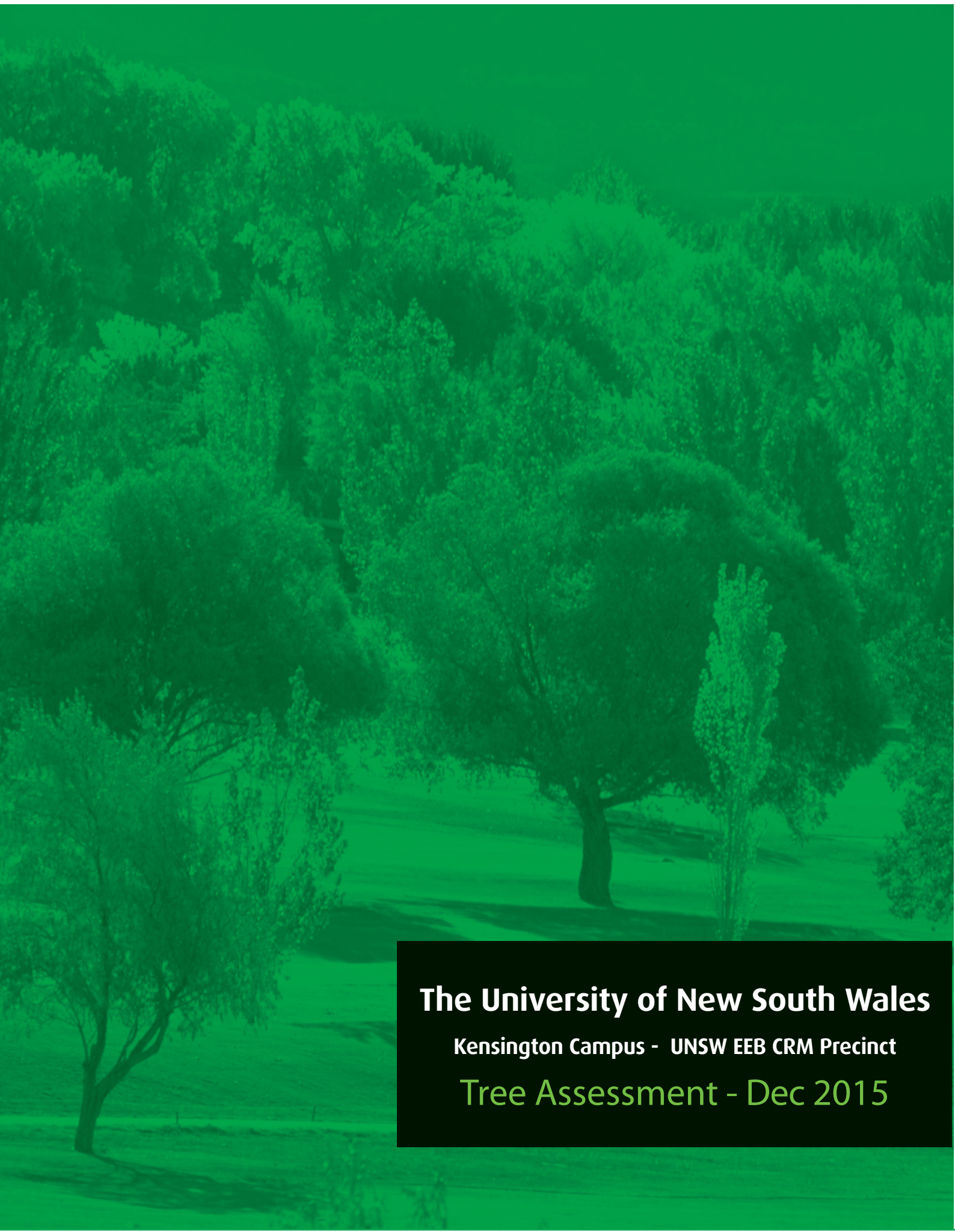




SOFTWARE SYSTEMS FOR TREE INVENTORY MANAGEMENT



The University of New South Wales

Kensington Campus - UNSW EEB CRM Precinct

Tree Assessment - Dec 2015

1 Introduction

- 1.1.1 ArborSafe Australia Pty Ltd was engaged by Mr Mark Clark of UNSW to provide an arboricultural assessment and report regarding sixty two (62) trees located within the UNSW Kensington Campus in Sydney NSW.
- 1.1.2 The subject trees were assessed by Alex Austin and Luke Dawson, consulting arborists from ArborSafe Australia in July 2015. The trees were assessed from the university property.
- 1.1.3 The subset of trees within this assessment form part of a larger tree inventory under management at the campus under ArborPlan. The total inventory under management at the site is currently 1,157 trees
- 1.1.4 Based on the findings of the assessment, recommendations for the future management of the trees have been made within the ArborPlan tree management system for the site.
- 1.1.5 Tree assessment and recommendations in the tree schedule on the following pages are based on the condition of the trees at the time of inspection. Site conditions and weather events may change the condition of the trees from the time of inspection.

2 Scope

- 2.1.1 To assess the current health and condition of sixty two (62) subject trees from the university's property in Sydney NSW.
- 2.1.2 Provide an objective appraisal of the subject trees in relation to species, estimated age, health, structural condition, hazards and risks, remedial work actions and viability within the landscape.
