280 R	1/R ST	1	YES	NO	Ρ	3 4
00/1	Sydney Red Gum	Comments:	90% dea	ad crown.								-							
38B	Angophora costata	Y	LV	D	YLVD – 0 3		6	1 N	1 S	1 E	1 W								3 4
	Sydney Red Gum	Comments:																	
45A	Ficus rubiginosa x2	Y	GV	F	YGVF – 8 1	С	6-9	2 N	2 S	2 E	2 W	40 90	120-260 R	1/R ST	3	NO	NO	G	2 2
/6	Port Jackson Fig	Comments:																	

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		app me Orien N=r S= S E=1	read prox. tres / tation north		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
74A	Angophora costata	м	GV	F	MGVF – 9 2	С	11	3 N	3 S	3 E	3 W	60 70	260 R	1/R ST	1	NO	NO	G	2
747	Sydney Red Gum	Comments:			I							-		-					L
81A	Stenocarpus sinuatus	Y/M	GV	F	YMGVF - 8.5 2	S	6	1 N	1 S	1 E	1 W	80 90	130 R	1/R ST	1	NO	NO	G	2
• • • •	Firewheel Tree	Comments:	Non-loc	ally indige	nous species.														
81B	Angophora costata	Y/M	GV	F	YMGVF - 8.5 2	I	12	2 N	2 S	1.5 E	1.5 W	50 70	200 R	1/R ST	1	NO	NO	G	2
0.5	Sydney Red Gum	Comments:		•	•										•				
83A	Ficus rubiginosa	Y	GV	F	YGVF – 8 1	S	5	1.5 N	1.5 S	1.5 E	1.5 W	90 70	140 R	1/R ST	3	NO	NO	G	2 2
	Port Jackson Fig	Comments:		•	•														
85A	Ficus rubiginosa	м	GV	F	MGVF – 9 1	I	9	6 N	6 S	5 E	5 W	90 90	800# R	5/R ST	5 3-W, 2-S	NO	YES	G	1 1
	Port Jackson Fig	Comments:	50% cro	wn overha	anging site.										•				
91A	Lagerstroemia indica	м	GV	F	MGVF – 9 2	С	5	2.5 N	2.5 S	2 E	2 W	70 D	600@300 R	5/R ST	1	NO	YES	G	2
	Crepe Myrtle	Comments:	Multiple	basal ster	ns Heritage Cur	ilage Pallister	House.								•				
91B	Lagerstroemia indica	м	GV	F	MGVF – 9 2	С	5	2.5 N	2.5 S	2 E	2 W	70 D	600@300 R	5/R ST	1	NO	YES	G	2 2
0.2	Crepe Myrtle	Comments:	Multiple	basal ster	ns Heritage Cur	ilage Pallister	· House.								•				
91C	Photinia glabra	м	LV	F	MLVF - 4 2	I	6	4 N	4 S	2.5 E	2.5 W		500@300 R	5/R ST	1	NO	YES	F	3 3
	Photinia	Comments:																	
107A	Jacaranda mimosifolia	Y	GV	F	YGVF – 8 2	С	6	2 N	2 S	1 E	1 W	70 D	130 R	2/SE SC	1	NO	NO	G	3 4
	Jacaranda	Comments:	Self-sov	vn – NOW	REMOVED														
107B	Robinia pseudoacacia	Y	GV	F	YGVF – 8 2	С	6	1 N	1 S	1 E	1 W	80 D	100 R	1/R ST	1	NO	NO	G	3 4
	Golden Rain Tree	Comments:	Self-sov	vn - NOW	REMOVED	-	•					-	•	-	•				

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Spr app me Orien N=r S= S E=1	tres / tation		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
107C	Lagerstroemia indica	М	GV	F	MGVF – 9 2	I	8	3 N	3 S	2 E	2 W	80 70	500 DARB R	5/R ST	3	NO	YES	G	2 2
	Crepe Myrtle	Comments:	Heritage	e Curtilage	Pallister House	- NOW REM	OVED						•	•	•				
400.4	Melaleuca bracteata 'Revolution Green'	Y/M	GV	F	YMGVF - 8.5 2	- 1	8	1.5 N	1.5 S	1.5 E	1.5 W	50 60	160 R	1/R ST	1	NO	NO	G	2 2
133A	Revolution Green Paperbark	Comments:	I	1	L	1	1	L			1		L		1	1	1		
4005	Melaleuca bracteata 'Revolution Green'	Y/M	GV	F	YMGVF - 8.5 2	I	10	1.5 N	1.5 S	1.5 E	1.5 W	60 70	180 R	2/W SC	1	NO	NO	G	2
133B	Revolution Green Paperbark	Comments:	L	1		1	1	L					I	1	1	1	I		
142A	Phoenix canariensis x4	М	GV	F	MGVF – 9 2	С	7	3 N	3 S	3 E	3 W	50 80	800 R	1/R ST	1	NO	NO	G	3 3
/7	Date Palm	Comments:	Located	to east ar	nd south of tree	142 (now rem	oved), b	ushlan	d inva	ding s	pecies								
144A	X Cupressocyparis leylandii	М	GV	F	MGVF - 9 2	D	14	2 N	2 S	2 E	2 W	40 80	400 R	2/N ST	1	NO	NO	G	23
	Leyland Cypress	Comments:	Excessi	vely crown	, lifted.														
147A	Phoenix canariensis	М	GV	F	MGVF – 9 2	- 1	5	3 N	3 S	3 E	3 W	50 90	800 R	1/R ST	- 1	NO	NO	G	2 2
	Date Palm	Comments:																	
147B	Celtis	М	GV	F	MGVF – 9 2	D	10	3 N	3 S	3 E	3 W	60 80	350 R	1/R ST	3	NO	NO	G	2 2
	Hackberry	Comments:																	
147C	Liquidambar styraciflua	Y/M	GV	F	YMGVF - 8.5 2	- 1	7	3.5 N	3.5 S	2.5 E	2.5 W	50 80	280 R	1/R ST	5 1-W, 2-S	NO	NO	Ρ	2 2
	Sweet Gum	Comments:	- Exemp	ot species															
147D	Acer negundo x3	М	GV	F	MGVF – 9 2	С	8-9	3 N	3 S	2.5 E	2.5 W	60 80	200-260 R	5/R ST	- 3	NO	NO	G	2 2
/8	Box Elder Maple	Comments:	- Exemp	ot species															
147E	Acer negundo	М	GV	F	MGVF – 9 2	D	8	4 N	4 S	4 E	4 W	70 80	500@300 R	5/R ST	1	NO	YES	G	2 2
	Box Elder Maple	Comments:	Exempt	species -	Lower crown co	vered in Englis	sh Ivy, tv	win ste	ms ari	sing a	t 400m	าท							

Tree No.	Genus & Species Common Name	Age Y = Young M = Mature O = Overmature	Vigour GV = Good Vigour LV = Low Vigour	Condition G = Good F = Fair P = Poor D = Dead	1. SRIV Age, Vigour, Condition / Index Rating www.iaca.org.au / 2. Estimated Life Expectancy 1. Long 2. Medium 3. Short	Crown Form D = Dominant C = Co-dominant I = Intermediate S = Suppressed F = Forest E = Emergent	Ht. Approx. metres		Cro Spr app met / Orient N= n S= S E= E W=V	ead rox. res tation oorth outh East		Crown Cover % / Crown Density % / D = dormant	DBH in mm @ 1.4m, or other, as indicated / Trunk Orientation other than R = radial, e.g. N/S g = ground	Trunk Lean 1 = Upright-Slight 2 = Moderate 3 = Severe 4 = Critical. 5 = Acaulescent / Orientation / ST = Static P = Progressive Sc = Self- correcting	Roots Evident at Root Crown 1. = None 2. = Adventitious 3. = Basal Flare 4. = Buttresses 5. = First Order Roots (FOR), No. & distribution e.g. R = radial, or one each to N, S, E and W	Pests, Diseases & Damage No or Yes If Yes see comments	Branch Bark Included No or Yes or N/A	Form G = Good Form P = Poor Form	Significance scale 1=High 2=Medium 3=Low / Retention Value 1=High 2=Medium 3=Low 4=Remove
153A	Magnolia grandiflora	Y/M	GV	F	YMGVF - 8.5 2	S	9	1.5 N	1.5 S	1 E	1 W	80 80	230 R	1/R ST	5 4-S	NO	NO	G	2
	Bull Bay Magnolia	Comments:														•			
162A	Archontophoenix cunninghamiana x2	Y/M	GV	F	YMGVF - 8.5 2	С	6	1 N	1 S	1 E	1 W	30 80	150 R	1/R ST	1	NO	NO	G	3 3
/9	Bangalow Palm	Comments:														•			
160A	Syzygium australe	М	GV	F	MGVF – 9 2	D	6	1.5 N	1.5 S	1 E	1 W	80 80	180 R	1/R ST	1	NO	NO	G	2 2
	Lilly Pilly	Comments:																	
159a	Syzygium australe	М	GV	F	MGVF - 9 2	D	5.5	1.5 N	1.5 S	1.5 E	1.5 W	90 80	150 R	5/R ST	1	NO	YES	G	2 2
	Lilly Pilly	Comments:																	

Observations

7.2 The site has a stand of young, mature or senescent, remnant and planted endemic and non-locally indigenous or exotic evergreen and deciduous taxa within the current proposal. The proposed design requires the retention and protection of two hundred and eleven (211) specimens within the site and on the neighbouring properties as they are considered significant for their contribution as landscape elements to the property and the retention of these trees allows them as components of the current curtilage to be transferred to the new proposal, maintaining elements of a continuous landscape, providing a more harmonious integration and transition of the use of the land.

Tree Significance

7.3 Significant Trees as established by the Rating System for Tree Significance – IACA Stars (2010), Appendix A.

Significance Scale 1 – High

- 2 Medium
- 3 Low

Significance Scale	Redgum Tree No.
1	4, 5, 6, 7, 9, 12, 14, 25, 29, 41, 48, 51, 64, 84, 87, 90, 92, 93, 94, 95, 102, 108, 110, 163, 167, 177, 184, 189, 190, 251, 254, 264, 265, 266, 268, 85A
2	1, 2, 10, 15, 19, 20, 22, 27, 28, 30, 34, 35, 37, 39, 40, 44, 45, 46, 47, 49, 50, 52, 53, 54, 57, 58, 60, 63, 65, 66, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 83, 86, 88, 89, 91, 103, 104, 107, 109, 111, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 134, 135, 136, 137, 138, 139, 144, 145, 147, 149, 150, 152, 153, 154, 155, 156, 157, 158, 159, 160, 165, 168, 176, 185, 186, 188, 191, 192, 196, 207, 208, 210, 211, 213, 215, 216, 218, 219, 220, 221, 222, 224, 225, 226, 227 ^{x3} , 229, 231, 233, 234, 235, 236, 237, 243, 244, 245, 246, 247, 250, 253, 255, 258, 261, 262, 263, 269x ² , 270, 271, 14A, 45A, 74A, 91ABC, 83A, 81AB, 133AB, 144A, 147ABCDE, 153A, 160A, 159A
3	8, 13, 18, 23, 26, 31, 32, 33, 36, 38, 42, 43, 59, 61, 62, 67, 68, 82, 85, 105, 112, 133, 143, 146, 151, 161, 162, 164, 166, 171, 172, 173, 175, 194, 197, 198,200, 206, 209, 212, 214, 217, 223, 228, 230, 232, 238, 239, 240, 241, 242, , 248, 249, 252, 256, 257, 259, 260, 267, 272, 8A, 11A, 21A, 22A, 38A, 38B, 142A, 162A

Tree Retention Value

7.4 See Appendix A for Retention Value Matrix.

Retention Value

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

Retention Value	Redgum Tree No.
High Priority for. Retention	4, 5, 6, 7, 9, 12, 14, 18, 24, 25, 29, 41, 51, 64, 84, 90, 102, 110, 167, 171, 172, 173, 174, 175, 176, 184, 189, 190, 251, 254, 264, 265, 266, 268, 85A
Medium Consider for Retention	1, 2, 10, 15, 19, 20, 22, 27, 28, 30, 34, 35, 37, 39, 40, 44, 46, 47, 48, 49, 50, 52, 53, 54, 57, 58, 60, 63, 65, 66, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 83, 86, 87, 88, 89, 92, 96, 94, 95, 103, 104, 107, 109, 111, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 132, 134, 135, 137, 138, 139, 144, 145, 147, 149, 150, 154, 155, 156, 158, 159, 177, 185, 186, 187, 188, 196, 201, 203, 204, 207, 208, 210, 211, 213, 215, 216, 218, 219, 220, 221, 222, 224, 225, 226, 227 ^{x3} , 229, 231, 233, 234, 235, 236, 237, 243, 244, 245, 246, 247, 250, 253, 255, 258, 261, 262, 263, 269x ² , 270, 271, 14A, 45A, 74A, 91A, 91B, 91C 83A, 81A, 81B, , 133A, 133B, 147A, 147B, 147C, 147D, 147E, 153A, 159A, 160A,
Low Consider for Removal	13, 17, 23, 26, 31, 33, 36, 38, 45, 59, 61, 62, 67, 68, 82, 91, 112, 136, 143, 146, 148, 151, 152, 153, 157, 160, 161, 162, 163, 164, 165, 166, 168, 178, 180, 181, 182, 191, 192, 193, 194, 197, 198, 199, 209, 212, 214, 217, 239, 240, 241, 252, 256, 257, 259, 260, 267, 272, 8A, 21A, 22A 142A, 144A, 162A
Remove Priority for. Removal	8, 16, 18, 32, 42, 43, 74 85, 105, 133, 179, 195, 200, 202, 206, 223, 228, 230,232, 238, 242, 248, 249, 11A, 38A, 38B

* Trees located within the neighbouring property and should be retained and protected. Consent required from owner if removal required.

- 7.5 AS4970 (2009) section 3, 3.3.3 requires the Project Arborist to demonstrate that where a retained tree is subject to a major encroachment (>10% of area of TPZ) it can be protected to remain viable
- 7.6 <u>Tree 1, 2, 4, 5, 6, 7, 8A, 9, 10, 11A, 12, 13, 14, 14A, 15, 20, 21, 21A, 22, 22A, 23, 24, 25, 26, 27, 28, 29, 30, 35, 37</u> <u>& 40</u> *Cinnamomum camphora -* Camphor Laurel, *Pinus radiata -* Radiata Pine, *Ficus rubiginosa -* Port Jackson Fig, *Pittosporum undulatum -* Native Daphne, *Agathis robusta -* Queensland Kauri Pine, *Eucalyptus pilularis –* Blackbutt, *Glochidion ferdinandi -* Cheese Tree, *Eucalyptus saligna x botryoides -* Wollongong Wollybutt, *Cupaniopsis anacardioides –* Tuckeroo, *Eucalyptus botryoides -* Bangalay Gum & *Eucalyptus saligna -* Sydney Blue Gum, these specimens are located within the north-east end of the site.

- 7.7 Tree 19, 31, 33, 34, 41, 44, 45, 45A, 46, 47, 48, 49, 50, 51, 52, 53, 54, 57, 55, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 261, 262 & 263, Angophora bakeri Small Leaf Apple, Phoenix canariensis Date Palm, Pittosporum undulatum Native Daphne, Eucalyptus saligna Sydney Blue Gum, Glochidion ferdinandi Cheese Tree, Eucalyptus pilularis Blackbutt, Angophora costata Sydney Red Gum, Eucalyptus resinifera Red Mahogany, Acacia falcata Hickory Wattle, Cinnamomum camphora Camphor Laurel & Ficus rubiginosa Port Jackson Fig, these specimens are located within the south-east end of the site.
- 7.8 <u>Tree 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 81A, 81B, 82, 83, 83A, 84, 85A, 86, 87, 88, 89, 90, 91, 91A, 91B, 91C, 92, 93, 94, 95, 102, 103, 104, 107, 108, 109, 110, 111, 112, 264, 265, 266 & 268 Angophora costata Sydney Red Gum, Corymbia citriodora Lemon Scented Gum, Jacaranda mimosifolia Jacaranda, Cedrus deodara Himalayan Cedar, Camellia japonica Camellia, Ficus rubiginosa Port Jackson Fig, Stenocarpus sinuatus Firewheel Tree, Acer negundo Box Elder Maple, Lagerstroemia indica Crepe Myrtle, Photinia glabra Photinia, Platanus digitate Plane Tree, Thuja orientalis Bookleaf Conifer, Eucalyptus pilularis Blackbutt, Eucalyptus microcorys Tallowwood, Eucalyptus grandis Rose gum, Liquidambar styraciflua Sweet Gum & Celtis sp. Hackberry, These specimens are located to the south of the site within the Pallister House grounds.</u>
- 7.9 <u>Tree 113 130, 132, 133A, 133B, 134, 135, 136, 137, 138, 139, 142A, 143, 147, 147A, 147B, 147C, 147D, 147E, 148, 151, 152, 154, 155, 156, 158, 157, 158, 199, 250, 251, 252, 253, 254, 255, 259, 260 & 271 Glochidion ferdinandi Cheese Tree, Melaleuca bracteata 'Revolution Green' Revolution Green Paperbark, Cupressus cashmeriana Kashmir Cypress, Cedrus deodara Himalayan Cedar, Callistemon salignus Willow Bottlebrush, Eucalyptus saligna Sydney Blue Gum, Livistona chinensis Chinese Fan Palm, Phoenix canariensis Date Palm, Eucalyptus saligna Sydney Blue Gum, Hymenosporum flavum Native Frangipani, Acer negundo Box Elder Maple, Magnolia grandiflora Bull Bay Magnolia, Triadica sebifera Chinese Tallowwood,& Brachychiton acerifolius Illawarra Flame Tree & Syzygium australe Lilly Pilly, these specimens are located on the western side of the site.</u>

• <u>Trees viability to development</u>; the impact by the proposed development will be assessed further when detailed architectural plans are available. The project arborist is to certify that installation of protection measures has been installed as per D/A conditions prior to commencement and works are to be monitored throughout the project at approx. 3 mthly intervals depending on the length of the development. These specimens should remain viable beyond completion of development provided recommended installation & protection measures are adhered to.

• <u>Development Impacts</u>: AS4970 (2009) section 3 requires a TPZ setback as detailed in column 4 of Table 2 from COT, the setback for the proposed development adjacent to these specimens is to be greater than the Structural Root Zone as detailed in column 2 of Table 2. Additional trees may require removal, depending on setbacks when detailed plans are available.

7.10 <u>Tree 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 224, 225, 226, 227, 229, 231, 233, 234, 235, 236, 237, 239 & 241</u> Pittosporum undulatum - Native Daphne, Leptospermum sp.- Tea Tree, Eucalyptus botryoides - Bangalay Gum, Lophostemon confertus- Queensland Brush Box, Allocasuarina torulosa- Forest She Oak, Corymbia citriodora- Lemon Scented Gum, Glochidion ferdinandi x3- Cheese Tree, Ficus rubiginosa- Port Jackson Fig, Banksia integrifolia- Coastal Banksia, Jacaranda mimosifolia- Jacaranda, Syncarpia glomulifera-Turpentine, Eucalyptus haemastoma- Scribbly Gum, Rhaphiolepis sp.- Hawthorn & Melia azedarach- White Cedar, these specimens are located on the northern side of the site, within the road reserve.

• <u>Trees viability to development</u>; the impact by the proposed development will be assessed further when detailed architectural plans are available. The project arborist is to certify that installation of protection measures has been installed as per D/A conditions prior to commencement and works are to be monitored throughout the project at approx. 3 mthly intervals depending on the length of the development. These specimens should remain viable beyond completion of development provided recommended installation & protection measures are adhered to.

• <u>Development Impacts</u>: AS4970 (2009) section 3 requires a TPZ setback as detailed in column 4 of Table 2 from COT, the setback for the proposed development adjacent to these specimens is to be greater than the Structural Root Zone as detailed in column 2 of Table 2. Additional trees may require removal, depending on setbacks when detailed plans are available.

Demolition and Tree Removal/s

- 7.11 There is a total of eighty-six (86) trees recommended for removal, with fifty-three (55) trees recommended for removal due to proposed building envelopes which consists of (4) Trees 17, 19, 38 & 39 are recommended to be removed as they are in the proposed footprint for the Respite facility and (49) Trees 144, 144A, 145, 159A, 160, 160A, 161, 162, 162A^{x2}, 163, 164, 167, 168, 171 to 186, 188 to 192, 196, 197, 198, 203, 204, 207, 208, 243, 244, 245, 247, 256, 257 & 269x² are recommended to be removed as they are situated within the proposed building envelope and associated infrastructure. Twenty (20) trees are recommended for removal as part of the proposed development: (1) Tree 16 is recommended to be removed to reduce competition for locally indigenous specimens and (19) Trees 8, 18, 32, 36, 105, 146, 147B, 147C, 153, 187, 193, 195, 199, 206, 230, 232, 240, 242 & 248 are recommended to be removed as they are exempt specimens which are not protected under Council guidelines and to reduce competition for locally indigenous. Eleven (11) trees are recommended for removal independent to the proposed development; (5) Trees 11A, 38A, 42, 43, 133 & 200 are recommended to be removed as they have compromised structural integrity, (3) Trees 85, 202 & 205 are recommended to be removed as they are exempt specimens which are not protected under Council guidelines and have compromised structural integrity with the potential to collapse in part or full with (3) dead Trees 11, 38B & 223. We recommend application for Council to remove (2) Trees 228 & 238 located within the road reserve independent to the proposed development as they are considered hazardous with decay and compromised structural integrity with the potential to collapse in part or full. are to be removed as they are not worthy of retention or located within the site in a position where they cannot be retained due to the proposed building footprints and associated infrastructure where encroachment will have an adverse impact on its roots and crown for viability and stability.
 - Tree 8, 18, 32, 36, 67, 68, 105, 146, 147B, 147C, 153, 166, 187, 191, 192, 193, 195, 199, 206, 230, 232, 240, 242 & 248: Cinnamomum camphora Camphor Laurel, Erythrina x sykesii Coral tree, Schefflera actinophylla Large Leaf Umbrella, Acer negundo Box Elder Maple, Syagrus romanzoffianum Cocos Palm, Celtis occidentalis Hackberry, Olea europaea var. Africana African Olive & Privet; Cotoneaster franchettii Cotoneaster; these specimen are located within the property and are exempt species or horticultural industry recognised weed species and are recommended to be removed to reduce competition for locally indigenous species as part of the redevelopment of the site.
 - Tree 11, 38B & 223: Acacia sp. Wattle, Angophora costata Sydney Red Gum & Allocasuarina torulosa

 Forest She Oak (road reserve specimen); located within the property and positioned outside the
 proposed building footprint. These specimens are dead and recommended to be removed independent
 to the proposed development.
 - Tree 11A, 38A, 42, 43, 74,133 & 200: Acacia falcata Hickory Wattle, Angophora costata Sydney Red Gum, Eucalyptus resinifera - Red Mahogany, Pittosporum undulatum - Native Daphne, Allocasuarina torulosa – Forest Oak, Pinus patula - Mexican Weeping Pine & Melia azedarach - White Cedar; these specimens are recommended to be removed independent to the proposed development due to compromised structural integrity due to their healthy &/or condition – see tables in section 7 for further details.
 - Tree 16: *Phoenix canariensis* Date Palm; this specimen is located within the property and is recommended to be removed to reduce competition for locally indigenous specimens.
 - Trees 17, 19, 38 & 39: Eucalyptus saligna Sydney Blue Gum, Angophora bakeri Small Leaf Apple, Angophora costata - Sydney Red Gum & Eucalyptus pilularis – Blackbutt; located within the site and positioned within the proposed Respite building envelope and associated infrastructure. If this current proposed design is approved, then these specimens cannot be retained and are recommended to be replaced as part of the proposed landscape works.
 - Tree 85, 202 & 205: *Erythrina x sykesii* Coral tree; these specimen are located within the property and are recommended to be removed as they are exempt specimens which are not protected under Council guidelines and have compromised structural integrity with the potential to collapse in part or full.
 - Trees 144, 144A, 145, 159A, 160, 160A, 161, 162, 162A^{x2}, 163, 164, 167, 168, 171 to 186, 188 to 192, 196, 197, 198, 203, 204, 207, 208, 243, 244, 245, 247, 256, 257 & 269^{x2}: Ginkgo biloba Maidenhair Tree, *X Cupressocyparis leylandii* Leyland Cypress, *Syzygium australe* Lilly Pilly, *Cedrus atlantica* Atlantic Cedar, *Pyrus* Ornamental Pear, *Archontophoenix cunninghamiana* Bangalow Palm, *Angophora costata* Sydney Red Gum, *Jacaranda mimosifolia* Jacaranda, *Ficus rubiginosa* Port Jackson Fig, *Eucalyptus sideroxylon* Pink Flowering Ironbark, *Acer negundo* Box Elder, *Eucalyptus*

pilularis – Blackbutt, *Phoenix canariensis* - Date Palm, *Syzygium smithii* - Lilly Pilly, *Cinnamomum camphora* - Camphor Laurel, *Triadica sebifera* - Chinese Tallowwood, *Pittosporum undulatum* - Native Daphne, *Stenocarpus sinuatus* - Firewheel Tree, *Araucaria cunninghamii* - Hoop Pine, *Cupaniopsis anacardioides* - Tuckeroo, *Magnolia grandiflora* - Bull Bay Magnolia, *Callistemon citrinus* - Crimson Bottlebrush, *Dracaena marginata* - Dragon tree; located within the site and positioned within the proposed building envelope and associated infrastructure. If this current proposed design is approved, then these specimens cannot be retained and are recommended to be replaced as part of the proposed landscape works.

- Tree 228 & 238: Eucalyptus pilularis Blackbutt & Banksia integrifolia Coastal Banksia; these specimen are located within road reserve and are recommended to be removed by the owner of the asset, independent to the proposed development as they are considered hazardous with decay and compromised structural integrity with the potential to collapse in part or full.
- 7.12 Removal of a tree within 6 m of a tree to be retained should be undertaken only by cutting down such a tree without damaging the trees to be retained, and by grinding out its stump. Where possible the structural roots of 20 mm diameter or greater of the tree to be cut down should not be removed, to minimise soil disturbance and to reduce the impact on the roots of any tree to be retained nearby. Where structural roots are to be removed, this should be undertaken manually using non-motorized hand tools after the stump has been ground out when such roots are often easier to locate from the site of the stump from which they have been severed.

Specific - Tree works – Post Construction

7.13 Trees to be removed are to be replaced with advanced specimens being mindful of the space limitations of the new use of the site. The advanced trees should be situated in areas along the boundaries of the site. The planting in these locations will provide the maximum benefit to the surrounding properties by screening views to and from the site and the plantings included in the proposed landscape plan. The replacement trees will be situated in positions where they may grow to maturity unhindered and will not conflict with built structures or utility services and in greater numbers than the trees removed should provide a net increase in the local amenity.

8.0 CONCLUSION

There are fifty-five (55) trees recommended for removal due to the proposed building footprints, thirty-three (31) additional trees recommended for removal as they are exempt or inappropriate species, weed species, due to their health and/or stability or to reduce competition for locally indigenous specimens with a total of eighty-six (86) trees within the property and on the road reserve nominated for removal and replacement with species in accordance with the associated Landscape documentation for the development. The two hundred and eleven (211) trees to be preserved will be retained and protected through the implementation of adequate measures for their integration into the development by the application of appropriate technology as detailed in this report. Where appropriate, the Landscape Plan will include planting with new trees including street tree/s. *The Arboricultural Impact Assessment only considers the developable areas of the site. The south-western corner of the site contains a densely vegetated area extending down a steep slope towards Gore Creek. This part of the site will remain largely intact and is considered under the Ecology Impact Assessment prepared by Keytone Ecological and included in support of the EIS. When trees from this area are considered the tree retention on site will exceed required tree removal.*

The recommendations made in this report are subject to approval by the consent authority.

9.0 RECOMMENDATIONS

- 9.1 Trees 1, 2, 4, 5, 6, 7, 8A, 9, 10, 12, 13, 14, 14A, 15, 20, 21A, 22, 22A, 23, 25 to 31⁽⁷⁾, 33, 34, 35, 37, 40, 41, 44, 45, 45Ax², 46 to 54, 57 to 68, 71 to 73, 74A, 75 to 81, 81A, 81B, 82, 83, 83A, 84, 85A*, 86 to 91, 91A, 91B, 91C, 92, 93, 94, 95, 102, 103, 104, 107, 109 to 130, 132, 133A, 133B, 134 to 139, 142A^{x4},143, 147, 147A, 147B, 147C, 147Dx3, 147E, 148x5, 149, 150, 151, 152, 153A, 154, 155, 156, 157x3, 158, 159, 165, 194, 201, 209, 210, 212 to 222, 224 to 227x3, 229, 231, 233 to 237, 239, 241, 249, 251, 252, 254, 258 to 266, 267, 268, 270, 271 & 272, Trees 21, 24 108 & 211 are recommended to be retained and protected with further investigation or remedial works required independent to the proposed development and Trees 250, 253 & 255 are dead and recommended to be retained as habitat specimens. All specimens are to be retained in situ within the site and are to be protected as detailed in 7.5 – 7.9 and Section 14 of part B of this report. Tree protection fences, or works, to be situated in accordance with Site Plan B - Trees to be Retained and Tree Protection Zones (Appendix F). See Tree Protection Plan for additional protection measures for the management of retained specimens.
- 9.2 There is a total of eighty-six (86) trees recommended for removal, with fifty-three (55) trees recommended for removal due to proposed building envelopes which consists of (4) Trees 17, 19, 38 & 39 are recommended to be removed as they are in the proposed footprint for the Respite facility and (49) Trees 144, 144A, 145, 159A, 160, 160A, 161, 162, 162Ax², 163, 164, 167, 168, 171 to 186, 188 to 192, 196, 197, 198, 203, 204, 207, 208, 243, 244, 245, 247, 256, 257 & 269x2 are recommended to be removed as they are situated within the proposed building envelope and associated infrastructure. Twenty (20) trees are recommended for removal as part of the proposed development: (1) Tree 16 is recommended to be removed to reduce competition for locally indigenous specimens. and (19) Trees 8, 18, 32, 36, 105, 146, 147B, 147C, 153, 187, 193, 195, 199, 206, 230, 232, 240, 242 & 248 are recommended to be removed as they are exempt specimens which are not protected under Council guidelines and to reduce competition for locally indigenous. Eleven (11) trees are recommended for removal independent to the proposed development; (5) Trees 11A, 38A, 42, 43, 74, 133 & 200 are recommended to be removed as they have compromised structural integrity, (3) Trees 85, 202 & 205 are recommended to be removed as they are exempt specimens which are not protected under Council guidelines and have compromised structural integrity with the potential to collapse in part or full with (3) dead Trees 11, 38B & 223. We recommend application for Council to remove (2) Trees 228 & 238 located within the road reserve independent to the proposed development as they are considered hazardous with decay and compromised structural integrity with the potential to collapse in part or full. All removals are to be undertaken in accordance with 7.11 - 7.13 and Section 13 of Part B of this report.
- 9.3 Each of the replacement are to be a vigorous specimen with a straight trunk, gradually tapering and continuous, crown excurrent, symmetrical, with roots established but not pot bound in a volume container or approved similar and be maintained by an appropriately qualified and experienced landscape contractor for up to one (1) year after planting, or as appropriate.

1 Man

Craig Martin Senior Associate Post Grad Cert Wildlife Habitat Management 2006, Diploma of Horticulture - Arboriculture; (AQF5) 2001, Horticulture Certificate: 1988

DISCI AIMER



DISCLAIMER The author and Redgum Horticultural take no responsibility for actions taken and their consequences, contrary to those expert and professional instructions given as recommendations pertaining to safety by way of exercising our responsibility to our client and the public as our duty of care commitment, to mitigate or prevent hazards from arising, from a failure moment in full or part, from a structurally deficient or unsound tree or a tree likely to be rendered thus by its retention and subsequent modification's to its growing environment either above or below ground contrary to our advice.

REFERENCES

- Draper BD and Richards PA 2009, Dictionary for Managing Trees in Urban Environments, Institute of Australian Consulting Arboriculturists (IACA), CSIRO Publishing, Collingwood, Victoria, Australia. IACA 2005, Sustainable Retention Index Value, Institute of Australian Consulting Arboriculturists, Australia, <u>www.iaca.org.au</u>
- Standards Australia 2007, Australian Standard 4373 Pruning of amenity trees, Standards Australia, Sydney, Australia. Standards Australia 2009, Australian Standard 4970 Protection of trees on development sites, Standards Australia, Sydney, Australia.
- Safe Work Australia 2016, Guide to Managing Risks of Tree Trimming & Removal Works.
- Buchanan R. A. (1989), Bush Regeneration Recovering Australian Landscapes, TAFE Student Learning Publications Sydney Australia.

Appendix A

IACA Significance of a Tree, Assessment Rating System (STARS) $\hfill {\Bbb C}$ (IACA 2010) $\hfill {\Bbb C}$

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

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

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

Tree Significance - Assessment Criteria

1. High Significance in landscape

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

2. Medium Significance in landscape

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

3. Low Significance in landscape

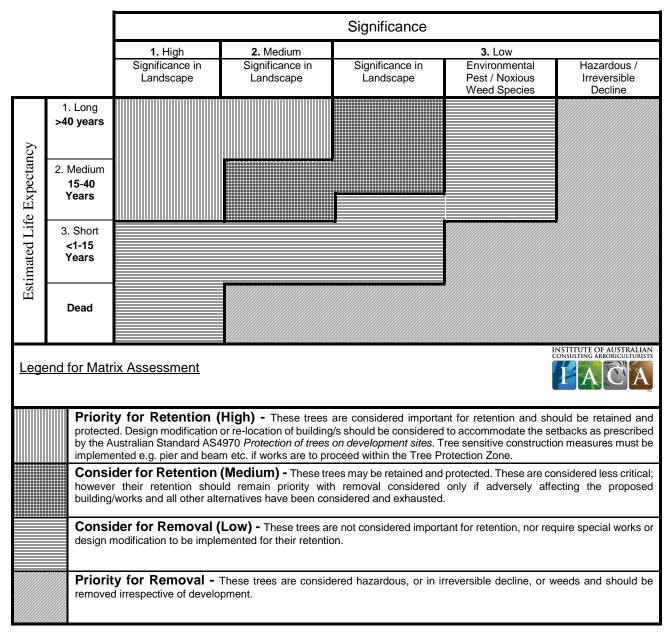
- The tree is in fair-poor condition and good or low vigour;
- The tree has form atypical of the species;
- The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings,
- The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area,
- The tree is a young specimen which may or may not have reached dimension to be protected by local Tree Preservation orders or similar protection mechanisms and can easily be replaced with a suitable specimen,
- The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa in situ tree is inappropriate to the site conditions,
- The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms,
- The tree has a wound or defect that has potential to become structurally unsound.
- Environmental Pest / Noxious Weed Species
- The tree is an Environmental Pest Species due to its invasiveness or poisonous/ allergenic properties,
- The tree is a declared noxious weed by legislation. Hazardous/Irreversible Decline
- The tree is structurally unsound and/or unstable and is considered potentially dangerous,
- The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

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

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



Table 1.0 Tree Retention Value - Priority Matrix.



REFERENCES

Australia ICOMOS Inc. 1999, The Burra Charter – The Australian ICOMOS Charter for Places of Cultural Significance, International Council of Monuments and Sites, www.icomos.org/australia

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

Footprint Green Pty Ltd 2001, Footprint Green Tree Significance & Retention Value Matrix, Avalon, NSW Australia, www.footprintgreen.com.au

Appendix B Matrix - Sustainable Retention Index Value (S.R.I.V.) ©

Version 4, 2010

Developed by IACA – Institute of Australian Consulting Arboriculturists www.iaca.org.au

The matrix is to be used with the value classes defined in the Glossary for Age / Vigour / Condition. An index value is given to each category where ten (10) is the highest value.

Class		Vig	our Class and C	ondition Class		INSTITUTE OF AUSTRALIAN CONSULTING ARBORICULTURISTS
Age	Good Vigour & Good Condition (GVG)	Good Vigour & Fair Condition (GVF)	Good Vigour & Poor Condition (GVP)	Low Vigour & Good Condition (LVG)	Low Vigour & Fair Condition (LVF)	Low Vigour & Poor Condition (LVP)
	Able to be retained if sufficient space available above and below ground for future growth. No remedial work or improvement to growing environment required. May be subject to high vigour. Retention potential - Medium – Long Term.	Able to be retained if sufficient space available above and below ground for future growth. Remedial work may be required or improvement to growing environment may assist. Retention potential - Medium Term. Potential for longer with remediation or favourable environmental conditions.	Able to be retained if sufficient space available above and below ground for future growth. Remedial work unlikely to assist condition, improvement to growing environment may assist. Retention potential - Short Term. Potential for longer with remediation or favourable environmental conditions.	May be able to be retained if sufficient space available above and below ground for future growth. No remedial work required, but improvement to growing environment may assist vigour. Retention potential - Short Term. Potential for longer with remediation or favourable environmental conditions.	May be able to be retained if sufficient space available above and below ground for future growth. Remedial work or improvement to growing environment may assist condition and vigour. Retention potential - Short Term. Potential for longer with remediation or favourable environmental conditions.	Unlikely to be able to be retained if sufficient space available above and below ground for future growth. Remedial work or improvement to growing environment unlikely to assist condition or vigour. Retention potential - Likely to be removed immediately or retained for Short Term. Potential for longer with remediation or favourable environmental conditions.
Young (YGVG - 9 Index Value 9 Retention potential - Long Term. Likely to provide minimal contribution to local amenity if height <5 m. High potential for future growth and adaptability. Retain, move or replace.	YGVF - 8 Index Value 8 Retention potential - Short – Medium Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5 m. Medium-high potential for future growth and adaptability. Retain, move or replace.	YGVP - 5 Index Value 5 Retention potential - Short Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5 m. Low- medium potential for future growth and adaptability. Retain, move or replace.	YLVG - 4 Index Value 4 Retention potential - Short Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5 m. Medium potential for future growth and adaptability. Retain, move or replace.	YLVF - 3 Index Value 3 Retention potential - Short Term. Potential for longer with improved growing conditions. Likely to provide minimal contribution to local amenity if height <5m. Low-medium potential for future growth and adaptability. Petaian, move or replace.	YLVP - 1 Index Value 1 Retention potential - Likely to be removed immediately or retained for Short Term. Likely to provide minimal contribution to local amenity if height <5 m. Low potential for future growth and adaptability.
(M)	MGVG - 10	MGVF - 9	MGVP - 6	MLVG - 5	MLVF - 4	MLVP - 2
Mature	Index Value 10 Retention potential -Medium - Long Term.	Index Value 9 Retention potential - Medium Term. Potential for longer with improved growing conditions.	Index Value 6 Retention potential - Short Term. Potential for longer with improved growing conditions.	Index Value 5 Retention potential - Short Term. Potential for longer with improved growing conditions.	Index Value 4 Retention potential - Short Term. Potential for longer with improved growing conditions.	Index Value 2 Retention potential - Likely to be removed immediately or retained for Short Term.
(0)	OGVG - 6	OGVF - 5	OGVP - 4	OLVG - 3	OLVF - 2	OLVP - 0
Over- 0	Index Value 6 Retention potential - Medium - Long Term.	Index Value 5 Retention potential - Medium Term.	Index Value 4 Retention potential - Short Term.	Index Value 3 Retention potential - Short Term. Potential for longer with improved growing conditions.	Index Value 2 Retention potential - Short Term.	Index Value 0 Retention potential - Likely to be removed immediately or retained for Short Term.

Appendix C

Survey of Subject Tree/s Trees the subject of this report are marked on the plans in the following appendices and are numbered as listed below.