- 2.1.3 Based on the findings of the assessment, provide independent recommendations regarding the future management of the subject trees.

3 Methodology

- 3.1.1 The subject trees were inspected from the ground using the initial component of Visual Tree Assessment (VTA) (Mattheck & Breloer 1994). No foliage or soil samples were taken. No aerial or internal investigations were undertaken.
- 3.1.2 Tree height and canopy width were estimated. Trunk diameter at breast height (DBH) was also estimated.
- 3.1.3 Data collected on site was analysed by Alex Austin and Luke Dawson, collated into ArborPlan format, and relevant recommendations were formulated within the management plan.

- 3.1.4 Risk assessment was performed in accordance with the ArborPlan Risk Matrix. Tree risk of the subject trees were determined by the author assessing both the Probability of whole tree or significant limb failure (Within the next 12 months) and the Consequence to human health and/or property damage should a failure occur (see Figure 1).

		PROBABILITY				
		No Detectable Threat	Failure Unlikely	Failure Possible	Failure Likely	Failure Certain
CONSEQUENCE	Minor	NEGLECTABLE	VERY LOW	LOW	MEDIUM	MEDIUM
	Moderate	VERY LOW	LOW	MEDIUM	MEDIUM	HIGH
	Serious	LOW	MEDIUM	MEDIUM	HIGH	URGENT
	Extreme	MEDIUM	MEDIUM	HIGH	URGENT	CRITICAL

Figure 1: The ArborPlan Risk Matrix using Probability of tree failure and the Consequence of failure to derive a tree risk.

4 Aerial Images



Figure 2: The subject trees (coloured icons representing current risk not retention values). Source: ArborPlan 2015