Redgum Tree / Stand No.	Genus and species	Common name	Recommendation
1	Cinnamomum camphora	Camphor Laurel	Retain and protect
2	Pinus radiata	Radiata Pine	Retain and protect
3	MISSING		Missing at time of inspection
4	Ficus rubiginosa	Port Jackson Fig	Retain and protect
5	Ficus rubiginosa	Port Jackson Fig	Retain and protect
6	Ficus rubiginosa	Port Jackson Fig	Retain and protect
7	Ficus rubiginosa	Port Jackson Fig	Retain and protect
8	Cinnamomum camphora	Camphor Laurel	Remove – Inappropriate species
9	Ficus rubiginosa	Port Jackson Fig	Retain and protect
10	Ficus rubiginosa	Port Jackson Fig	Retain and protect
11	Acacia		Dead - Remove
12	Ficus rubiginosa	Port Jackson Fig	Retain and protect
13	Pittosporum undulatum	Native Daphne	Retain and protect
14	Agathis robusta	Queensland Kauri Pine	Retain and protect
15	Eucalyptus pilularis	Blackbutt	Retain and protect
16	Phoenix canariensis	Date Palm	Remove – self-sown
17	Eucalyptus saligna	Sydney Blue Gum	Remove due to Respite building
18	Erythrina x sykesii	Coral tree	Remove - exempt species
19	Angophora bakeri	Small Leaf Apple	Remove due to Respite building
20	Glochidion ferdinandi	Cheese Tree	Retain and protect
21	Eucalyptus pilularis	Blackbutt	Retain – Further investigation require
22	Eucalyptus saligna x botryoides	Wollongong Woolybutt	Retain and protect
23	Eucalyptus saligna x botryoides	Wollongong Woolybutt	Retain and protect
24	Eucalyptus pilularis	Blackbutt	Retain – Further investigation require
25	Eucalyptus botryoides	Bangalay Gum	Retain and protect
26	Eucalyptus botryoides	Bangalay Gum	Retain and protect
27	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
28	Glochidion ferdinandi/ Eucalyptus saligna x botryoides – two species entwined	Cheese Tree/ Wollongong Wollybutt	Retain and protect
29	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
30	Glochidion ferdinandi/ Eucalyptus saligna x botryoides – two species entwined	Cheese Tree/ Wollongong Wollybutt	Retain and protect
31	Phoenix canariensis	Date Palm	Retain and protect
32	Cinnamomum camphora	Camphor Laurel	Remove – Inappropriate species
33	Pittosporum undulatum	Native Daphne	Retain and protect
34	Pittosporum undulatum	Native Daphne	Retain and protect
35	Eucalyptus saligna x botryoides	Wollongong Wollybutt	Retain and protect
36	Erythrina x sykesii	Coral tree	Remove - exempt species
37	Eucalyptus pilularis	Blackbutt	Retain and protect
38	Angophora costata	Sydney Red Gum	Remove due to Respite building
39	Eucalyptus pilularis	Blackbutt	Remove due to Respite building
40	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
41	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
42	Eucalyptus resinifera	Red Mahogany	Remove – Bracket fungi
43	Pittosporum undulatum	Native Daphne	Remove – overmature / cavity
44	Glochidion ferdinandi	Cheese Tree	Retain and protect
45	Eucalyptus pilularis	Blackbutt	Retain and protect
45	Angophora costata	Sydney Red Gum	
4 0	niyupiiula custata	Gyuney Neu Guill	Retain and protect

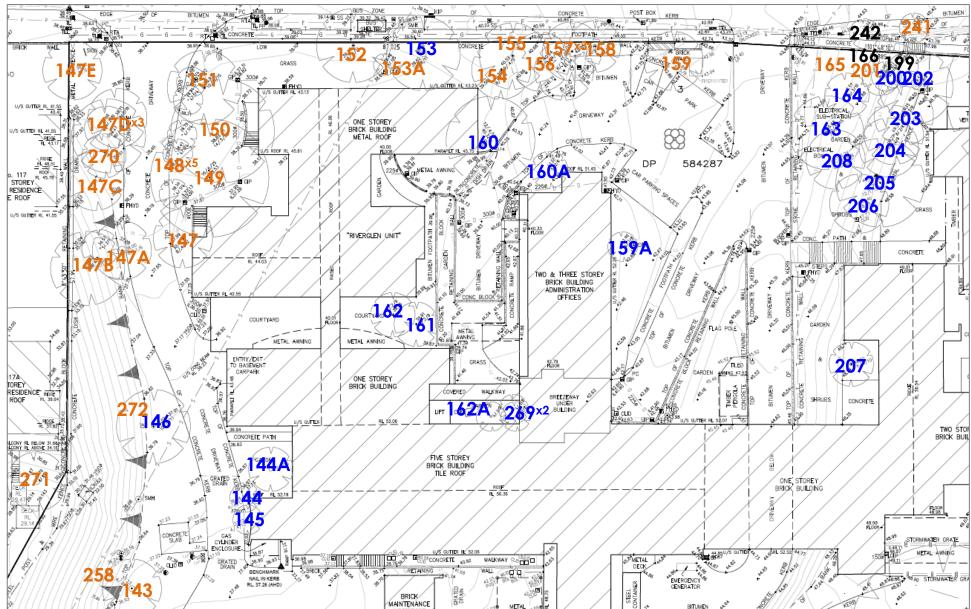
Redgum Tree / Stand No.	Genus and species	Common name	Recommendation
48	Eucalyptus pilularis	Blackbutt	Retain and protect. Habitat tree that will require pruning
49	Eucalyptus resinifera	Red Mahogany	Retain and protect
50	Acacia falcata	Hickory Wattle	Retain and protect
51	Eucalyptus resinifera	Red Mahogany	Retain and protect
52	Angophora costata	Sydney Red Gum	Retain and protect
53	Eucalyptus resinifera	Red Mahogany	Retain and protect
54	Angophora costata	Sydney Red Gum	Retain and protect
55	Missing		Missing at time of inspection
56	Missing		Missing at time of inspection
57	Angophora costata	Sydney Red Gum	Retain and protect
58	Eucalyptus resinifera	Red Mahogany	Retain and protect
59	Pittosporum undulatum	Native Daphne	Retain and protect
60	Cinnamomum camphora	Camphor Laurel	Retain and protect
61	Cinnamomum camphora	Camphor Laurel	Retain and protect
62	Grevillea robusta	Silky Oak	Retain and protect Exempt species
63	Angophora costata	Sydney Red Gum	Retain and protect
64	Angophora costata	Sydney Red Gum	Retain and protect
65	Ficus rubiginosa	Port Jackson Fig	Retain and protect
66	Angophora costata	Sydney Red Gum	Retain and protect
67	Cinnamomum camphora	Camphor Laurel	Retain and protect
68	Cinnamomum camphora	Camphor Laurel	Retain and protect
69	Missing		Missing at time of inspection
70	Missing		Missing at time of inspection
71	Angophora costata	Sydney Red Gum	Retain and protect
72	Angophora costata	Sydney Red Gum	Retain and protect
72	Angophora costata	Sydney Red Gum	Retain and protect
73	Allocasuarina torulosa	Forest She Oak	Remove failed at base
75	Angophora costata	Sydney Red Gum	Retain and protect
76	Angophora costata	Sydney Red Gum	Retain and protect
77	Angophora costata	Sydney Red Gum	Retain and protect
78	Angophora costata	Sydney Red Gum	Retain and protect
70	Angophora costata	Sydney Red Gum	Retain and protect
80	Angophora costata	Sydney Red Gum	Retain and protect
81	Angophora costata	Sydney Red Gum	· · ·
82	Corymbia citriodora	Lemon Scented Gum	Retain and protect
83	Angophora costata	Sydney Red Gum	Retain and protect Retain and protect
84	Angophora costata	Sydney Red Gum	
85	Erythrina x sykesii	Coral tree	Retain and protect Remove - exempt species
86	Corymbia citriodora	Lemon Scented Gum	
87	Corymbia citriodora	Lemon Scented Gum	Retain and protect
			Retain and protect
88	Corymbia citriodora	Lemon Scented Gum	Retain and protect
89	Corymbia citriodora	Lemon Scented Gum	Retain and protect
90	Corymbia citriodora	Lemon Scented Gum	Retain and protect
91	Jacaranda mimosifolia	Jacaranda	Retain and protect
92	Angophora costata	Sydney Red Gum	Retain and protect
93	Cedrus deodara	Himalayan Cedar	Retain and protect
94	Camellia japonica	Camellia	Retain and protect
95	Ficus rubiginosa	Port Jackson Fig	Retain and protect
96	Missing		Missing at time of inspection
97	Missing		Missing at time of inspection
98	Missing		Missing at time of inspection

Redgum Tree / Stand No.	Genus and species	Common name	Recommendation
99	Missing		Missing at time of inspection
100	Missing		Missing at time of inspection
101	Missing		Missing at time of inspection
102	Ficus rubiginosa	Port Jackson Fig	Retain and protect
103	Platanus digitata	Plane Tree	Retain and protect
104	Jacaranda mimosifolia	Jacaranda	Retain and protect
105	Schefflera actinophylla	Large Leaf Umbrella	Remove – exempt species
106	Missing		Missing at time of inspection
107	Thuja orientalis	Bookleaf Conifer	Retain and protect
108	Eucalyptus pilularis	Blackbutt	Retain – Further investigation required
109	Eucalyptus microcorys	Tallowwood	Retain and protect
110	Eucalyptus grandis	Rose gum	Retain and protect
111	Liquidambar styraciflua	Sweet Gum	Retain and protect
112	Celtis sp.	Hackberry	Retain and protect
113	Cupressus torulosa	Bhutan Cypress	Retain and protect
114	Cupressus torulosa	Bhutan Cypress	Retain and protect
115	Cupressus torulosa	Bhutan Cypress	Retain and protect
116	Cupressus torulosa	Bhutan Cypress	Retain and protect
117	Cupressus torulosa	Bhutan Cypress	Retain and protect
118	Cupressus torulosa	Bhutan Cypress	Retain and protect
119	Cupressus torulosa	Bhutan Cypress	Retain and protect
120	Cupressus torulosa	Bhutan Cypress	Retain and protect
121	Cupressus torulosa	Bhutan Cypress	Retain and protect
121	Cupressus torulosa	Bhutan Cypress	Retain and protect
122	Cupressus torulosa	Bhutan Cypress	Retain and protect
123	Cupressus torulosa	Bhutan Cypress	Retain and protect
124	Cupressus torulosa	Bhutan Cypress	Retain and protect
125	Cupressus torulosa	Bhutan Cypress	
120	Cupressus torulosa	Bhutan Cypress	Retain and protect
127	· ·	•••	Retain and protect
120	Cupressus torulosa	Bhutan Cypress	Retain and protect
	Cupressus torulosa	Bhutan Cypress	Retain and protect
130	Cupressus torulosa	Bhutan Cypress	Retain and protect
131	Missing		Missing at time of inspection
132	Glochidion ferdinandi	Cheese Tree	Retain and protect
133	Pinus patula	Mexican Weeping Pine	Remove - OVERMATURE
134	Cupressus cashmeriana	Kashmir Cypress	Retain and protect
135	Cedrus deodara	Himalayan Cedar	Retain and protect
136	Cedrus deodara	Himalayan Cedar	Retain and protect
137	Callistemon salignus	Willow Bottlebrush	Retain and protect
138	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
139	Livistona chinensis	Chinese Fan Palm	Retain and protect
140	Missing		Missing at time of inspection
141	Missing		Missing at time of inspection
142	Eucalyptus scoparia	Wallangarra White Gum	Removed at time of 2019 inspection
143	Phoenix canariensis	Date Palm	Retain and protect
144	Ginkgo biloba	Maidenhair Tree	Remove and replace
145	Ginkgo biloba	Maidenhair Tree	Remove and replace
146	Cinnamomum camphora	Camphor Laurel	Remove – exempt species
147	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
148/2	Hymenosporum flavum x5	Native Frangipani	Retain and protect

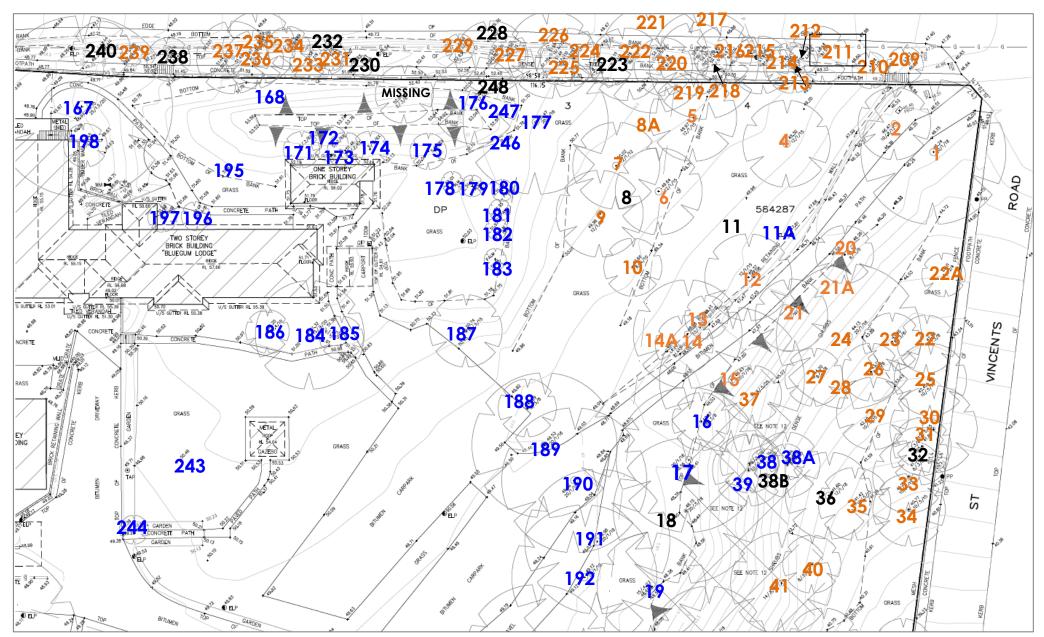
Redgum Tree / Stand No.	Genus and species	Common name	Recommendation
149	Eucalyptus microcorys	Tallowwood	Retain and protect
150	Liquidambar styraciflua	Sweet Gum	Retain and protect
151	Acer negundo	Box Elder Maple	Retain and protect. – Exempt species
152	Acer negundo	Box Elder Maple	Retain and protect. – Exempt species
153	Acer negundo	Box Elder Maple	Remove – exempt species
154	Magnolia grandiflora	Bull Bay Magnolia	Retain and protect
155	Magnolia grandiflora	Bull Bay Magnolia	Retain and protect
156	Jacaranda mimosifolia	Jacaranda	Retain and protect
157/3	Acer negundo x3	Box Elder Maple	Retain and protect. – Exempt species
158	Triadica sebifera	Chinese Tallowwood	Retain and protect
159	Brachychiton acerifolius	Illawarra Flame Tree	Retain and protect
160	Cedrus atlantica	Atlantic Cedar	Remove and replace
161	Pyrus	Ornamental Pear	Remove and replace
162	Pyrus	Ornamental Pear	Remove and replace
163	Angophora costata	Sydney Red Gum	Remove and replace
164	Jacaranda mimosifolia	Jacaranda	Remove and replace
165	Jacaranda mimosifolia	Jacaranda	Retain and protect.
			Removed at time of 2019 inspection
166	Cinnamomum camphora	Camphor Laurel	- stump visible
167	Ficus rubiginosa	Port Jackson Fig	Remove and replace
168	Eucalyptus sideroxylon	Pink Flowering Ironbark	Remove and replace
169	Missing		Missing at time of inspection
170	Missing		Missing at time of inspection
171	Acer negundo	Box Elder Maple	Remove and replace
172	Acer negundo	Box Elder Maple	Remove and replace
173	Acer negundo	Box Elder Maple	Remove and replace
174	Acer negundo	Box Elder Maple	Remove and replace
175	Acer negundo	Box Elder Maple	Remove and replace
176	Eucalyptus pilularis	Blackbutt	Remove and replace
177	Eucalyptus pilularis	Blackbutt	Remove and replace
178	Phoenix canariensis	Date Palm	Remove and replace
179	Phoenix canariensis	Date Palm	Remove and replace
180	Phoenix canariensis	Date Palm	Remove and replace
181	Phoenix canariensis	Date Palm	Remove and replace
182	Phoenix canariensis	Date Palm	Remove and replace
183	Phoenix canariensis	Date Palm	Remove and replace
184	Eucalyptus pilularis	Blackbutt	Remove and replace
185	Eucalyptus sideroxylon	Pink Flowering Ironbark	Remove and replace
186	Eucalyptus sideroxylon	Pink Flowering Ironbark	Remove and replace
187	Syagrus romanzoffianum	Cocos Palm	Remove - exempt species
188	Syagius romanzomanum Syzygium smithii	Lilly Pilly	Remove and replace
189	Ficus rubiginosa	Port Jackson Fig	Remove and replace
199		Port Jackson Fig	Remove and replace
190	Ficus rubiginosa	-	Remove; environmental weed
191	Cinnamomum camphora	Camphor Laurel	
	Cinnamomum camphora	Camphor Laurel	Remove; environmental weed
193 194	Olea europaea var. africana Populus deltoids	African Olive Eastern Cottonwood	Remove – exempt species Retain and protect
194	Celtis	Hackberry	Remove - exempt species
195	Triadica sebifera	Chinese Tallowwood	Remove and replace
197	Triadica sebifera	Chinese Tallowwood	Remove and replace
198	Pittosporum undulatum	Native Daphne	Remove and replace
199	Acer negundo	Box Elder Maple	Retain and protect – exempt species
200	Melia azedarach	White Cedar	Remove and replace

Redgum Tree / Stand No.	Genus and species	Common name	Recommendation
201	Triadica sebifera	Chinese Tallowwood	Retain and protect
202	Erythrina x sykesii	Coral tree	Remove - exempt species with compromised structural integrity
203	Acer negundo	Box Elder Maple	Remove and replace (exempt if under 6 metres)
204	Ficus rubiginosa	Port Jackson Fig	Remove and replace
205	Erythrina x sykesii	Coral tree	Remove - exempt species
206	Privet		Remove – weed species
207	Stenocarpus sinuatus	Firewheel Tree	Remove and replace
208	Phoenix canariensis	Date Palm	Remove & replace
209	Pittosporum undulatum	Native Daphne	Retain and protect – Street tree
210	Leptospermum sp.	Tea Tree	Retain and protect – Street tree
211	Eucalyptus botryoides	Bangalay Gum	Retain – Further investigation required. – Street tree
212	Pittosporum undulatum	Native Daphne	Retain and protect – Street tree
213	Lophostemon confertus	Queensland Brush Box	Retain and protect – Street tree
214	Allocasuarina torulosa	Forest She Oak	Retain and protect – Street tree
215	Lophostemon confertus	Queensland Brush Box	Retain and protect – Street tree
216	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree
217	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree
218	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree
219	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree
220	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree
221	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree
222	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree
223	Allocasuarina torulosa	Forest She Oak	Remove/ Dead specimen Street tree
224	Lophostemon confertus	Queensland Brush Box	Retain and protect – Street tree
225	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree
226	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree
227/4	Glochidion ferdinandi x3	Cheese Tree	Retain and protect – Street tree
228	Eucalyptus pilularis	Blackbutt	Remove – structural weakness / potentially hazardous – Street tree
229	Ficus rubiginosa	Port Jackson Fig	Retain and protect – Street tree
230	Celtis occidentalis	Hackberry	Remove - exempt species - Street tree
231	Banksia integrifolia	Coastal Banksia	Retain and protect – Street tree
232	Cotoneaster franchettii	Cotoneaster	Remove - exempt species - Street tree
233	Jacaranda mimosifolia	Jacaranda	Retain and protect – Street tree
234	Syncarpia glomulifera	Turpentine	Retain and protect – Street tree
235	Eucalyptus haemastoma	Scribbly Gum	Retain and protect – Street tree
236	Lophostemon confertus	Queensland Brush Box	Retain and protect – Street tree
237	Lophostemon confertus	Queensland Brush Box	Retain and protect – Street tree
238	Banksia integrifolia	Coastal Banksia	Remove – dead tree/ potentially hazardous – Street tree
239	Rhaphiolepis sp.	Hawthorn	Retain and protect – Street tree
240	Celtis occidentalis	Hackberry	Remove - exempt species / road reserve – Street tree
241	Melia azedarach	White Cedar	Retain and protect – Street tree
242	Celtis occidentalis	Hackberry	Remove - exempt species- Street tree
243	Araucaria cunninghamii	Hoop Pine	Remove and replace
244	Cupaniopsis anacardioides	Tuckeroo	Remove and replace
245	Magnolia grandiflora	Bull Bay Magnolia	Remove and replace
246	Eucalyptus pilularis	Blackbutt	Remove and replace
247	Eucalyptus pilularis	Blackbutt	Remove and replace
248	Cinnamomum camphora	Camphor Laurel	Remove; environmental weed species
249	Ulmus procera	English Elm	Retain and protect
250	Eucalyptus sp.	Eucalypt	Dead specimen – retain for habitat