5 Tree Assessment

5.1 Table of Findings

ArborPlan Tree Assessment Data as at 14.12.15

Customer UNSW Kensington Campus

No	Botanical Name	Common Name	Canopy (m)	DBH (mm)	Height (m)	Trees in Group	Condition	Structure	Age	TLE (yrs)	Tree Defects	Significance	Remedial Work Actions	Arborist comments	Estimate	Tree Risk Current Probability	Tree Risk Current Consequence	Current Risk	Est Tree Protection Zone TPZ (m)
66	Platanus x hybrida	London Plane	10-15	600	15-20	1	Good	Fair	Mature	>50	Wound(s)	Amenity value/shade;Attractive landscape feature			0.00	Failure Unlikely	Moderate	Low	7.2
67	Platanus x hybrida	London Plane	10-15	600	15-20	1	Good	Fair	Mature	>50	Wound(s);Dead wood in canopy;Damaging infrastructure	Amenity value/shade;Attractive landscape feature	Remove deadwood/stubs	28-7-15 - Small diameter deadwood throughout crown. Tree roots beginning to lift pavement. - Jul 27 2015 - lukeunsw - 27/07/2015	150.00	Failure Likely	Minor	Medium	7.2
68	Platanus x hybrida	London Plane	10-15	400	15-20	1	Good	Good	Mature	>50	Previous failures;Hanger(s);Wound(s)	Amenity value/shade;Attractive landscape feature	Remove hanging limb	28-7-15 - 5 - Small hanger in lower crown. - Jul 27 2015 - lukeunsw - 27/07/2015	50.00	Failure Likely	Minor	Medium	4.8
69	Platanus x hybrida	London Plane	10-15	600	15-20	1	Good	Good	Mature	>50	Wound(s);Epicormic growth;Co-dominant stems	Attractive landscape feature;Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	7.2
70	Fraxinus excelsior	European Ash	5-10	200	5-10	1	Good	Good	Semi-Mature	25-50	Wound(s);Co-dominant stems	Amenity value/shade			0.00	Failure Unlikely	Minor	Very Low	2.4
670	Corymbia citriodora	Lemon-scented Gum	5-10	300	15-20	1	Fair	Fair	Mature	25-50	Wound(s);Previous failures	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	3.6
671	Corymbia maculata	Spotted Gum	10-15	500	15-20	1	Good	Good	Mature	>50	Wound(s);Previous failures;Dieback	Attractive landscape feature;Amenity value/shade			0.00	Failure Unlikely	Serious	Medium	6.0
672	Eucalyptus saligna	Sydney Blue Gum	5-10	400	15-20	1	Good	Good	Semi-Mature	>50	Wound(s);Previous failures;Dead wood in canopy	Attractive landscape feature;Amenity value/shade		31.07.15 - Small diameter deadwood over garden bed. - Jul 31 2015 - lukeunsw - 31/07/2015	0.00	Failure Unlikely	Serious	Medium	4.8
673	Eucalyptus sp.	Eucalypt	<5	100	5-10	1	Fair	Fair	Juvenile	5-10	Suppressed;Epicormic growth;Dieback;Wound(s)		Removal	31.07.15 - Suppressed tree with limited future potential. Main leader in upper crown is dead. - Jul 31 2015 - lukeunsw - 31/07/2015	300.00	Failure Possible	Moderate	Medium	1.2
674	Eucalyptus microcorys	Tallowwood	10-15	700	20-30	1	Good	Good	Mature	>50	Dead wood in canopy;Wound(s);Previous failures	Amenity value/shade;Attractive landscape feature;Significant due to age/size		31.07.15 - Small-medium sized diameter deadwood throughout crown. mainly over garden bed. - Jul 31 2015 - lukeunsw - 31/07/2015	0.00	Failure Unlikely	Serious	Medium	8.4