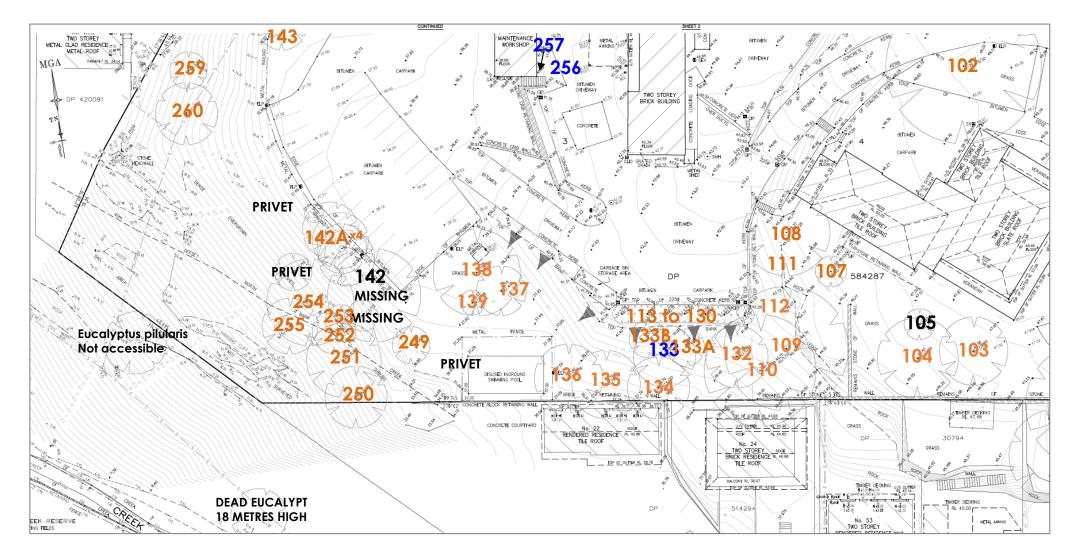
Redgum Tree / Stand No.	Genus and species	Common name	Recommendation
251	Ficus rubiginosa	Port Jackson Fig	Retain and protect
252	Cinnamomum camphora	Camphor Laurel	Retain and protect
253	Eucalyptus sp.	Eucalypt	Dead specimen – retain for habitat
254	Ficus rubiginosa	Port Jackson Fig	Retain and protect
255	Eucalyptus sp.	Eucalypt	Dead specimen – retain for habitat
256	Callistemon citrinus	Crimson Bottlebrush	Remove and replace
257	Dracaena marginata	Dragon tree	Remove and replace
258	Melaleuca styphelioides	Prickly Paperbark	Retain and protect.
259	Salix matsudana 'tortuosa'	Tortured Willow	Retain and protect
260	Erythrina x hybrida	Coral tree	Retain and protect – Exempt species
261	Syzygium australe	Scrub Cherry	Retain and protect
262	Magnolia grandiflora	Bull Bay Magnolia	Retain and protect
263	Grevillea robusta	Silky Oak	Retain and protect
264	Angophora costata	Sydney Red Gum	Retain and protect
265	Angophora costata	Sydney Red Gum	Retain and protect
266	Angophora costata	Sydney Red Gum	Retain and protect
267	Ravenala madagascariensis	Traveller's Palm	Retain and protect
268	Angophora costata	Sydney Red Gum	Retain and protect
269 / 5	* *	Bangalow Palm	Remove and replace
	Archontophoenix cunninghamiana x2		
270	Syzygium luehmannii	Small Leafed Lilly Pilly	Retain and protect
271	Phoenix canariensis	Date Palm	Retain and protect
272	Pittosporum undulatum	Native Daphne	Retain and protect
8A	Glochidion ferdinandi	Cheese Tree	Retain and protect
11A	Acacia falcata	Hickory Wattle	Remove - overmature
14A	Glochidion ferdinandi	Cheese Tree	Retain and protect
21A	Pittosporum undulatum	Native Daphne	Retain and protect
22A	Cupaniopsis anacardioides	Tuckeroo	Retain and protect
38A	Angophora costata	Sydney Red Gum	Remove - overmature
38B	Angophora costata	Sydney Red Gum	Remove – Dead specimen
45A / 6	Ficus rubiginosa x2	Port Jackson Fig	Retain and protect
74A	Angophora costata	Sydney Red Gum	Retain and protect
81A	Stenocarpus sinuatus	Firewheel Tree	Retain and protect
81B	Acer negundo	Box Elder Maple	Retain and protect-exempt species
83A	Ficus rubiginosa	Port Jackson Fig	Retain and protect
85A	Ficus rubiginosa	Port Jackson Fig	Retain and protect
91A	Lagerstroemia indica	Crepe Myrtle	Retain and protect
91B	Lagerstroemia indica	Crepe Myrtle	Retain and protect
91C	Photinia glabra	Photinia	Retain and protect
107A	Jacaranda mimosifolia	Jacaranda	Removed at time of 2019 inspection
107B	Robinia pseudoacacia	Golden Rain Tree	Removed at time of 2019 inspection
107C	Lagerstroemia indica	Crepe Myrtle	Removed at time of 2019 inspection
133A	Melaleuca bracteata	Revolution Green Paperbark	Retain and protect
100/1	'Revolution Green'	Revolution Oreen raperbalk	
133B	Melaleuca bracteata 'Revolution Green'	Revolution Green Paperbark	Retain and protect
142A/5	Phoenix canariensis x4	Date Palm	Retain and protect
144A	X Cupressocyparis leylandii	Leyland Cypress	Retain and protect
147A	Phoenix canariensis	Date Palm	Retain and protect
147B	Celtis	Hackberry	Retain and protect
147C	Liquidambar styraciflua	Sweet Gum	Retain and protect
147D / 7	Acer negundo x3	Box Elder Maple	Retain and protect
147E	Acer negundo	Box Elder Maple	Retain and protect
153A	Magnolia grandiflora	Bull Bay Magnolia	Retain and protect
159A	Syzygium australe	Lilly Pilly	Remove and replace
160A	Syzygium australe	Lilly Pilly	Remove and replace
162A / 8	Archontophoenix cunninghamiana x2	Bangalow Palm	Remove and replace



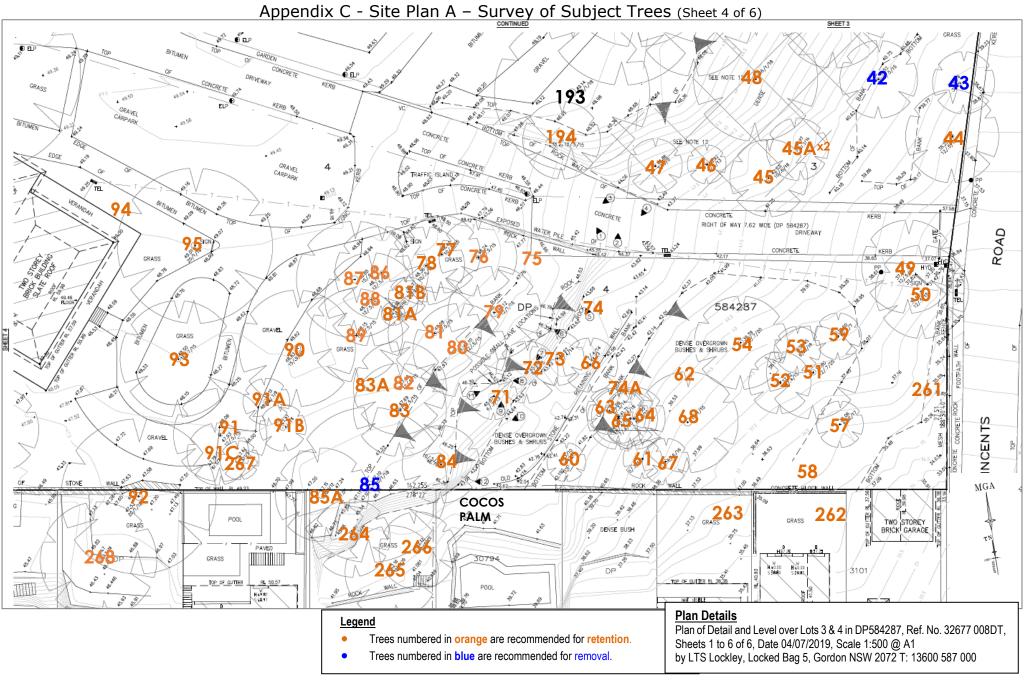
Appendix C - Site Plan A - Survey of Subject Trees (Sheet 2 of 6) This report has relied upon the following plan/s and documents which have been reproduced from electronic transmission and no longer to original scale.



Appendix C - Site Plan A - Survey of Subject Trees (Sheet 3 of 6)



Appendix C - Site Plan A - Survey of Subject Trees (Sheet 4 of 6)



Redgum Horticultural 2019, Reference 3521.4 Arboricultural Impact Assessment: River Road, Greenwich NSW



Part B: TREE PROTECTION PLAN

(Trees to be retained and protected)

for

Hammondcare Greenwich Hospital River Road, Greenwich NSW

Prepared 16 February 2018 Revised 5 August 2019 Ref: 3521.4

10.0 PREFACE

<u>Retention of Significant Tree/s within the continual landscape of a development is recommended to minimise the impact of the built landscape within the overall local amenity. This section of the report highlights the required specifications within the Tree Protection Plan (Tree Management Plan) and is to be read in conjunction with Part A: Arboricultural Impact Assessment of this report.</u>

11.0 INTRODUCTION

- 11.1 This section of the report provides the specification/s for all tree/s to be retained (on subject site) as detailed in Part A Arboricultural Impact Assessment.
- 11.2 The trees to be retained are indicated on the Site Plan Survey of Subject Trees to be retained & Tree Protection Zones. The minimum setback for protective fencing from development works per tree to be retained is summarized in Table 1.0. Tree Protection Specifications including Site maintenance, Site Arboricultural service, Periodic inspections, Mulching, Irrigation, Weed control / suppression, Provision of services.
- 11.3 Tree maintenance works including pruning, removal or transplantation are detailed in section 2.0. Works for Tree Protection on Construction Sites are detailed in section 3.0 and Tree Protection Zones a Standard Procedure as detailed in section 13.0 to be applied, or further detailed, or additional or alternative works added where appropriate.

12.0 METHODOLOGY

This Methodology where utilised is applied to both Part A – Arboricultural Impact Assessment and B – Tree Protection Plan.

- 12.1 The method of assessment of tree/s applied is adapted from the principles of visual tree assessment undertaken from the ground, which considers:
 - Tree health and subsequent stability, both long and short term
 - Sustainable Retention Index Value (SRIV) Version 4 (IACA 2010) ©
 - Hazard potential to people and property
 - Amenity values
 - Habitat values
 - Significance
- 12.2 This assessment is undertaken using standard tree assessment criteria for each tree based on the values above and is implemented as a result of at least one comprehensive and detailed site inspection to undertake a visual tree assessment from the ground of each individual tree, or stand of trees, or a representative population sample. Any dimensions recorded as averages, or by approximation are noted accordingly.

13.0 PRUNING STANDARDS

- 13.1 Any pruning recommended in this report is to be to the Australian Standard[®] AS4373 *Pruning of amenity trees* and conducted in accordance with the NSW Work Cover Authority Code of Practice, Tree Work, 2007.
- 13.2 All pruning or removal works are to be in accordance with the appropriate Tree Management Policy where applicable, or Tree Management Order (TMO), or Tree Preservation Order (TPO).
- 13.3 Tree maintenance work is specialised and in order to be undertaken safely to ensure the works carried out are not detrimental to the survival of a tree being retained, and to assist in the safe removal of any tree, should be undertaken by a qualified arboriculturist with appropriate competencies recognised within the Australian Qualification Framework, with a minimum of 5 years of continual experience within the industry of operational amenity arboriculture, and covered by appropriate and current types of insurance to undertake such works.

14.0 SUMMARY: Tree Management Plan

This Tree Protection Plan recommends; Trees 1, 2, 4, 5, 6, 7, 8A, 9, 10, 12, 13, 14, 14A, 15, 20, 21A, 22, 22A, 23, 25 to 31, 33, 34, 35, 37, 40, 41, 44, 45, 45A^{x2}, 46 to 54, 57 to 68, 71 to 73, 74A, 75 to 81, 81A, 81B, 82, 83, 83A, 84, 85A^{*}, 86 to 91, 91A, 91B, 91C, 92, 93, 94, 95, 102, 103, 104, 107, 109 to 130, 132, 133A, 133B, 134 to 139, 142A^{x4}, 143, 147, 147A, 147D^{x3,} 147E, 148^{x5}, 149, 150, 151, 152, 153A, 154, 155, 156, 157^{x3}, 158, 159, 165, 194, 201, 208, 209, 210, 212 to 222, 147B, 147C, 224 to 227^{x3}, 229, 231, 233 to 237, 239, 241, 249, 251, 252, 254, 258 to 266, 267, 268, 270, 271 & 272, Trees 21, 24 108 & 211 are recommended to be retained and protected with further investigation or remedial works required independent to the proposed development and Trees 250, 253 & 255 are dead and recommended to be retained as habitat specimens.

For trees where the alignment of the driveway or works at or above existing ground levels are an encroachment to retained specimens, the section of the proposed works within the Tree Protection Zone (TPZ) of the specimens is to be constructed using tree sensitive excavation and construction techniques such as pier and beam construction with a suspended slab to reduce any impact on the stability with piers to be dug by hand with non-motorised machinery to further assist in their protection. Where possible, for hard landscaping within the TPZ of retained specimens this is to be constructed using tree sensitive excavation and construction techniques such as either porous or permeable paving or pier and beam construction with a suspended slab to reduce any impact on the stability with piers to be dug by hand with non-motorised machinery to further assist in their protection. For trees where excavation is required below existing ground level within the TPZ of retained specimens the section of the excavation within the TPZ of the specimens is to be constructed using tree sensitive excavation techniques such as a vertical cut with shotcrete and contiguous pilings to reduce any impact on their stability.

Discussion

- 14.1 AS4970 (2009) section 3, 3.3.3 requires the Project Arborist to demonstrate that where a retained tree is subject to a major encroachment (>10% of area of TPZ) it can be protected to remain viable
- 14.2 <u>Tree 1, 2, 4, 5, 6, 7, 8A, 9, 10, 11A, 12, 13, 14, 14A, 15, 20, 21, 21A, 22, 22A, 23, 24, 25, 26, 27, 28, 29, 30, 35, 37</u> <u>& 40</u> *Cinnamomum camphora* - Camphor Laurel, *Pinus radiata* - Radiata Pine, *Ficus rubiginosa* - Port Jackson Fig, *Pittosporum undulatum* - Native Daphne, *Agathis robusta* - Queensland Kauri Pine, *Eucalyptus pilularis* – Blackbutt, *Glochidion ferdinandi* - Cheese Tree, *Eucalyptus saligna x botryoides* - Wollongong Wollybutt, *Cupaniopsis anacardioides* – Tuckeroo, *Eucalyptus botryoides* - Bangalay Gum & *Eucalyptus saligna* - Sydney Blue Gum, these specimens are located within the north-east end of the site.
- 14.3 <u>Tree 19, 31, 33, 34, 41, 44, 45, 45A, 46, 47, 48, 49, 50, 51, 52, 53, 54, 57, 55, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 261, 262 & 263</u>, *Angophora bakeri -* Small Leaf Apple, *Phoenix canariensis -* Date Palm, *Pittosporum undulatum -* Native Daphne, *Eucalyptus saligna -* Sydney Blue Gum, *Glochidion ferdinandi -* Cheese Tree, *Eucalyptus pilularis –* Blackbutt, *Angophora costata -* Sydney Red Gum, *Eucalyptus resinifera -* Red Mahogany, *Acacia falcata -* Hickory Wattle, *Cinnamomum camphora -* Camphor Laurel & *Ficus rubiginosa -* Port Jackson Fig, these specimens are located within the south-east end of the site.
- 14.4 <u>Tree 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 81A, 81B, 82, 83, 83A, 84, 85A, 86, 87, 88, 89, 90, 91, 91A, 91B, 91C, 92, 93, 94, 95, 102, 103, 104, 107, 108, 109, 110, 111, 112, 264, 265, 266 & 268 Angophora costata Sydney Red Gum, Corymbia citriodora Lemon Scented Gum, Jacaranda mimosifolia Jacaranda, Cedrus deodara Himalayan Cedar, Camellia japonica Camellia, Ficus rubiginosa Port Jackson Fig, Stenocarpus sinuatus Firewheel Tree, Acer negundo Box Elder Maple, Lagerstroemia indica Crepe Myrtle, Photinia glabra Photinia, Platanus digitate Plane Tree, Thuja orientalis Bookleaf Conifer, Eucalyptus pilularis Blackbutt, Eucalyptus microcorys Tallowwood, Eucalyptus grandis Rose gum, Liquidambar styraciflua Sweet Gum & Celtis sp. Hackberry, These specimens are located to the south of the site within the Pallister House grounds.</u>
- 14.5 <u>Tree 113 130, 132, 133A, 133B, 134, 135, 136, 137, 138, 139, 142A, 143, 147, 147A, 147B, 147C, 147D, 147E, 148, 151, 152, 154, 155, 156, 158, 157, 158, 199, 250, 251, 252, 253, 254, 255, 259, 260 & 271 Glochidion ferdinandi Cheese Tree, Melaleuca bracteata 'Revolution Green' Revolution Green Paperbark, Cupressus cashmeriana Kashmir Cypress, Cedrus deodara Himalayan Cedar, Callistemon salignus Willow Bottlebrush, Eucalyptus saligna Sydney Blue Gum, Livistona chinensis Chinese Fan Palm, Phoenix canariensis Date Palm, Eucalyptus saligna Sydney Blue Gum, Hymenosporum flavum Native Frangipani, Acer negundo Box Elder Maple, Magnolia grandiflora Bull Bay Magnolia, Triadica sebifera Chinese Tallowwood,& Brachychiton acerifolius Illawarra Flame Tree & Syzygium australe Lilly Pilly, these specimens are located on the western side of the site.</u>
- <u>Trees viability to development</u>; these specimens are not impacted by the proposed development. The project arborist is to certify the installation of protection measures as per D/A conditions prior to commencement of works Redgum Horticultural 2019, Reference 3521.4 Page 75
 Arboricultural Impact Assessment: River Road, Greenwich NSW

and to be monitored throughout the project at approx. 3 mthly intervals depending on the length of the development. These specimens should remain viable beyond completion of development provided recommended installation & protection measures are adhered to.

• <u>Development Impacts</u>: AS4970 (2009) section 3 requires a TPZ setback as detailed in column 4 of Table 2 from COT, the setback for the proposed development adjacent to these specimens is to be greater than the Structural Root Zone as detailed in column 2 of Table 2. Additional trees may require removal, depending on setbacks when detailed plans are available.

14.6 <u>Tree 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 224, 225, 226, 227, 229, 231, 233, 234, 235, 236, 237, 239 & 241</u> *Pittosporum undulatum* - Native Daphne, *Leptospermum sp.*- Tea Tree, *Eucalyptus botryoides* - Bangalay Gum, *Lophostemon confertus*- Queensland Brush Box, *Allocasuarina torulosa*- Forest She Oak, *Corymbia citriodora*- Lemon Scented Gum, *Glochidion ferdinandi x3*- Cheese Tree, *Ficus rubiginosa*- Port Jackson Fig, *Banksia integrifolia*- Coastal Banksia, *Jacaranda mimosifolia*- Jacaranda, *Syncarpia glomulifera*-Turpentine, *Eucalyptus haemastoma*- Scribbly Gum, *Rhaphiolepis sp.*- Hawthorn & *Melia azedarach*- White Cedar, these specimens are located on the northern side of the site, within the road reserve.

• <u>Trees viability to development</u>; these specimens are not impacted by the proposed development. The project arborist is to certify the installation of protection measures as per D/A conditions prior to commencement of works and to be monitored throughout the project at approx. 3 mthly intervals depending on the length of the development. Theses specimens should remain viable beyond completion of development provided recommended installation & protection measures are adhered to.

• <u>Development Impacts</u>: AS4970 (2009) section 3 requires a TPZ setback as detailed in column 4 of Table 2 from COT, the setback for the proposed development adjacent to these specimens is to be greater than the Structural Root Zone as detailed in column 2 of Table 2. Additional trees may require removal, depending on setbacks when detailed plans are available.

If associated infrastructure (pipe works) are to be installed within the Tree Protection Zone of any retained specimen, they are to be installed by hand with non-motorised machinery. If structural roots are found within the trench, they are to be left intact and dug around retaining this specimen's structural integrity with works to be undertaken in consultation with the project arborist.

The impacts to specimens which are to be retained and protected as per AS 4970 (2009) Section 3, 3.3.3 *Major Encroachments* from development works within >10% of the area of the Tree Protection Zone and as per discussion points in section 14 in part B of this report will be detailed in the final Arboricultural Impact Assessment report following receipt of detailed plans. Any works within TPZ must be in consultation with and when required, certified by the Project Arborist in accordance with AS4970 (2009).

General – Tree Protection works – Prior to Demolition

- 14.7 <u>Milestone</u> Prior to demolition works, a site arborist shall be appointed to supervise all tree protection procedures detailed in this specification. The Site Arborist shall have a minimum level 5 AQF qualification in Arboriculture. Milestones are to be adhered to throughout the duration of this development and all relevant documentation is to be submitted to the local authority.
- 14.8 The Tree Protection Zone for each tree/s is to be incorporated into the construction works for the site and the protection fencing or works to be situated as indicated on the Appendix F Tree Protection Plan. The setbacks from building works on the side closest to each tree are to be carried out as indicated in Table 2.0, and Tree Protection Zones be constructed as described here and detailed in Appendix D. The trees will be sustained within the constraints of the modifications to the site by the proposed development works.
- 14.9 Trees 1, 2, 4, 5, 6, 7, 8A, 9, 10, 12, 13, 14, 14A, 15, 20, 21A, 22, 22A, 23, 25 to 31⁽⁷⁾, 33, 34, 35, 37, 40, 41, 44, 45, 45A^{x2}, 46 to 54, 57 to 68, 71 to 73, 74A, 75 to 81, 81A, 81B, 82, 83, 83A, 84, 85A^{*}, 86 to 91, 91A, 91B, 91C, 92, 93, 94, 95, 102, 103, 104, 107, 109 to 130, 132, 133A, 133B, 134 to 139, 142A^{x4}, 143, 147, 147A, 147B, 147C, 147D^{x3,} 147E, 148^{x5}, 149, 150, 151, 152, 153A, 154, 155, 156, 157^{x3}, 158, 159, 165, 194, 201, 208, 209, 210, 212 to 222, 224 to 227^{x3}, 229, 231, 233 to 237, 239, 241, 249, 251, 252, 254, 258 to 266, 267, 268, 270, 271 & 272, Trees 21, 24 108 & 211 are recommended to be retained and protected with further investigation or remedial works required independent to the proposed development and Trees 250, 253 & 255 are dead and recommended to be retained and protected and incorporated into the landscape works for the site, and Tree Protection Zone fencing to be marked accordingly on the Landscape Plan, where appropriate and installed prior to any demolition or construction.