675	Eucalyptus microcorys	Tallowwood	10-15	700	20-30	1	Good	Good	Mature	>50	Dead wood in canopy;Dieback;Wound(s);Previous failures	Amenity value/shade		31.07.15 - Small-medium sized diameter deadwood over garden bed. - Jul 31 2015 - lukeunsw - 31/07/2015	0.00	Failure Unlikely	Moderate	Low	8.4
676	Eucalyptus microcorys	Tallowwood	10-15	750	20-30	1	Good	Good	Mature	>50	Dead wood in canopy;Dieback;Wound(s);Previous failures	Amenity value/shade		31.07.15 - Small-medium sized diameter deadwood over garden bed. - Jul 31 2015 - lukeunsw - 31/07/2015	0.00	Failure Unlikely	Moderate	Low	9.0
677	Eucalyptus saligna	Sydney Blue Gum	5-10	150	10-15	1	Fair	Fair	Semi-Mature	25-50	Suppressed;Dieback;Dead wood in canopy			31.07.15 - Small-medium sized deadwood over garden bed. - Jul 31 2015 - lukeunsw - 31/07/2015	0.00	Failure Unlikely	Moderate	Low	1.8
678	Angophora costata	Smooth-barked Apple Myrtle	10-15	400	15-20	1	Good	Fair	Mature	>50	Suppressed;Dead wood in canopy	Amenity value/shade	Remove deadwood/stubs	31.07.15 - Medium sized deadwood over footbridge. - Jul 31 2015 - lukeunsw - 31/07/2015	300.00	Failure Possible	Moderate	Medium	4.8
679	Eucalyptus microcorys	Tallowwood	10-15	700	20-30	1	Good	Good	Mature	>50	Dead wood in canopy;Wound(s);Previous failures	Attractive landscape feature;Amenity value/shade		31.07.15 - Small diameter deadwood over garden bed. - Jul 31 2015 - lukeunsw - 31/07/2015	0.00	Failure Unlikely	Serious	Medium	8.4
680	Eucalyptus saligna	Sydney Blue Gum	10-15	300	15-20	1	Good	Fair	Semi-Mature	25-50	Suppressed;Wound(s);Dieback	Amenity value/shade			0.00	Failure Unlikely	Serious	Medium	3.6
681	Eucalyptus microcorys	Tallowwood	10-15	700	20-30	1	Good	Good	Mature	>50	Dead wood in canopy;Wound(s);Dieback	Attractive landscape feature;Amenity value/shade	Remove deadwood/stubs	31.07.15 - Small-medium sized diameter deadwood throughout crown within fall distance of footpath. - Jul 31 2015 - lukeunsw - 31/07/2015	300.00	Failure Unlikely	Serious	Medium	8.4
682	Afrocarpus falcatus	Sickle-leaved Yellowwood	5-10	300	5-10	1	Good	Fair	Semi-Mature	25-50	Suppressed;Dieback	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	3.6
683	Eucalyptus sideroxylon	Red Ironbark	10-15	350	10-15	1	Fair	Fair	Semi-Mature	25-50	Suppressed;Previous failures;Dieback;Dead wood in canopy;Wound(s)	Amenity value/shade		31.07.15 - Small-medium sized diameter deadwood over garden bed. - Jul 31 2015 - lukeunsw - 31/07/2015	0.00	Failure Possible	Moderate	Medium	4.2
684	Jacaranda mimosifolia	Jacaranda	10-15	400	15-20	1	Good	Fair	Mature	15-25	Wound(s);Dieback;Previous failures	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	4.8