- 14.10 <u>Ground protection</u> If temporary access for machinery is required within the TPZ ground protection measures will be required. The purpose of ground protection is to prevent root damage and soil compaction within the TPZ. Measures may include a permeable membrane such as geotextile fabric beneath a layer of mulch or crushed rock below rumble boards. These measures may be applied to root zones beyond the TPZ.
- 14.11 Where applicable, any excavation for the establishment of a batter slope or benching for reasons of safety and to comply with Work Cover Authority safety regulations should be restricted as far as is safely possible near to trees to be retained to prevent root damage. If the excavations cannot be undertaken near to vertical the stability of these trees and their long-term viability may be compromised and their retention in a safe and healthy condition jeopardized and they may need to be revised and possibly removed.

Specific - Tree Protection Works - Prior to Demolition and Tree Removal

- 14.12 All other trees/shrubs; prior to demolition and tree removal works these tree/s are to be placed within a Tree Protection Zone with protective fencing and maintained and retained until the completion of all building works. Protective fencing is to be installed as shown in Appendix F Tree Protection Plan.
 - The Protective fencing where required may delineate the Tree Protection Zone (TPZ) and should be situated as determined by the project arborist in accordance with AS4970 Protection of trees on development sites, Section 4, 4.3. "Fencing should be erected before any machinery or materials are brought onto the site and before the commencement of works including demolition. Once erected, protective fencing must not be removed or altered without approval by the project arborist. The TPZ must be secured to restrict access. AS4687 Temporary fencing and hoardings specifies applicable fencing requirements. Shade cloth or similar should be attached to reduce the transport of dust, other particulate matter and liquids into the protected area. Fence posts and supports should have a diameter greater than 20 mm and be located clear of roots. Existing perimeter fences and other structures may be suitable as part of the protective fencing" or similar.
 - Tree Protection signage is to be attached to each **TPZ** and displayed from within the development site in accordance with AS4970 2009 Protection of trees on development sites
 - The area of the Tree Protection Zone to be mulched to a depth of 100 mm with organic material being 75% leaf litter and 25% wood, and this being composted material preferably from the same genus and species of tree as that to where the mulch is to be applied, i.e. species-specific mulch. The depth of mulch and type as indicated, to be maintained for the duration of the project. Where deep excavation will expose the soil profile to drying out the root plate is to be protected by pegging jute matting across the ground surface 2 m back from the edge of the profile and 2 m down the face of the profile and is to be in one continuous sheet or layers up to 5 mm thick and overlapped 300 mm and pegged. Pegs are to be a minimum length of 200 mm and spaced at 500 mm increments in a grid pattern. Once installed mulch is to be placed on top of the jute matting previously described.
- 14.13 There is to be no storage of materials, rubbish, soil, equipment, structures or goods of any type to be kept or placed within 5 metres from the trunk or within the dripline of any tree for the duration of the development. This will ensure protection of the tree/s to be retained on or adjacent to site.
- 14.14 <u>Milestone</u> Project/Site arborist is to inspect/assess all retained specimens prior to demolition to inspect tree protection measures have been carried out as per the approved D/A conditions for the site. Documentation is to be submitted to the consenting authority after each inspection.

Demolition and Tree Removal/s

- 14.15 Removal of a tree within 6 m of a tree to be retained should be undertaken only by cutting down such a tree without damaging the trees to be retained, and by grinding out its stump. Where possible the structural roots of 20 mm diameter or greater of the tree to be cut down should not be removed, to minimise soil disturbance and to reduce the impact on the roots of any tree to be retained nearby. Where structural roots are to be removed this should be undertaken manually by the use of non-motorized hand tools after the stump has been ground out when such roots are often easier to locate from the site of the stump from which they have been severed.
- 14.16 Ground protection in accordance with AS4970 section 4, 4.5.3 may require steel plates to protect the ground surface from compaction to protect roots between the stages of demolition and construction of the new pavement.

Specific - Tree Protection works – During Demolition

- 14.16 Demolition of Existing Buildings should be undertaken with access restricted to the driveway and the building platform for each of the existing buildings, or to areas of the land where no trees are growing within 6m of any tree to be retained. Where access or space for a safe working environment is restricted, or where the area of the 6m set back must be compromised, a 100 mm layer of wood mulch must be laid over the area of encroachment. Where vehicular access is required across the mulch layer further root protection should be provided by laying a temporary pathway over the mulch. The temporary pathway should be constructed of a grated steel material capable of supporting the vehicles used during demolition e.g. like ramps used to load vehicles onto the backs of trucks. Trunks of trees may require protection from vehicular damage.
- 14.17 Demolition of landscape structures: the demolition of walls, driveways retaining walls, paths and pools etc. within 6 m of a tree to be retained should be undertaken manually using hand tools. Where a driveway is to be demolished being of concrete strip or slab type construction, it should be undertaken by working from the end of the driveway closest to the building back towards the street by utilising the driveway as a stable platform to prevent soil compaction. Where a concrete slab driveway passes less than 1 m from the base of a tree and the area beneath the driveway is to be undisturbed and incorporated into the landscape works for the site, the volume of space previously occupied by the driveway must be replaced with local top soil from the site or otherwise a loamy sand, to replace the mass of the concrete on the root plate which may be critical to the ballast and centre of mass for the stability of the tree. If the tree becomes unstable immediately contact the Consultant Arboriculturist.

Specific - Tree Protection works – Post Demolition and Prior to Construction

- 14.18 <u>Milestone</u> Project/Site arborist is to inspect/assess all retained specimens prior to construction in relation to tree protection measures have been carried out as per the approved D/A conditions for the site. Documentation is to be submitted to the consenting authority after each inspection.
- 14.19 Location of underground utilities within a Tree Protection Zone of a retained specimen. Any utility services to be situated underground within the TPZ are to be undertaken utilising excavation techniques that prevent or minimise damage to structural roots (roots greater than >20 mm diameter). To prevent soil compaction and root damage these works should be conducted with non-motorised hand tools, air knife or directional drilling.
- 14.20 <u>Re-grading of site near retained trees</u>; Grading &/or re-grading of sites/slopes within Tree Protection Zones or near retained specimens is to be undertaken <u>only</u> if at all, after consultation with the Project Arborist. This is to protect all structural roots systems from damage or compaction from machinery.
- 14.21 <u>Placement of relocatable buildings</u>; consideration should be given to tree sensitivity such as the buildings being placed on pier and beam or skids construction as they are to be positioned now on the eastern side of their driplines within the Tree Protection Zone (TPZ). The area of the Tree Protection Zone under the buildings is to be mulched to a depth of 200 mm (*if installed on skids*) with organic material to further reduce compaction. The mulch is to be composted material, i.e. species-specific mulch. Alternatively, if installed on a pier & beam construction, piers are to be undertaken manually by using non-motorized hand tools to determine the location of first order and lower order structural roots with a diameter of 20 mm (*structural woody roots*) or greater, without damaging them.

Specific - Tree Protection works – During Construction

- 14.22 <u>Milestone</u> Project/Site arborist is to inspect/assess all retained specimens during construction in relation to tree protection measures have been carried out as per the approved D/A conditions for the site. Documentation is to be submitted to the consenting authority after each inspection.
- 14.23 Where any structural roots (roots with a diameter of greater than >20 mm) encountered by excavation are to be pruned and it is to be undertaken with clean sharp pruning tools, with a final cut to undamaged wood to prevent infestation by pathogens and assist continued root growth and undertaken in consultation with the Consulting Arboriculturist. Tree Protection Zone fences are to be maintained during these works. Ground protection in accordance with AS4970 section 4, 4.5.3 may require steel plates to protect the ground surface from compaction to protect roots between the stages of demolition and construction of the new pavement.

- 14.24 All Tree Protection Zones of retained trees are to be monitored for the duration of the construction phase of the development. The three main areas requiring monitoring are; *mulching* mulch must be maintained to a depth of 50–100 mm using material that complies with AS 4454. Where the existing landscape within the TPZ is to remain unaltered (e.g. garden beds or turf) mulch may not be required, *watering* soil moisture levels should be regularly monitored by the project arborist. Temporary irrigation or watering may be required within the TPZ. An above-ground irrigation system could be installed and maintained by a competent individual and *weeding* weeds should be removed by hand without disturbing soil or should be controlled with weedicide.
- 14.25 Trees to be removed are to be replaced with advanced specimens being mindful of the space limitations of the new use of the site. The advanced trees should be situated in areas along the boundaries of the site. The planting in these locations will provide the maximum benefit to the surrounding properties by screening views to and from the site and the plantings included in the proposed landscape plan. The replacement trees will be situated in positions where they may grow to maturity unhindered and will not conflict with built structures or utility services and in greater numbers than the trees removed should provide a net increase in the local amenity.

Specific - Tree Protection works – Post Construction

14.26 <u>Milestone</u> - At completion of construction work the Site/Project Arborist should carry out an assessment of all trees retained &/or affected by works. This assessment is to document any required on-going remedial care needed to ensure viable retention of trees affected. Documentation is to be submitted to the consenting authority.

15.0 CONCLUSION

There are fifty-five (55) trees recommended for removal due to the proposed building footprints, thirty-three (31) additional trees recommended for removal as they are exempt or inappropriate species, weed species, due to their health and/or stability or to reduce competition for locally indigenous specimens with a total of eighty-six (86) trees within the property and on the road reserve nominated for removal and replacement with species in accordance with the associated Landscape documentation for the development. The two hundred and eleven (211) trees to be preserved will be retained and protected through the implementation of adequate measures for their integration into the development by the application of appropriate technology as detailed in this report. Where appropriate, the Landscape Plan will include planting with new trees including street tree/s.

It is often a consequence of redevelopment, and subject to the nature of the proposed land use that some or all the trees present on the site prior to that redevelopment may be required to be removed and replaced with new tree plantings in different locations. This may be dependent upon the type of development and its design constraints and the requirements of the local planning instruments and any Landscape Design Codes if existing. Where tree removal is required for this development, it is considered that those trees identified within this report are not sustainable within the context of the proposed development. Where tree retention has been considered, those trees are expected to survive the redevelopment process and remain stable and viable. The retention and protection of existing trees on site is a significant aspect of the development process, allowing those trees as components of the current curtilage to be transferred to the new development for incorporation into the landscaping works for the site. The retention of some or all the existing trees contributes to: the preservation of local amenity, screening of views to and from the site, and a balance to the scale and bulk of buildings, while maintaining elements of a continuous landscape, providing a more harmonious integration and transition of the use of the land.

If all the recommendations and procedures detailed herein are adhered to, some or all the trees the subject of this report will continue or will be replaced with more appropriate plantings in suitable locations, or enhanced by additional new plantings, and will grow to develop as important landscape components providing elements of long term amenity for the property and its owners or occupants, and the local community.

The recommendations made in this report are subject to approval by the consent authority.

As a renewable and dynamic natural resource, the urban tree and the growing environment essential for its survival must be understood and carefully managed to balance its needs with those of people. It is crucial that as required: this resource be planned for, planted, nurtured, protected, maintained and replaced, to ensure appropriateness and suitability of new plantings and trees retained, for safety and viability, so that it remains vital, and is sustainable in continuity.

16.0 RECOMMENDATIONS – Retention.

- 16.1 Trees 1, 2, 4, 5, 6, 7, 8A, 9, 10, 12, 13, 14, 14A, 15, 20, 21A, 22, 22A, 23, 25 to 31⁽⁷⁾, 33, 34, 35, 37, 40, 41, 44, 45, 45A^{x2}, 46 to 54, 57 to 68, 71 to 73, 74A, 75 to 81, 81A, 81B, 82, 83, 83A, 84, 85A^{*}, 86 to 91, 91A, 91B, 91C, 92, 93, 94, 95, 102, 103, 104, 107, 109 to 130, 132, 133A, 133B, 134 to 139, 142A^{x4}, 143, 147, 147A, 147B, 147C, 147D^{x3,} 147E, 148^{x5}, 149, 150, 151, 152, 153A, 154, 155, 156, 157^{x3}, 158, 159, 165, 194, 201, 208, 209, 210, 212 to 222, 224 to 227^{x3}, 229, 231, 233 to 237, 239, 241, 249, 251, 252, 254, 258 to 266, 267, 268, 270, 271 & 272, Trees 21, 24 108 & 211 are recommended to be retained and protected with further investigation or remedial works required independent to the proposed development and Trees 250, 253 & 255 are dead and recommended to be retained as habitat specimens. are to be retained in situ within the site and are to be protected as detailed in 14.2 14.26 of Part B of this report. Tree protection fences, or works, to be in accordance with *Site Plan B Trees to be Retained and Tree Protection Zones* (Appendix F).
- 16.2 Where Tree Protection Zone fences are to be moved or relocated this must be undertaken in consultation with the Consultant Arboriculturist for the project to ensure that tree protection is maintained. If the fences are relocated areas are to be mulched in accordance with 14.12 of this report to reduce compaction to the root system of the retained specimens.
- 16.3 To minimise damage to retained crowns, all Tree Protection Zones are to be adhered to. This must be undertaken in consultation with the Consultant Arboriculturist for the project to ensure that tree protection is maintained. Minor pruning may be required if damage occurs, work to undertaken in accordance with section 4 of this report.
- 16.4 <u>Milestones</u> Project/Site arborist is to inspect/assess all retained specimens prior to Demolition and Tree Removal, Post Demolition, Prior to Construction during Construction and on completion in relation to trees protected and the protection measures have been carried out as per the approved D/A conditions for the site. Documentation is to be submitted to the consenting authority after each inspection.
- 16.5 Any work to be undertaken within Tree Protection Zones is to be undertaken in accordance with 16.2 of this report.
- 16.6 Tree removal near retained specimens is to be undertaken in accordance with 14.15 of this report.
- 16.7 There is to be no storage of materials, rubbish, soil, equipment, structures or goods of any type to be kept or placed within 5 metres from the trunk or within the dripline of any tree for the duration of the development. This will ensure protection of the tree/s to be retained on or adjacent to site.
- 16.8 Each of the replacement are to be a vigorous specimen with a straight trunk, gradually tapering and continuous, crown excurrent, symmetrical, with roots established but not pot bound in a volume container or approved similar and be maintained by an appropriately qualified and experienced landscape contractor for up to one (1) year after planting, or as appropriate.

Man

DISCLAIMER

Craig Martin Senior Associate Post Grad Cert Wildlife Habitat Management 2006, Diploma of Horticulture – Arboriculture; (AQF5) 2001, Horticulture Certificate; 1988



The author and Redgum Horticultural take no responsibility for actions taken and their consequences, contrary to those expert and professional instructions given as recommendations pertaining to safety by way of exercising our responsibility to our client and the public as our duty of care commitment, to mitigate or prevent hazards from a fairing, from a fairing, from a fairing tron a structurally deficient or unsound tree or a tree likely to be rendered thus by its retention and subsequent modifications to its growing environment either above or below ground contrary to our advice.

Appendix D

Extract from Australian Standard AS4970 2009 Protection of trees on development sites

Section 3, Determining the tree protection zones of the selected trees

3.1 Tree protection zone (TPZ)

"The tree protection zone (TPZ) is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable.

The TPZ incorporates the structural root zone (SRZ) (refer to Clause 3.3.5)."

3.2 Determining the TPZ

The radius of the TPZ is calculated for each tree by multiplying its DBH x 12.

TPZ = DBH x 12

where

DBH = trunk diameter measured at 1.4 m above ground

Radius is measured from the centre of the stem at ground level.

3.3.5 Structural root zone (SRZ)

"The SRZ is the area required for street stability. A larger area is required to maintain a viable tree. The SRZ only needs to be calculated when a major encroachment into a TPZ is proposed. Root investigation may provide more information on the extent of these roots."

Determining the SRZ

The radius of the TPZ is calculated for each tree by multiplying its DBH x 12.

SRZ radius = (D x 50)^{0.42} x 0.64

where

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

Note: The SRZ for trees with trunk diameters less than 0.15 m will be 1.5 m.

Appendix E

From

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

Age of Trees

Age Most trees have a stable biomass for the major proportion of their life. The estimation of the age of a tree is based on the knowledge of the expected lifespan of the taxa in situ divided into three distinct stages of measurable biomass, when the exact age of the tree from its date of cultivation or planting is unknown and can be categorized as *Young*, *Mature* and *Over-mature* (British Standards 1991, p. 13, Harris *et al*, 2004, p. 262).

Young Tree aged less than <20% of life expectancy, in situ.

Mature Tree aged 20-80% of life expectancy, in situ.

Over-mature Tree aged greater than >80% of life expectancy, *in situ*, or *senescent* with or without reduced *vigour*, and declining gradually or rapidly but irreversibly to death.

Condition of Trees

Condition A tree's *crown form* and growth habit, as modified by its *environment* (aspect, suppression by other trees, soils), the *stability* and *viability* of the *root plate*, trunk and structural branches (first (1st) and possibly second (2nd) order branches), including structural defects such as wounds, cavities or hollows, *crooked* trunk or weak trunk/branch junctions and the effects of predation by pests and diseases. These may not be directly connected with *vigour* and it is possible for a tree to be of *normal vigour* but in *poor condition*. Condition can be categorized as *Good Condition*, *Fair Condition*, *Poor Condition* and *Dead*.

Good Condition Tree is of good habit, with *crown form* not severely restricted for space and light, physically free from the adverse effects of *predation* by pests and diseases, obvious instability or structural weaknesses, fungal, bacterial or insect infestation and is expected to continue to live in much the same condition as at the time of inspection provided conditions around it for its basic survival do not alter greatly. This may be independent from, or contributed to by vigour.

Fair Condition Tree is of good habit or *misshapen*, a form not severely restricted for space and light, has some physical indication of *decline* due to the early effects of *predation* by pests and diseases, fungal, bacterial, or insect infestation, or has suffered physical injury to itself that may be contributing to instability or structural weaknesses, or is faltering due to the modification of the *environment* essential for its basic survival. Such a tree may recover with remedial works where appropriate, or without intervention may stabilise or improve over time, or in response to the implementation of beneficial changes to its local environment. This may be independent from, or contributed to by vigour.

Poor Condition Tree is of good habit or *misshapen*, a form that may be severely restricted for space and light, exhibits symptoms of advanced and *irreversible decline* such as fungal, or bacterial infestation, major die-back in the branch and *foliage crown, structural deterioration* from insect damage e.g. termite infestation, or storm damage or lightning strike, ring barking from borer activity in the trunk, root damage or instability of the tree, or damage from physical wounding impacts or abrasion, or from altered local environmental conditions and has been unable to adapt to such changes and may decline further to death regardless of remedial works or other modifications to the local *environment* that would normally be sufficient to provide for its basic survival if in *good* to *fair* condition. Deterioration physically, often characterised by a gradual and continuous reduction in vigour but may be independent of a change in vigour, but characterised by a proportionate increase in susceptibility to, and *predation* by pests and diseases against which the tree cannot be sustained. Such conditions may also be evident in trees of advanced senescence due to normal phenological processes, without modifications to the growing environment or physical damage having been inflicted upon the tree. This may be independent from, or contributed to by vigour.

Senescent / Moribund Advanced state of decline, dying or nearly dead.

Dead Tree is no longer capable of performing any of the following processes or is exhibiting any of the following symptoms; Processes

Photosynthesis via its foliage crown (as indicated by the presence of moist, green or other coloured leaves);

Osmosis (the ability of the root system to take up water);

Turgidity (the ability of the plant to sustain moisture pressure in its cells);

Epicormic shoots or *epicormic strands* in Eucalypts (the production of new shoots as a response to stress, generated from latent or adventitious buds or from a *lignotuber*);

Symptoms

Permanent leaf loss;

Permanent wilting (the loss of turgidity which is marked by desiccation of stems leaves and roots);

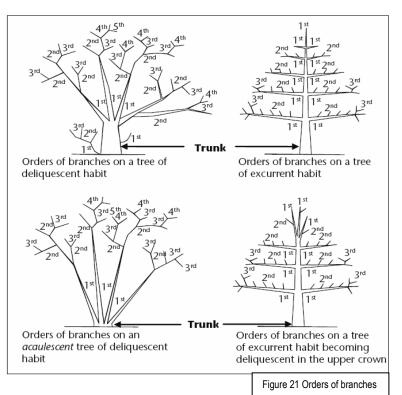
Abscission of the epidermis (bark desiccates and peels off to the beginning of the sapwood).

Removed No longer present, or tree not able to be located or having been cut down and retained on a site, or having been taken away from a site prior to site inspection.

<u>Branch</u>

Branch An elongated woody structure arising initially from the trunk to support leaves, flowers, fruit and the development of other branches. A branch may itself fork and continue to divide many times as successive *orders of branches* with the length and taper decreasing incrementally to the *outer extremity* of the *crown*. These may develop initially as a gradually tapering continuation of the *trunk* with minimal division as in a *young* tree or a tree of *excurrent habit*, or in a *sapling*, or may arise where the trunk terminates at or some distance from the *root crown*, dividing into *first order branches* to form and support the *foliage crown*. In an *acaulescent* tree, branches arise at or near the *root crown*. Similarly branches may arise from a *sprout mass* from damaged *roots*, *branches* or *trunk*.

Orders of branches The marked divisions between successively smaller branches (James 2003, p. 168) commencing at the initial division where the trunk terminates on a *deliquescent* tree or from *lateral* branches on an *excurrent* tree. Successive branching is generally characterised by a gradual reduction in branch diameters at each division, and each gradation from the trunk can be categorised numerically, e.g. first order, second order, third order etc. (See Figure 21.)



<u>Crown</u>

Canopy 1. Of multiple trees, the convergence, or merging in full or part, of the crowns of two or more trees due to their proximity, or where competition for light and space available in a forest environment is limited as each tree develops forming a continuous layer of foliage. 2. Used as a plural for crown. 3. Sometimes synonymously used for crown (USA).

Crown Of an individual tree all the parts arising above the trunk where it terminates by its division forming branches, e.g. the branches, leaves, flowers and fruit; or the total amount of foliage supported by the branches. The crown of any tree can be divided vertically into three sections and can be categorised as *lower crown, mid crown* and *upper crown* (Figure 8). For a *leaning* tree these can be divided evenly into crown sections of one-third from the base to apex. The volume of a crown can be categorised as the *inner crown, outer crown* and *outer extremity of crown*.

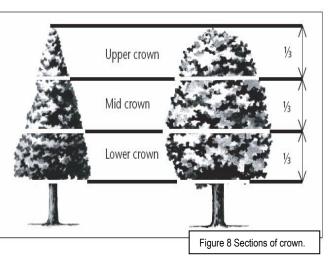
Lower crown The *proximal* or lowest section of a crown when divided vertically into one-third (1_3) increments. See also *Crown*, *Mid crown* and *Upper crown*.

Mid crown The middle section of a crown when divided vertically into one-third (1/3) increments. See also *Crown*, *Lower crown* and *Upper crown*.

Upper crown The *distal* or highest section of a crown when divided vertically into one-third (1/3) increments. See also *Crown*, *Mid crown* and *Lower crown*.

Crown Projection (CP) Area within the *dripline* or beneath the lateral extent of the *crown* (Geiger 2004, p. 2). See also *Crown spread* and *Dripline*.

Dripline A line formed around the edge of a tree by the lateral extent of the *crown*. Such a line may be evident on the ground with some trees when exposed soil is displaced by rain shed from the crown. See also *Crown Projection*.



Crown Form of Trees

Crown Form The shape of the crown of a tree as influenced by the availability or restriction of space and light, or other contributing factors within its growing environment. Crown Form may be determined for tree shape and habit generally as *Dominant, Codominant, Intermediate, Emergent, Forest* and *Suppressed*. The habit and shape of a *crown* may also be considered qualitatively and can be categorized as *Good Form* or *Poor Form*.

Good Form Tree of *typical* crown shape and habit with proportions representative of the taxa considering constraints such as origin e.g. indigenous or exotic, but does not appear to have been adversely influenced in its development by environmental factors in situ such as *soil water* availability, prevailing wind, or cultural practices such as lopping and competition for space and light.

Poor Form Tree of *atypical* crown shape and habit with proportions not representative of the species considering constraints and appears to have been adversely influenced in its development by environmental factors in situ such as *soil water* availability, prevailing wind, cultural practices such as lopping and competition for space and light; causing it to be *misshapen* or disfigured by disease or vandalism.

Crown Form Codominant Crowns of trees restricted for space and light on one or more sides and receiving light primarily from above e.g. constrained by another tree/s or a building.

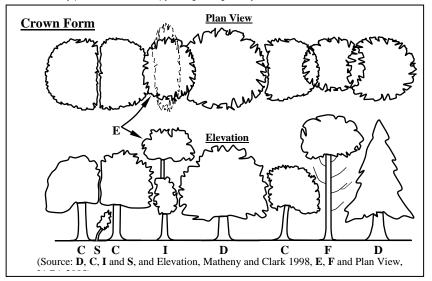
Crown Form Dominant Crowns of trees generally not restricted for space and light receiving light from above and all sides.

Crown Form Emergent Crowns of trees restricted for space on most sides receiving most light from above until the *upper crown* grows to protrude above the canopy in a stand or forest environment. Such trees may be *crown form dominant* or transitional from *crown form intermediate* to *crown form forest* asserting both *apical dominance* and *axillary dominance* once free of constraints for space and light.

Crown Form Forest Crowns of trees restricted for space and light except from above forming tall trees with narrow spreading crowns with foliage restricted generally to the top of the tree. The trunk is usually erect, straight and continuous, tapering gradually, crown often excurrent, with first order branches becoming structural, supporting the live crown concentrated towards the top of the tree, and below this point other first order branches arising radially with each *inferior* and usually temporary, divergent and ranging from horizontal to ascending, often with internodes exaggerated due to competition for space and light in the *lower crown*.

Crown Form Intermediate Crowns of trees restricted for space on most sides with light primarily from above and on some sides only.

Crown Form Suppressed Crowns of trees generally not restricted for space but restricted for light by being *overtopped* by other trees and occupying an understorey position in the canopy and growing slowly.



<u>Deadwood</u>

Deadwood Dead branches within a tree's crown and considered quantitatively as separate to *crown cover* and can be categorised as *Small Deadwood* and *Large Deadwood* according to diameter, length and subsequent *risk* potential. The amount of dead branches on a tree can be categorized as *Low Volume Deadwood*, *Medium Volume Deadwood* and *High Volume Deadwood*. See also *Dieback*.

Deadwooding Removing of dead branches by *pruning*. Such pruning may assist in the prevention of the spread of *decay* from *dieback* or for reasons of safety near an identifiable target.

Small Deadwood A dead branch up to 10mm diameter and usually <2 metres long, generally considered of low *risk* potential. Large Deadwood A dead branch >10mm diameter and usually >2 metres long, generally considered of high *risk* potential. High Volume Deadwood High Volume Deadwood Where >10 dead branches occur that may require *removal*. Medium Volume Deadwood Where 5-10 dead branches occur that may require *removal*. Low Volume Deadwood Where <5 dead branches occur that may require *removal*.

Dieback

Dieback The death of some areas of the *crown*. Symptoms are leaf drop, bare twigs, dead branches and tree death, respectively. This can be caused by root damage, root disease, bacterial or fungal canker, severe bark damage, intensive grazing by insects, *abrupt changes* in growth conditions, drought, water-logging or over-maturity. Dieback often implies reduced *resistance, stress* or *decline* which may be temporary. Dieback can be categorized as *Low Volume Dieback, Medium Volume Dieback* and *High Volume Dieback*.

High Volume Dieback Where >50% of the *crown cover* has died. Medium Volume Dieback Where 10-50% of the *crown cover* has died. Low Volume Dieback Where <10% of the *crown cover* has died. See also Dieback, High Volume Dieback and Medium Volume Dieback.

Epicormic shoots

Epicormic Shoots Juvenile shoots produced at branches or trunk from *epicormic strands* in some Eucalypts (Burrows 2002, pp. 111-131) or sprouts produced from dormant or latent buds concealed beneath the bark in some trees. Production can be triggered by fire, pruning, wounding, or root damage but may also be as a result of *stress* or *decline*. Epicormic shoots can be categorized as *Low Volume Epicormic Shoots*, *Medium Volume Epicormic Shoots*.

High Volume Epicormic Shoots Where >50% of the *crown cover* is comprised of live *epicormic shoots*. Medium Volume Epicormic Shoots Where 10-50% of the *crown cover* is comprised of live *epicormic shoots*. Low Volume Epicormic Shoots Where <10% of the *crown cover* is comprised of live *epicormic shoots*.

General Terms

Cavity A usually shallow void often localized initiated by a *wound* and subsequent *decay* within the trunk, branches or roots, or beneath bark, and may be enclosed or have one or more opening.

Decay Process of degradation of wood by microorganisms (Australian Standard 2007, p. 6) and fungus.

Hazard The threat of danger to people or property from a tree or tree part resulting from changes in the physical condition, growing environment, or existing physical attributes of the tree, e.g. included bark, soil erosion, or thorns or poisonous parts, respectively.

Included bark 1. The bark on the inner side of the *branch union*, or is within a concave *crotch* that is unable to be lost from the tree and accumulates or is trapped by *acutely divergent* branches forming a *compression fork*. 2. Growth of bark at the interface of two or more branches on the inner side of a branch union or in the crotch where each branch forms a branch collar and the collars roll past one another without forming a graft where no one collar is able to subsume the other. Risk of failure is worsened in some taxa where branching is *acutely divergent* or *acutely convergent* and ascending or erect.

Hollow A large void initiated by a *wound* forming a *cavity* in the trunk, branches or roots and usually increased over time by *decay* or other contributing factors, e.g. fire, or fauna such as birds or insects e.g. ants or termites. A hollow can be categorized as an *Ascending Hollow* or a *Descending Hollow*.

Risk The random or potentially foreseeable possibility of an episode causing harm or damage.

Significant Important, weighty or more than ordinary.

Significant Tree A tree considered important, weighty or more than ordinary. Example: due to prominence of location, or *in situ*, or contribution as a component of the overall landscape for *amenity* or aesthetic qualities, or *curtilage* to structures, or importance due to uniqueness of taxa for species, subspecies, variety, *crown form*, or as an historical or cultural planting, or for age, or substantial dimensions, or habit, or as *remnant vegetation*, or habitat potential, or a rare or threatened species, or uncommon in cultivation, or of aboriginal cultural importance, or is a commemorative planting.

Substantial A tree with large dimensions or proportions in relation to its place in the landscape.

Sustainable Retention Index Value (SRIV) A visual tree assessment method to determine a qualitative and numerical rating for the viability of urban trees for development sites and management purposes, based on general tree and landscape assessment criteria using classes of *age*, *condition* and *vigour*. SRIV is for the professional manager of urban trees to consider the tree *in situ* with an assumed knowledge of the *taxon* and its growing environment. It is based on the physical attributes of the tree and its response to its environment considering its position in a matrix for age class, vigour class, condition class and its sustainable retention with regard to the safety of people or damage to property. This also factors the ability to retain the tree with remedial work or beneficial modifications to its growing environment or removal and replacement. SRIV is supplementary to the decision made by a tree management professional as to whether a tree is retained or removed (IACA - Institute of Australian Consulting Arboriculturists 2005).

Visual Tree Assessment (VTA) A visual inspection of a tree from the ground based on the principle that, when a tree exhibits apparently superfluous material in its shape, this represents repair structures to rectify *defects* or to reinforce weak areas in accordance with the *Axiom of Uniform Stress* (Mattheck & Breloer 1994, pp. 12-13, 145). Such assessments should only be undertaken by suitably competent practitioners.

Leaning Trees

Leaning A tree where the *trunk* grows or moves away from upright. A lean may occur anywhere along the *trunk* influenced by a number of contributing factors e.g. genetically predetermined characteristics, competition for space or light, prevailing winds, aspect, slope, or other factors. A *leaning* tree may maintain a *static lean* or display an increasingly *progressive lean* over time and may be hazardous and prone to *failure* and *collapse*. The degrees of leaning can be categorized as *Slightly Leaning*, *Moderately Leaning*, *Severely Leaning* and *Critically Leaning*.

Slightly Leaning A leaning tree where the trunk is growing at an angle within 0°-15° from upright. **Moderately Leaning** A leaning tree where the trunk is growing at an angle within 15°-30° from upright. **Severely Leaning** A leaning tree where the trunk is growing at an angle within 30°-45° from upright. **Critically Leaning** A leaning tree where the trunk is growing at an angle greater than >45° from upright. **Progressively Leaning** A tree where the degree of *leaning* appears to be increasing over time. **Static Leaning** A leaning tree whose lean appears to have stabilized over time.

Periods of Time

Periods of Time The life span of a tree in the urban environment may often be reduced by the influences of encroachment and the dynamics of the environment and can be categorized as *Immediate*, *Short Term*, *Medium Term* and *Long Term*.

Immediate An episode or occurrence, likely to happen within a twenty-four (24) hour period, e.g. tree failure or collapse in full or part posing an imminent danger.

Short Term A period of time less than <1 - 15 years. Medium Term A period of time 15 - 40 years. Long Term A period of time greater than >40 years.

<u>Roots</u>

First Order Roots (FOR) Initial woody roots arising from the *root crown* at the base of the *trunk*, or as an *adventitious root mass* for structural support and *stability*. Woody roots may be buttressed and divided as a marked gradation, gradually tapering and continuous or tapering rapidly at a short distance from the root crown. Depending on soil type these roots may descend initially and not be evident at the root crown, or become buried by changes in soil levels. Trees may develop 4-11 (Perry 1982, pp. 197-221), or more first order roots which may radiate from the trunk with a relatively even distribution, or be prominent on a particular aspect, dependent upon physical characteristics e.g. leaning trunk, *asymmetrical* crown; and event within a relatively a cleart within the analysis.

constraints within the growing *environment* from topography e.g. slope, soil depth, rocky outcrops, exposure to predominant wind, soil moisture, depth of *water table* etc.

Orders of Roots The marked divisions between woody roots, commencing at the initial division from the base of the trunk, at the *root crown* where successive branching is generally characterised by a gradual reduction in root diameters and each gradation from the trunk and can be categorized numerically, e.g. *first order roots*, second order roots, third order roots etc. Roots may not always be evident at the *root crown* and this may be dependent on species, age class and the growing environment. Palms at maturity may form an adventitious root mass.

Root Plate The entire root system of a tree generally occupying the top 300-600mm of soil including roots at or above ground and may extend laterally for distances exceeding twice the height of the tree (Perry 1982, pp. 197-221). Development and extent is dependent on water availability, soil type, *soil depth* and the physical characteristics of the surrounding landscape.

Root Crown Roots arising at the base of a trunk.

Zone of Rapid Taper The area in the *root plate* where the diameter of *structural roots* reduces substantially over a short distance from the *trunk*. Considered to be the minimum radial distance to provide structural support and *root plate* stability. See also *Structural Root Zone (SRZ)*.

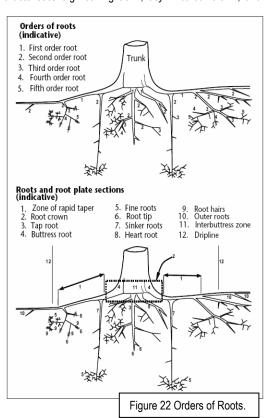
Structural Roots Roots supporting the infrastructure of the *root plate* providing strength and *stability* to the tree. Such roots may taper rapidly at short distances from the *root crown* or become large and woody as with gymnosperms and dicotyledonous angiosperms and are usually 1st and 2nd order roots, or form an *adventitious root mass* in monocotyledonous angiosperms (palms). Such roots may be crossed and grafted and are usually contained within the area of *crown projection* or extend just beyond the *dripline*.

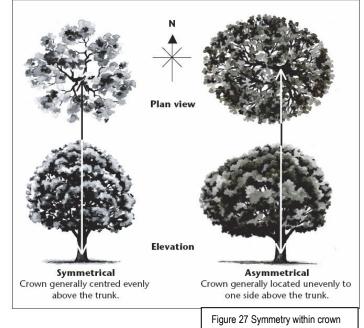
Symmetry

Symmetry Balance within a *crown*, or *root plate*, above or below the *axis* of the trunk of branch and foliage, and root distribution respectively and can be categorized as *Asymmetrical* and *Symmetrical*.

Asymmetrical Imbalance within a crown, where there is an uneven distribution of branches and the foliage *crown* or *root plate* around the vertical *axis* of the trunk. This may be due to *Crown Form Codominant* or *Crown Form Suppressed* as a result of natural restrictions e.g. from buildings, or from competition for space and light with other trees, or from exposure to wind, or artificially caused by pruning for clearance of roads, buildings or power lines. An example of an expression of this may be, crown asymmetrical, bias to west.

Symmetrical Balance within a crown, where there is an even distribution of branches and the *foliage crown* around the vertical *axis* of the trunk. This usually applies to trees of *Crown Form Dominant* or *Crown Form Forest*. An example of an expression of this may be crown symmetrical.





<u>Trunk</u>

Trunk A single stem extending from the root crown to support or elevate the crown, terminating where it divides into separate stems forming first order branches. A trunk may be evident at or near ground or be absent in acaulescent trees of deliquescent habit, or may be continuous in trees of excurrent

habit. The trunk of any *caulescent* tree can be divided vertically into three (3) sections and can be categorized as *Lower Trunk, Mid Trunk* and *Upper Trunk*. For a *leaning* tree these may be divided evenly into sections of one third along the trunk.

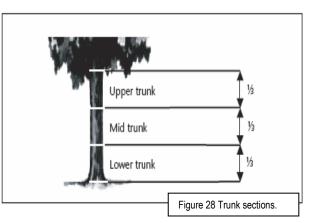
Acaulescent A *trunkless* tree or tree growth forming a very short *trunk*. See also *Caulescent*. (See Fig. 21)

Caulescent Tree grows to form a trunk. See also Acaulescent. (See Fig. 21)

Lower trunk Lowest, or *proximal* section of a trunk when divided into one-third (γ_3) increments along its *axis*. See also *Trunk*, *Mid trunk* and *Upper trunk*.

Mid trunk A middle section of a trunk when divided into one-third ($\frac{1}{3}$) increments along its *axis*. See also *Trunk*, *Lower trunk* and *Upper trunk*.

Upper trunk Highest, or *distal* section of a trunk when divided into one-third (1_3) increments along its *axis*. See also *Trunk*, *Lower trunk* and *Mid trunk*.



Diameter at Breast Height (DBH) Measurement of trunk width calculated at a given distance above ground from the base of the tree often measured at 1.4 m. The trunk of a tree is usually not a circle when viewed in cross section, due to the presence of *reaction wood* or *adaptive wood*, therefore an average diameter is determined with a *diameter tape* or by recording the trunk along its narrowest and widest axes, adding the two dimensions together and dividing them by 2 to record an average and allowing the orientation of the longest axis of the trunk to also be recorded. Where a tree is growing on a lean the distance along the top of the trunk is measured to 1.4m and the diameter then recorded from that point perpendicular to the edge of the trunk. Where a *leaning* trunk is *crooked* a vertical distance of 1.4m is measured from the ground. Where a tree branches from a trunk that is less than 1.4m above ground, the trunk diameter is recorded perpendicular to the length of the *trunk* from the point immediately below the base of the flange of the *branch collar* extending the furthest down the trunk, and the distance of this point above ground recorded as *trunk* length. Where a tree is located on sloping ground the DBH should be measured at half way along the side of the tree to average out the angle of slope. Where a tree is *acaulescent* or *trunkless* branching at or near ground an average diameter is determined by recording the radial extent of the trunk at or near ground and noting where the measurement was recorded e.g. at ground.

<u>Vigour</u>

Vigour Ability of a tree to sustain its life processes. This is independent of the *condition* of a tree but may impact upon it. Vigour can appear to alter rapidly with change of seasons (seasonality) e.g. *dormant*, deciduous or semi-deciduous trees. Vigour can be categorized as *Normal Vigour*, *High Vigour*, *Low Vigour* and *Dormant Tree Vigour*.

Normal Vigour Ability of a tree to maintain and sustain its life processes. This may be evident by the *typical* growth of leaves, *crown cover* and *crown density*, branches, roots and trunk and *resistance* to *predation*. This is independent of the *condition* of a tree but may impact upon it, and especially the ability of a tree to sustain itself against predation.

High Vigour Accelerated growth of a tree due to incidental or deliberate artificial changes to its growing *environment* that are seemingly beneficial, but may result in *premature aging* or failure if the favourable conditions cease, or promote *prolonged senescence* if the favourable conditions remain, e.g. water from a leaking pipe; water and nutrients from a leaking or disrupted sewer pipe; nutrients from animal waste, a tree growing next to a chicken coop, or a stock feed lot, or a regularly used stockyard; a tree subject to a stringent watering and fertilising program; or some trees may achieve an extended lifespan from continuous *pollarding* practices over the life of the tree.

Low Vigour Reduced ability of a tree to sustain its life processes. This may be evident by the *atypical* growth of leaves, reduced *crown cover* and reduced *crown density*, branches, roots and trunk, and a deterioration of their functions with reduced *resistance* to *predation*. This is independent of the *condition* of a tree but may impact upon it, and especially the ability of a tree to sustain itself against predation.

Appendix F urvey of Subject Tree/s

Survey of Subject Tree/s Trees the subject of this report are marked on the plans in the following appendices and are numbered as listed below.

Redgum Tree / Stand No.	Genus and species	Common name	Recommendation
1	Cinnamomum camphora	Camphor Laurel	Retain and protect
2	Pinus radiata	Radiata Pine	Retain and protect
3	MISSING		Missing at time of inspection
4	Ficus rubiginosa	Port Jackson Fig	Retain and protect
5	Ficus rubiginosa	Port Jackson Fig	Retain and protect
6	Ficus rubiginosa	Port Jackson Fig	Retain and protect
7	Ficus rubiginosa	Port Jackson Fig	Retain and protect
8	Cinnamomum camphora	Camphor Laurel	Remove – Inappropriate species
9	Ficus rubiginosa	Port Jackson Fig	Retain and protect
10	Ficus rubiginosa	Port Jackson Fig	Retain and protect
11	Acacia	-	Dead - Remove
12	Ficus rubiginosa	Port Jackson Fig	Retain and protect
13	Pittosporum undulatum	Native Daphne	Retain and protect
14	Agathis robusta	Queensland Kauri Pine	Retain and protect
15	Eucalyptus pilularis	Blackbutt	Retain and protect
16	Phoenix canariensis	Date Palm	Remove – self-sown
17	Eucalyptus saligna	Sydney Blue Gum	Remove due to Respite building
18	Erythrina x sykesii	Coral tree	Remove - exempt species
19	Angophora bakeri	Small Leaf Apple	Remove due to Respite building
20	Glochidion ferdinandi	Cheese Tree	Retain and protect
21	Eucalyptus pilularis	Blackbutt	Retain – Further investigation required
22	Eucalyptus saligna x botryoides	Wollongong Woolybutt	Retain and protect
23	Eucalyptus saligna x botryoides	Wollongong Woolybutt	Retain and protect
24	Eucalyptus pilularis	Blackbutt	Retain – Further investigation required
25	Eucalyptus botryoides	Bangalay Gum	Retain and protect
26	Eucalyptus botryoides	Bangalay Gum	Retain and protect
27	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
28	Glochidion ferdinandi/ Eucalyptus saligna x botryoides – two species entwined	Cheese Tree/ Wollongong Wollybutt	Retain and protect
29	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
30	Glochidion ferdinandi/ Eucalyptus saligna x botryoides – two species entwined	Cheese Tree/ Wollongong Wollybutt	Retain and protect
31	Phoenix canariensis	Date Palm	Retain and protect
32	Cinnamomum camphora	Camphor Laurel	Remove – Inappropriate species
33	Pittosporum undulatum	Native Daphne	Retain and protect
34	Pittosporum undulatum	Native Daphne	Retain and protect
35	Eucalyptus saligna x botryoides	Wollongong Wollybutt	Retain and protect
36	Erythrina x sykesii	Coral tree	Remove - exempt species
37	Eucalyptus pilularis	Blackbutt	Retain and protect
38	Angophora costata	Sydney Red Gum	Remove due to Respite building
39	Eucalyptus pilularis	Blackbutt	Remove due to Respite building
40	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
41	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
42	Eucalyptus resinifera	Red Mahogany	Remove – Bracket fungi
43	Pittosporum undulatum	Native Daphne	Remove – overmature / cavity
44	Glochidion ferdinandi	Cheese Tree	Retain and protect
45	Eucalyptus pilularis	Blackbutt	Retain and protect
46	Angophora costata	Sydney Red Gum	Retain and protect
47	Glochidion ferdinandi	Cheese Tree	Retain and protect

Redgum Tree / Stand No.			Recommendation
48	Eucalyptus pilularis	Blackbutt	Retain and protect. Habitat tree that will require pruning
49	Eucalyptus resinifera	Red Mahogany	Retain and protect
50	Acacia falcata	Hickory Wattle	Retain and protect
51	Eucalyptus resinifera	Red Mahogany	Retain and protect
52	Angophora costata	Sydney Red Gum	Retain and protect
53	Eucalyptus resinifera	Red Mahogany	Retain and protect
54	Angophora costata	Sydney Red Gum	Retain and protect
55	Missing		Missing at time of inspection
56	Missing		Missing at time of inspection
57	Angophora costata	Sydney Red Gum	Retain and protect
58	Eucalyptus resinifera	Red Mahogany	Retain and protect
59	Pittosporum undulatum	Native Daphne	Retain and protect
60	Cinnamomum camphora	Camphor Laurel	Retain and protect
61	Cinnamomum camphora	Camphor Laurel	Retain and protect
62	Grevillea robusta	Silky Oak	Retain and protect Exempt species
63	Angophora costata	Sydney Red Gum	Retain and protect
64	Angophora costata	Sydney Red Gum	Retain and protect
65	Ficus rubiginosa	Port Jackson Fig	Retain and protect
66	Angophora costata	Sydney Red Gum	Retain and protect
67	Cinnamomum camphora	Camphor Laurel	Retain and protect
68	Cinnamomum camphora	Camphor Laurel	Retain and protect
69	Missing		Missing at time of inspection
70	Missing		Missing at time of inspection
70	Angophora costata	Sydney Red Gum	Retain and protect
71		Sydney Red Gum	Retain and protect
72	Angophora costata Angophora costata	Sydney Red Gum	
73	Allocasuarina torulosa	Forest She Oak	Retain and protect Remove failed at base
74	Angophora costata	Sydney Red Gum	
76	Angophora costata	Sydney Red Gum	Retain and protect
77	Angophora costata	Sydney Red Gum	Retain and protect
			Retain and protect
78 79	Angophora costata	Sydney Red Gum	Retain and protect
80	Angophora costata	Sydney Red Gum	Retain and protect
	Angophora costata	Sydney Red Gum	Retain and protect
81	Angophora costata	Sydney Red Gum	Retain and protect
82	Corymbia citriodora	Lemon Scented Gum	Retain and protect
83	Angophora costata	Sydney Red Gum	Retain and protect
84	Angophora costata	Sydney Red Gum	Retain and protect
85	Erythrina x sykesii	Coral tree	Remove - exempt species
86	Corymbia citriodora	Lemon Scented Gum	Retain and protect
87	Corymbia citriodora	Lemon Scented Gum	Retain and protect
88	Corymbia citriodora	Lemon Scented Gum	Retain and protect
89	Corymbia citriodora	Lemon Scented Gum	Retain and protect
90	Corymbia citriodora	Lemon Scented Gum	Retain and protect
91	Jacaranda mimosifolia	Jacaranda	Retain and protect
92	Angophora costata	Sydney Red Gum	Retain and protect
93	Cedrus deodara	Himalayan Cedar	Retain and protect
94	Camellia japonica	Camellia	Retain and protect
95	Ficus rubiginosa	Port Jackson Fig	Retain and protect
96	Missing		Missing at time of inspection
97	Missing		Missing at time of inspection
98	Missing		Missing at time of inspection

Redgum Tree / Stand No.	Genus and species	Common name	Recommendation
99	Missing		Missing at time of inspection
100	Missing		Missing at time of inspection
101	Missing		Missing at time of inspection
102	Ficus rubiginosa	Port Jackson Fig	Retain and protect
103	Platanus digitata	Plane Tree	Retain and protect
104	Jacaranda mimosifolia	Jacaranda	Retain and protect
105	Schefflera actinophylla	Large Leaf Umbrella	Remove – exempt species
106	Missing		Missing at time of inspection
107	Thuja orientalis	Bookleaf Conifer	Retain and protect
108	Eucalyptus pilularis	Blackbutt	Retain – Further investigation required
109	Eucalyptus microcorys	Tallowwood	Retain and protect
110	Eucalyptus grandis	Rose gum	Retain and protect
111	Liquidambar styraciflua	Sweet Gum	Retain and protect
112	Celtis sp.	Hackberry	Retain and protect
113	Cupressus torulosa	Bhutan Cypress	Retain and protect
114	Cupressus torulosa	Bhutan Cypress	Retain and protect
115	Cupressus torulosa	Bhutan Cypress	Retain and protect
116	Cupressus torulosa	Bhutan Cypress	Retain and protect
117	Cupressus torulosa	Bhutan Cypress	Retain and protect
118	Cupressus torulosa	Bhutan Cypress	Retain and protect
119	Cupressus torulosa	Bhutan Cypress	Retain and protect
120	Cupressus torulosa	Bhutan Cypress	Retain and protect
120	· ·	Bhutan Cypress	Retain and protect
121	Cupressus torulosa		
122	Cupressus torulosa	Bhutan Cypress	Retain and protect
	Cupressus torulosa	Bhutan Cypress	Retain and protect
124	Cupressus torulosa	Bhutan Cypress	Retain and protect
125	Cupressus torulosa	Bhutan Cypress	Retain and protect
126	Cupressus torulosa	Bhutan Cypress	Retain and protect
127	Cupressus torulosa	Bhutan Cypress	Retain and protect
128	Cupressus torulosa	Bhutan Cypress	Retain and protect
129	Cupressus torulosa	Bhutan Cypress	Retain and protect
130	Cupressus torulosa	Bhutan Cypress	Retain and protect
131	Missing		Missing at time of inspection
132	Glochidion ferdinandi	Cheese Tree	Retain and protect
133	Pinus patula	Mexican Weeping Pine	Remove - OVERMATURE
134	Cupressus cashmeriana	Kashmir Cypress	Retain and protect
135	Cedrus deodara	Himalayan Cedar	Retain and protect
136	Cedrus deodara	Himalayan Cedar	Retain and protect
137	Callistemon salignus	Willow Bottlebrush	Retain and protect
138	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
139	Livistona chinensis	Chinese Fan Palm	Retain and protect
140	Missing		Missing at time of inspection
141	Missing		Missing at time of inspection
142	Eucalyptus scoparia	Wallangarra White Gum	Now removed at time of 2019 inspection
143	Phoenix canariensis	Date Palm	Retain and protect
144	Ginkgo biloba	Maidenhair Tree	Remove and replace
145	Ginkgo biloba	Maidenhair Tree	Remove and replace
146	Cinnamomum camphora	Camphor Laurel	Remove – exempt species
147	Eucalyptus saligna	Sydney Blue Gum	Retain and protect
148/2	Hymenosporum flavum x5	Native Frangipani	Retain and protect

Redgum Tree / Stand No.	Genus and species	Common name	Recommendation
149	Eucalyptus microcorys	Tallowwood	Retain and protect
150	Liquidambar styraciflua	Sweet Gum	Retain and protect
151	Acer negundo	Box Elder Maple	Retain and protect. – Exempt species
152	Acer negundo	Box Elder Maple	Retain and protect. – Exempt species
153	Acer negundo	Box Elder Maple	Remove – exempt species
154	Magnolia grandiflora	Bull Bay Magnolia	Retain and protect
155	Magnolia grandiflora	Bull Bay Magnolia	Retain and protect
156	Jacaranda mimosifolia	Jacaranda	Retain and protect
157/3	Acer negundo x3	Box Elder Maple	Retain and protect Exempt species
158	Triadica sebifera	Chinese Tallowwood	Retain and protect
159	Brachychiton acerifolius	Illawarra Flame Tree	Retain and protect
160	Cedrus atlantica	Atlantic Cedar	Remove and replace
161	Pyrus	Ornamental Pear	Remove and replace
162	Pyrus	Ornamental Pear	Remove and replace
163	Angophora costata	Sydney Red Gum	Remove and replace
164	Jacaranda mimosifolia	Jacaranda	Remove and replace
165	Jacaranda mimosifolia	Jacaranda	Retain and protect.
			Now removed at time of 2019
166	Cinnamomum camphora	Camphor Laurel	inspection
167	Ficus rubiginosa	Port Jackson Fig	Remove and replace
168	Eucalyptus sideroxylon	Pink Flowering Ironbark	Remove and replace
169	Missing		Missing at time of inspection
170	Missing		Missing at time of inspection
171	Acer negundo	Box Elder Maple	Remove and replace
172	Acer negundo	Box Elder Maple	Remove and replace
173	Acer negundo	Box Elder Maple	Remove and replace
174	Acer negundo	Box Elder Maple	Remove and replace
175	Acer negundo	Box Elder Maple	Remove and replace
176	Eucalyptus pilularis	Blackbutt	Remove and replace
177	Eucalyptus pilularis	Blackbutt	Remove and replace
178	Phoenix canariensis	Date Palm	Remove and replace
179	Phoenix canariensis	Date Palm	Remove and replace
180	Phoenix canariensis	Date Palm	Remove and replace
181	Phoenix canariensis	Date Palm	Remove and replace
182	Phoenix canariensis	Date Palm	Remove and replace
183	Phoenix canariensis	Date Palm	Remove and replace
184	Eucalyptus pilularis	Blackbutt	Remove and replace
184	Eucalyptus sideroxylon	Pink Flowering Ironbark	Remove and replace
186	Eucalyptus sideroxylon	Pink Flowering Ironbark	Remove and replace
187	Syagrus romanzoffianum	Cocos Palm	Remove - exempt species
187	Syagrus romanzomanum Syzygium smithii	Lilly Pilly	Remove and replace
	, ,,,		Remove and replace
189	Ficus rubiginosa	Port Jackson Fig	
190	Ficus rubiginosa	Port Jackson Fig	Remove and replace
191	Cinnamomum camphora	Camphor Laurel	Remove; environmental weed
192	Cinnamomum camphora	Camphor Laurel	Remove; environmental weed
193	Olea europaea var. africana	African Olive	Remove – exempt species
194	Populus deltoids	Eastern Cottonwood	Retain and protect
195	Celtis	Hackberry	Remove - exempt species
196	Triadica sebifera	Chinese Tallowwood	Remove and replace
197	Triadica sebifera	Chinese Tallowwood	Remove and replace
198	Pittosporum undulatum	Native Daphne	Remove and replace
199	Acer negundo	Box Elder Maple	Retain and protect – exempt species
200	Melia azedarach	White Cedar	Remove and replace

Redgum Tree / Stand No.	Genus and species	Common name	Recommendation	
201	Triadica sebifera	Chinese Tallowwood	Retain and protect	
202	Erythrina x sykesii	Coral tree	Remove - exempt species with compromised structural integrity	
203	Acer negundo	Box Elder Maple	Remove and replace (exempt if under 6 metres)	
204	Ficus rubiginosa	Port Jackson Fig	Remove and replace	
205	Erythrina x sykesii	Coral tree	Remove - exempt species	
206	Privet		Remove – weed species	
207	Stenocarpus sinuatus	Firewheel Tree	Remove and replace	
208	Phoenix canariensis	Date Palm	Remove and replace	
209	Pittosporum undulatum	Native Daphne	Retain and protect – Street tree	
210	Leptospermum sp.	Tea Tree	Retain and protect – Street tree	
211	Eucalyptus botryoides	Bangalay Gum	Retain – Further investigation required. – Street tree	
212	Pittosporum undulatum	Native Daphne	Retain and protect – Street tree	
213	Lophostemon confertus	Queensland Brush Box	Retain and protect – Street tree	
214	Allocasuarina torulosa	Forest She Oak	Retain and protect – Street tree	
215	Lophostemon confertus	Queensland Brush Box	Retain and protect – Street tree	
216	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree	
217	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree	
218	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree	
219	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree	
220	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree	
221	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree	
222	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree	
223	Allocasuarina torulosa	Forest She Oak	Remove/ Dead specimen Street tree	
224	Lophostemon confertus	Queensland Brush Box	Retain and protect – Street tree	
225	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree	
226	Corymbia citriodora	Lemon Scented Gum	Retain and protect – Street tree	
227/4	Glochidion ferdinandi x3	Cheese Tree	Retain and protect – Street tree	
228	Eucalyptus pilularis	Blackbutt	Remove – structural weakness / potentially hazardous – Street tree	
229	Ficus rubiginosa	Port Jackson Fig	Retain and protect – Street tree	
230	Celtis occidentalis	Hackberry	Remove - exempt species - Street tree	
231	Banksia integrifolia	Coastal Banksia	Retain and protect – Street tree	
232	Cotoneaster franchettii	Cotoneaster	Remove - exempt species - Street tree	
233	Jacaranda mimosifolia	Jacaranda	Retain and protect – Street tree	
234	Syncarpia glomulifera	Turpentine	Retain and protect – Street tree	
235	Eucalyptus haemastoma	Scribbly Gum	Retain and protect – Street tree	
236	Lophostemon confertus	Queensland Brush Box	Retain and protect – Street tree	
237	Lophostemon confertus	Queensland Brush Box	Retain and protect – Street tree	
238	Banksia integrifolia	Coastal Banksia	Remove – dead tree/ potentially hazardous – Street tree	
239	Rhaphiolepis sp.	Hawthorn	Retain and protect – Street tree	
240	Celtis occidentalis	Hackberry	Remove - exempt species / road reserve – Street tree	
241	Melia azedarach	White Cedar	Retain and protect – Street tree	
242	Celtis occidentalis	Hackberry	Remove - exempt species- Street tree	
243	Araucaria cunninghamii	Hoop Pine	Remove and replace	
244	Cupaniopsis anacardioides	Tuckeroo	Remove and replace	
245	Magnolia grandiflora	Bull Bay Magnolia	Remove and replace	
246	Eucalyptus pilularis	Blackbutt	Remove and replace	
247	Eucalyptus pilularis	Blackbutt	Remove and replace	
248	Cinnamomum camphora	Camphor Laurel	Remove; environmental weed species	
249	Ulmus procera	English Elm	Retain and protect	
250	Eucalyptus sp.	Eucalypt	Dead specimen – retain for habitat	

Redgum Tree / Stand No.	Genus and species	Common name	Recommendation	
251	Ficus rubiginosa	Port Jackson Fig	Retain and protect	
252	Cinnamomum camphora	Camphor Laurel	Retain and protect	
253	Eucalyptus sp.	Eucalypt	Dead specimen – retain for habitat Retain and protect	
254	Ficus rubiginosa	Port Jackson Fig		
255	Eucalyptus sp.	Eucalypt	Dead specimen – retain for habitat	
256	Callistemon citrinus	Crimson Bottlebrush	Remove and replace	
257	Dracaena marginata	Dragon tree	Remove and replace	
258	Melaleuca styphelioides	Prickly Paperbark	Retain and protect.	
259	Salix matsudana 'tortuosa'	Tortured Willow	Retain and protect	
260	Erythrina x hybrida	Coral tree	Retain and protect – Exempt species	
261	Syzygium australe	Scrub Cherry	Retain and protect	
262	Magnolia grandiflora	Bull Bay Magnolia	Retain and protect	
263	Grevillea robusta	Silky Oak	Retain and protect	
264	Angophora costata	Sydney Red Gum	Retain and protect	
265	Angophora costata	Sydney Red Gum	Retain and protect	
266	Angophora costata	Sydney Red Gum	Retain and protect	
267	Ravenala madagascariensis	Traveller's Palm	Retain and protect	
268	Angophora costata	Sydney Red Gum	Retain and protect	
269 / 5	•	Bangalow Palm	Retain and protect Remove and replace	
	Archontophoenix cunninghamiana x2		•	
270	Syzygium luehmannii	Small Leafed Lilly Pilly	Retain and protect	
271	Phoenix canariensis	Date Palm	Retain and protect	
272	Pittosporum undulatum	Native Daphne	Retain and protect	
8A	Glochidion ferdinandi	Cheese Tree	Retain and protect	
11A	Acacia falcata	Hickory Wattle	Remove - overmature	
14A	Glochidion ferdinandi	Cheese Tree	Retain and protect	
21A	Pittosporum undulatum	Native Daphne	Retain and protect	
22A	Cupaniopsis anacardioides	Tuckeroo	Retain and protect	
38A	Angophora costata	Sydney Red Gum	Remove - overmature	
38B	Angophora costata	Sydney Red Gum	Remove – Dead specimen	
45A / 6	Ficus rubiginosa x2	Port Jackson Fig	Retain and protect	
74A	Angophora costata	Sydney Red Gum	Retain and protect	
81A	Stenocarpus sinuatus	Firewheel Tree	Retain and protect	
81B	Acer negundo	Box Elder Maple	Retain and protect-exempt species	
83A	Ficus rubiginosa	Port Jackson Fig	Retain and protect	
85A	Ficus rubiginosa	Port Jackson Fig	Retain and protect	
91A	Lagerstroemia indica	Crepe Myrtle	Retain and protect	
91B	Lagerstroemia indica	Crepe Myrtle	Retain and protect	
91C	Photinia glabra	Photinia	Retain and protect	
107A	Jacaranda mimosifolia	Jacaranda	Removed at time of 2019 inspection	
107B	Robinia pseudoacacia	Golden Rain Tree	Removed at time of 2019 inspection	
107C	Lagerstroemia indica	Crepe Myrtle	Removed at time of 2019 inspection	
133A	Melaleuca bracteata	Revolution Green Paperbark	Retain and protect	
100/1	'Revolution Green'			
133B	Melaleuca bracteata 'Revolution Green'	Revolution Green Paperbark	Retain and protect	
142A/5	Phoenix canariensis x4	Date Palm	Retain and protect	
144A	X Cupressocyparis leylandii	Leyland Cypress	Remove and replace	
147A	Phoenix canariensis	Date Palm	Retain and protect	
147B	Celtis	Hackberry	Retain and protect	
147C	Liquidambar styraciflua	Sweet Gum	Retain and protect	
147D / 7	Acer negundo x3	Box Elder Maple	Retain and protect	
147E	Acer negundo	Box Elder Maple	Retain and protect	
153A	Magnolia grandiflora	Bull Bay Magnolia	Retain and protect	
159A	Syzygium australe	Lilly Pilly	Remove and replace	
160A	Syzygium australe	Lilly Pilly	Remove and replace	
162A / 8	Archontophoenix cunninghamiana x2	Bangalow Palm	Remove and replace	

Table 2.0 This table only applies to trees being retained. Tree Protection Zone fencing locations as measured from the centre of each tree and the recommended distances for the side closest to the building construction works e.g. excavation (see explanatory notes below). Tree Protection Zone fences and setbacks where applicable are indicated in Appendix F.

1.	2.	3.	4.	6.
Redgum	Structural Root Zone	Trunk Diameter at Breast Height	Tree Protection Zone (TPZ) =	Proposed distance of tree
Tree No.	SRZ (DARB)	DBH	12 x DBH	protection fence/works on the side closest to building construction ² , in
Redgum	From centre of trunk (COT)	1.4m above ground, AS4970	From centre of trunk (COT) in	metres by Redgum Horticultural.
Stand	Diameter Above Root Buttress AS4970 2009 Section 3, 3.3.5 (see	2009, or mm or m above ground	metres AS4970 2009Section 3	, ,
No.	Appendix D)	where indicated.	(see Appendix D) (Minimum 2.0 metres)	
	where applicable (Minimum 1.5 metres)	# = average. g = ground	(Winning 2.0 metres)	
1	3.0	800	9.6	T.B.A
2	2.7	600	7.2	T.B.A
4	3.4	1100 DARB	13.2	T.B.A
5	3.9	1500# DARB	15 ²³	T.B.A
6	4.2	1800# DARB	15 ²³	T.B.A
7	3.7	1300	15 ²³	T.B.A
8A	2.0	300@300	3.6	T.B.A
9	3.8	1400 DARB	15 ²³	T.B.A
10	3.2	900	10.8	T.B.A
12	3.8	1400# DARB	15 ²³	T.B.A
13	1.5 ²⁵	6x150#	2.0 22	T.B.A
14	2.8	700	8.4	T.B.A
14A	2.1	350	4.2	T.B.A
15	2.7	600	7.2	T.B.A
20	2.4	450@300	5.4	T.B.A
21A	2.0	300	3.6	T.B.A
22	2.3	400@300	4.8	T.B.A
22A	1.5 ²⁵	160	2.0 22	T.B.A
23	1.7	200	2.4	T.B.A
25 26	2.4	480	5.8	T.B.A T.B.A
26	1.6	180 240	2.1 2.9	T.B.A
28	1.8 2.5	500	6.0	T.B.A
28	2.3	600#	7.2	T.B.A
30	2.0	300	3.6	T.B.A
31	2.4	450	5.4	T.B.A
33	2.0	300	3.6	T.B.A
34	1.8	220	2.6	T.B.A
35	2.1	350	4.2	T.B.A
37	2.5	520	6.2	T.B.A
40	2.5	500	6.0	T.B.A
41	3.0	800	9.6	T.B.A
44	3.3	1000	12.0	T.B.A
45	2.8	700@300	8.4	T.B.A
45A/6	1.5 ²⁵ to 1.9	120-260	2.0 ²² to 3.1	T.B.A
46	1.9	280	3.4	T.B.A
47	2.1	350	4.2	T.B.A
48	3.3	1000	12.0	T.B.A
49	2.5	500@300	6.0	T.B.A
50	2.6	550	6.6	T.B.A
51	2.8	700	8.4	T.B.A
52	1.9	280	3.4	T.B.A
53	2.6	550	6.6	T.B.A
54	3.2	900	10.8	T.B.A
57	1.9	280	3.4	T.B.A
58 50	2.7	600	7.2	T.B.A
59 60	2.3 2.4	400	4.8 5.4	T.B.A T.B.A
00	۷.4	450@300	5.4	I.D.A

1.	2.	3.	4.	6.
Redgum	Structural Root Zone	Trunk Diameter at Breast Height	Tree Protection Zone (TPZ) =	Proposed distance of tree
Tree No.	SRZ (DARB)	DBH	12 x DBH	protection fence/works on the side
/	From centre of trunk (COT)			closest to building construction ² , in metres by Redgum Horticultural.
Redgum	Diameter Above Root Buttress	1.4m above ground, AS4970 2009, or mm or m above ground	From centre of trunk (COT) in metres AS4970 2009Section 3	mettes by Redgum Horticultural.
Stand	AS4970 2009 Section 3, 3.3.5 (see	where indicated.	(see Appendix D)	
No.	Appendix D) where applicable	# = average.	(Minimum 2.0 metres)	
	(Minimum 1.5 metres)	g = ground		
61	2.3	400#	4.8	T.B.A
62	1.6	180	2.1	T.B.A
63	1.9	260	3.1	T.B.A
64	2.4	450	5.4	T.B.A
65	2.4	450	5.4	T.B.A
66	1.7	200	2.4	T.B.A
67	2.8	700	8.4	T.B.A
68	5.25	3000	15 ^{#23}	T.B.A
71	3.3	1000	12.0	T.B.A
72 73	2.2	380	4.6	T.B.A
	2.0	300	3.6	T.B.A
74A	1.9	260	3.1	T.B.A
75 76	1.9	280	3.4	T.B.A
	2.4	450	5.4	T.B.A
77	2.3	400	4.8	T.B.A
78	1.9	280	3.4	T.B.A
79	2.7	600	7.2	T.B.A
80	2.0	300 350	3.6	T.B.A
81	2.1 1.5 ²⁵		4.2 2.0 ²²	T.B.A
81A		130		T.B.A
81B 82	1.7 2.0	200 300	2.4 3.6	T.B.A T.B.A
83	2.0	500	6.0	T.B.A
83A	1.5 ²⁵	140	2.0 22	T.B.A
84	2.4	450	5.4	T.B.A
85A	3.0	800#	9.6	T.B.A
86	2.4	450	5.4	T.B.A
87	3.3	1000#	12.0	T.B.A
88	2.0	300	3.6	T.B.A
89	2.3	400	4.8	T.B.A
90	2.8	700	8.4	T.B.A
91	2.7	600@300	7.2	T.B.A
91A	2.7	600@300	7.2	T.B.A
91B	2.7	600@300	7.2	T.B.A
91C	2.5	500@300	6.0	T.B.A
92	3.7	1300#	15 ²³	T.B.A
93	2.5	500	6.0	T.B.A
94	2.0	300@300	3.6	T.B.A
95	3.9	1500	15 ²³	T.B.A
102	5.25	3000	15 ²³	T.B.A
103	3.0	800@300	9.6	T.B.A
104	2.4	450	5.4	T.B.A
107	2.0	300@300	3.6	T.B.A
108	3.4	1100	13.2	T.B.A
109	3.0	800	9.6	T.B.A
110	3.3	1000	12.0	T.B.A
111	2.0	300	3.6	T.B.A
	2.0	300	3.0	I.B.A

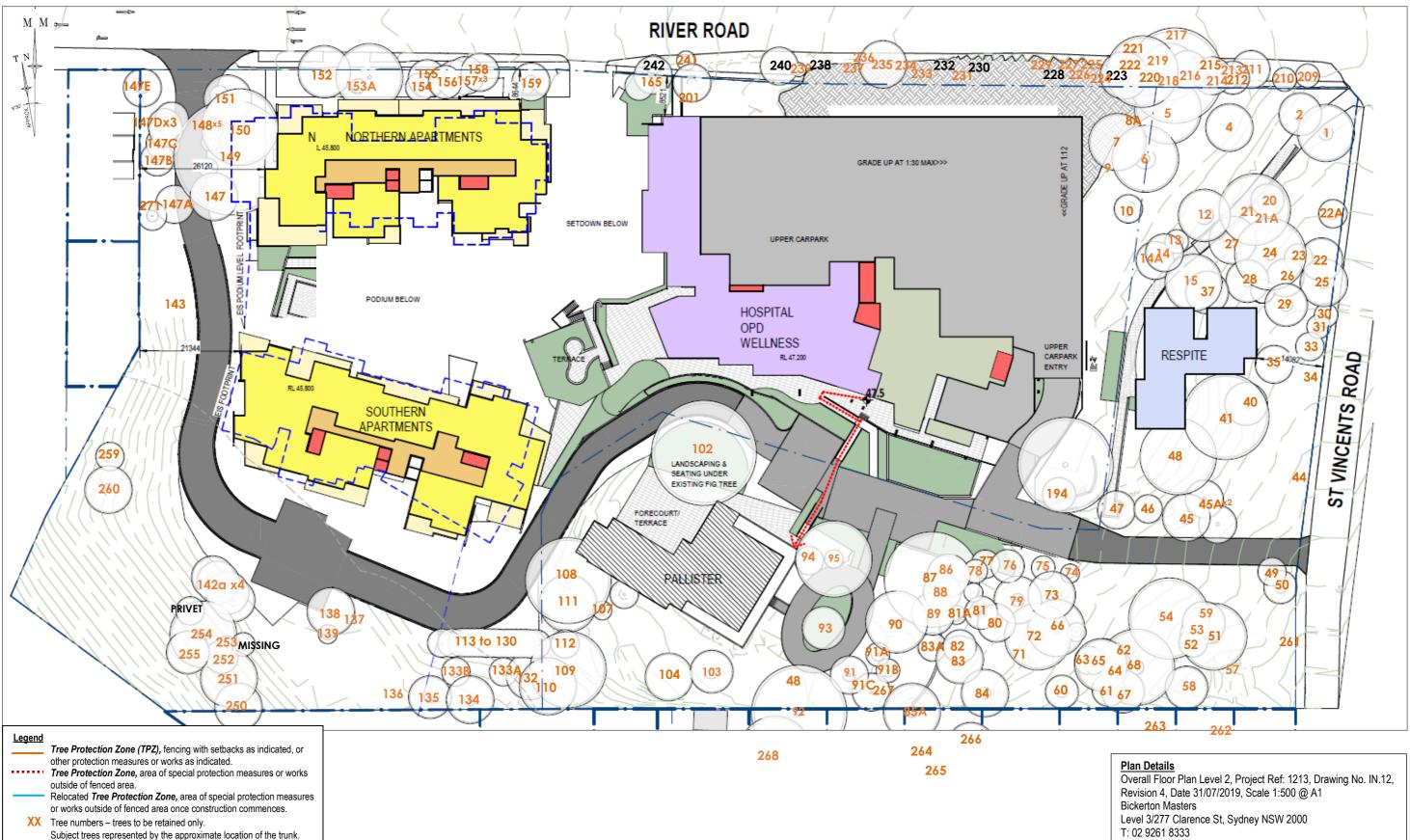
1.	2.	3.	4.	6.
Redgum	Structural Root Zone	Trunk Diameter at Breast Height	Tree Protection Zone (TPZ) =	Proposed distance of tree
Tree No.	SRZ (DARB)	DBH	12 x DBH	protection fence/works on the side
/	From centre of trunk (COT)	1.4m above ground, AS4970	From centre of trunk (COT) in	closest to building construction ² , in metres by Redgum Horticultural.
Redgum Stand	Diameter Above Root Buttress	2009, or mm or m above ground	metres AS4970 2009Section 3	
No.	AS4970 2009 Section 3, 3.3.5 (see Appendix D)	where indicated.	(see Appendix D)	
INO.	where applicable	# = average.	(Minimum 2.0 metres)	
112	(Minimum 1.5 metres) 1.7	g = ground 200	2.4	T.B.A
112	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
113	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
114	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
116	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
117	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
118	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
119	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
120	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
120	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
121	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
122	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
120	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
125	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
126	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
127	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
128	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
129	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
130	1.7 to 2.0	200 to 300	2.4 to 3.6	T.B.A
132	2.6	550@300	6.6	T.B.A
133A	1.5 ²⁵	160	2.0 22	T.B.A
133B	1.6	180	2.1	T.B.A
134	3.2	900	10.8	T.B.A
135	2.5	500	6.0	T.B.A
136	2.4	450	5.4	T.B.A
137	2.7	600@300	7.2	T.B.A
138	3.0	800	9.6	T.B.A
139	2.1	320	3.8	T.B.A
142A/7	N/A	800	4.0 #24	T.B.A
143	2.7	600	7.2	T.B.A
147	2.6	580	6.9	T.B.A
147A	N/A	800	4.0 #24	T.B.A.
147B	2.1	350	4.2	T.B.A
147C	1.9	280	3.4	T.B.A
147D/8	1.7 to 1.9	200 to 260	2.6 to 3.1	T.B.A
147E	2.5	500@300	6.0	T.B.A
148/2	1.5 ^{#25}	100-140	2.0 #22	T.B.A
149	3.2	900	10.8	T.B.A
150	2.7	600	7.2	T.B.A
151	2.5	500	6.0	T.B.A
152	3.0	800	9.6	T.B.A
153A	1.8	230	2.8	T.B.A
154 155	2.3	400@300 400	4.8	T.B.A T.B.A
	2.3			
156 157/3	1.5 ^{#25} to 2.0	600@300 150 to 300	7.2 2.0 ^{#22} to 3.6	T.B.A
	2.7		7.2	T.B.A
158 159		600@300		T.B.A T.B.A
159 165	2.1 2.0	350 300	4.2 3.6	T.B.S
100	۷.۷	300	3.0	1.D.O

1.	2.	3.	4.	6.
Redgum	Structural Root Zone	Trunk Diameter at Breast Height	Tree Protection Zone (TPZ) =	Proposed distance of tree
Tree No.	SRZ (DARB)	DBH	12 x DBH	protection fence/works on the side closest to building construction ² , in
/ Podaum	From centre of trunk (COT)	1.4m above ground, AS4970	From centre of trunk (COT) in	metres by Redgum Horticultural.
Redgum Stand	Diameter Above Root Buttress AS4970 2009 Section 3, 3.3.5 (see	2009, or mm or m above ground	metres AS4970 2009Section 3	
No.	Appendix D)	where indicated.	(see Appendix D) (Minimum 2.0 metres)	
110.	where applicable	# = average. g = ground	(Minimum 2.0 metres)	
194	(Minimum 1.5 metres) 2.5	600 @ 300	7.2	T.B.A
201	1.8	220	2.6	T.B.A
209	1.9	260	3.1	T.B.A
210	2.0	300	3.6	T.B.A
210	1.6	180	2.1	T.B.A
213	1.9	280	3.4	T.B.A
214	1.7	200	2.4	T.B.A
215	2.3	420	5.0	T.B.A
216	2.3	400	4.8	T.B.A
217	1.5 ^{#25}	90	2.0 #22	T.B.A
218	2.4	450	5.4	T.B.A
219	1.9	260	3.1	T.B.A
220	1.8	220	2.6	T.B.A
221	2.6	580	6.9	T.B.A
222	2.2	380	4.6	T.B.A
224	2.2	380	4.6	T.B.A
225	1.5 ^{#25}	150	2.0 #22	T.B.A
226	2.4	450	5.4	T.B.A
227/4	1.7 to 2.3	200 to 400	2.4 to 4.8	T.B.A
229	1.5 #25	140	2.0 #22	T.B.A
231	1.5 ^{#25}	110	2.0 #22	T.B.A
233	1.6	180	2.1	T.B.A
234	1.7	200	2.4	T.B.A
235	2.7	600	7.2	T.B.A
236	2.4	450	5.4	T.B.A
237	2.5	500	6.0	T.B.A
239	2.1	350	4.2	T.B.A
241	1.8	220	2.6	T.B.A
249	2.3	400	4.8	T.B.A
251	2.5	500	6.0	T.B.A
252	2.3	400	4.8	T.B.A
254	2.8	700	8.4	T.B.A
258	2.5	500	6.0	T.B.A
259	2.7	600	7.2	T.B.A
260	3.0	800	9.6	T.B.A
261	1.7	200	2.4	T.B.A T.B.A
262	2.0	300	3.6	
263 264	2.6 2.4	580 450	6.9 5.4	T.B.A T.B.A
264 265	2.4	700	5.4	T.B.A
265	2.8	620	7.4	T.B.A T.B.A
266	3.2	900@g	10.8	T.B.A T.B.A
267	2.4	900@g 480	5.8	T.B.A T.B.A
200	1.6	180@g	2.1	T.B.A
270	N/A	800	3.0 #24	T.B.A
271	1.5 #25	150	2.0 #22	T.B.A
212	1.0 "	150	2.0 "	ι.υ.⊼

Descriptors for modified setbacks as per above table.			Acceptable as tree growing on a lean and encroachment on compression wood side
1	Special conditions apply to protect the roots of trees generally.	ł	where root growth is of reduced structural importance.
2	Additional protective fencing information is detailed in attached plans.	14	Acceptable as root mapping has indicated extent of structural woody roots with a diameter
3	Acceptable due to the good relative tolerance of the species to development impacts.	ł	of 20 mm or more.
4	Range of setbacks for the trees at each end of a linear stand are to be calculated if	15	Acceptable as a specimen of palm taxa tolerant of encroachment.
	required.	16	Acceptable as excavation on down slope or across slope side of tree.
5	Acceptable as fence located at a substantial distance beyond dripline or may also include	17	Acceptable as encroachment into growing area below ground minor, with one corner of
	the location of a smaller tree in proximity to a larger tree to be retained and the smaller	ł	building or excavation works extending to within the radius of the dripline.
	tree being protected well within the protective fencing for that larger tree.	18	Acceptable as encroachment by pier, including screw piles, with minimal disturbance.
6	Acceptable due to additional special protection works, see Section 5.0 for this tree.	19	Acceptable as encroachment above grade without excavation or sub-base compaction.
7	Acceptable as pre-existing site conditions were conducive to having restricted the	20	Acceptable as located within 0.5 m from edge of dripline.
	development of root growth in this direction.	21	Acceptable as encroachment with gap graded fill that can accommodate gaseous
8	Street tree with protective fencing of minimal width to allow for pedestrian access along	l	exchange between roots/soil and the atmosphere and ongoing root growth.
	road reserve.	22	Minimum setback 2 m, AS4970 (2009) section 3, 3.2.
9	Acceptable as tree transplanted reducing the area of the root zone.	23	Maximum setback 15 m, AS4970 (2009) section 3, 3.2.
10	Acceptable as not effected by development works.	24	Tree is a palm, other monocot, cycad or tree fern TPZ is to be 1 m outside crown
11	Young tree not expected to have established a substantially expansive root system and	ł	projection AS4970 (2009) section 3, 3.2.
	able to re-establish or modify growth to be sustainable due to age and good vigour.	25	Minimum Structural Root Zone (SRZ) for trees less than 0.15 m diameter is 1.5 m,
12	Set back prescribed by the consent authority.	ł	AS4970 (2009) section 3, 3.5.
Ex	planatory notes for Table 2.0.		
Thi	s table is based upon Australian Standard AS4970 2009 Protection of trees on development	3.3	3.3 Major Encroachment
	es, Section 3 Determining the protection zone of the selected trees (see Appendix D), where	lf th	he proposed encroachment is greater than 10% of the area of the TPZ or inside the SRZ the
the approved building works should be no closer, including excavation, than the dimensions		pro	ject arborist must demonstrate that the tree(s) would remain viable. The area lost to this
	ted above.	enc	croachment should be compensated for elsewhere and contiguous with the TPZ."
"3	3 Variations to the TPZ	l	
	.2 Minor Encroachment - If the proposed encroachment is less than 10% of the area of the	l	
	Z and is outside the SRZ, detailed root investigations should not be required. The area lost to	i	
this	s encroachment should be compensated for elsewhere and contiguous with the TPZ.	i	

Appendix F

Site Plan - Redgum Survey of Subject Trees to be Retained & Tree Protection Zones This report has relied upon the following plan/s and documents which has been reproduced from electronic transmission and no longer to original scale. All Tree Protection Zones are to be measured on site as per Table 2.



T: 02 9261 8333