No	Botanical Name	Common Name	Canopy (m)	DBH (mm)	Height (m)	Trees in Group	Condition	Structure	Age	TLE (yrs)	Tree Defects	Significance	Remedial Work Actions	Arborist comments	Estimate	Tree Risk Current Probability	Tree Risk Current Consequence	Current Risk	Est Tree Protection Zone TPZ (m)
685	Eucalyptus grandis	Flooded Gum	10-15	700	20-30	1	Fair	Poor	Mature	5-10	Canker(s)/Gall(s);Wound(s)	Amenity value/shade	Removal	31.07.15 - Severe cankering at 4m has compromised structural integrity. Cankering is located on all sides of trunk damaging up to 80% of circumference with poor response wood development. Surrounding trees will fill void following removal. - Jul 31 2015 - lukeunsw - 31/07/2015	3000.00	Failure Possible	Extreme	High	8.4
686	Eucalyptus grandis	Flooded Gum	5-10	300	20-30	1	Good	Poor	Semi-Mature	10-15	Mechanical damage;Epicormic growth;Suppressed;Wound(s)	Amenity value/shade	Removal	31.07.15 - Adjacent tree is causing significant damage to trunk at 15m. Trees current structure does not warrant long term retention. - Jul 31 2015 - lukeunsw - 31/07/2015	2000.00	Failure Possible	Serious	Medium	3.6
687	Olea africana	African Olive	5-10	300	10-15	1	Fair	Fair	Mature	>50	Undesirable species;Co-dominant stems;Dead wood in canopy;Dieback		Removal	31.07.15 - Tree of undesirable species. - Jul 31 2015 - lukeunsw - 31/07/2015	750.00	Failure Unlikely	Moderate	Low	3.6
688	Eucalyptus elata	River Peppermint	15-20	1000	15-20	1	Fair	Poor	Senescent	<5	Dieback;Co-dominant stems;Abnormal lean;Cavity(s);Decay;Dead wood in canopy;Epicormic growth;Wound(s);Poor pruning		Removal	31.07.15 - Base of trunk taps as hollow when sounded with mallet. Suppression has resulted in asymmetrical crown. Lean and poor pruning have resulted in poor structure. Significant deadwood and dieback suggests dysfunction from basal decay. - Jul 31 2015 - lukeunsw - 31/07/2015	2400.00	Failure Possible	Serious	Medium	12.0
689	Casuarina glauca	Swamp she-oak	5-10	700	20-30	1	Good	Good	Mature	>50		Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	8.4
690	Eucalyptus microcorys	Tallowwood	5-10	300	10-15	1	Good	Fair	Semi-Mature	>50	Suppressed;Epicormic growth	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	3.6
691	Melaleuca styphelioides	Prickly-leaved Paperbark	5-10	300	5-10	1	Good	Good	Semi-Mature	25-50	Co-dominant stems	Amenity value/shade			0.00	Failure Unlikely	Minor	Very Low	3.6
692	Melaleuca styphelioides	Prickly-leaved Paperbark	5-10	250	10-15	1	Good	Good	Semi-Mature	25-50	Suppressed;Wound(s)	Amenity value/shade			0.00	Failure Unlikely	Minor	Very Low	3.0
693	Corymbia gummifera	Red Bloodwood	5-10	300	10-15	1	Fair	Good	Semi-Mature	25-50		Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	3.6
694	Archontophoenix cunninghamiana	Bangalow Palm	<5	400	5-10	1	Good	Fair	Semi-Mature	25-50	Co-dominant stems	Amenity value/shade			0.00	Failure Possible	Minor	Low	4.8
695	Tristania laurina	Kanooka	5-10	250	10-15	1	Good	Good	Semi-Mature	25-50	Co-dominant stems;Dead wood in canopy;Hanger(s)	Amenity value/shade		31/07/15- Deadwood is over garden. - Jul 31 2015 - alexunsw - 31/07/2015	0.00	Failure Possible	Minor	Low	3.0
696	Callistemon sp.	Bottlebrush	<5	150	5-10	1	Fair	Fair	Mature	25-50	Suppressed	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	1.8
697	Hymenosporum flavum	Native Frangipani	5-10	250	10-15	1	Fair	Good	Mature	10-15	Dieback	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	3.0
698	Melia azedarach	White Cedar	15-20	800	15-20	1	Fair	Fair	Mature	10-15	Wound(s);Co-dominant stems	Amenity value/shade;Attractive landscape feature	Monitor	30/07/15-Monitor trunk wounds for fungal fruiting bodies or signs of decay. Monitor basal union for cracks or splits after strong winds or storm events. - Jul 31 2015 - alexunsw - 31/07/2015	0.00	Failure Possible	Serious	Medium	9.6
699	Banksia integrifolia	Coast Banksia	5-10	300	10-15	1	Fair	Fair	Semi-Mature	15-25	Parasitic plant/Mistletoe;Suppressed	Amenity value/shade	Weed control	31/07/15 - Separate canopy from vine. - Jul 31 2015 - alexunsw - 31/07/2015	300.00	Failure Possible	Moderate	Medium	3.6
700	Podocarpus elatus	Brown Pine	5-10	400	15-20	1	Good	Good	Semi-Mature	>50		Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	4.8
701	Podocarpus elatus	Brown Pine	5-10	300	15-20	1	Good	Good	Semi-Mature	>50	Co-dominant stems	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	3.6
702	Melaleuca styphelioides	Prickly-leaved Paperbark	5-10	250	10-15	1	Good	Good	Semi-Mature	25-50	Suppressed	Amenity value/shade			0.00	Failure Unlikely	Minor	Very Low	3.0
703	Podocarpus elatus	Brown Pine	5-10	400	15-20	1	Good	Good	Semi-Mature	>50	Parasitic plant/Mistletoe	Amenity value/shade	Weed control	31/07/15- Vine stem at base is smothering several tree canopies. Sever vine at ground level and remove majority of material from canopies. - Jul 31 2015 - alexunsw - 31/07/2015	750.00	Failure Possible	Moderate	Medium	4.8

No	Botanical Name	Common Name	Canopy (m)	DBH (mm)	Height (m)	Trees in Group	Condition	Structure	Age	TLE (yrs)	Tree Defects	Significance	Remedial Work Actions	Arborist comments	Estimate	Tree Risk Current Probability	Tree Risk Current Consequence	Current Risk	Est Tree Protection Zone TPZ (m)
704	Podocarpus elatus	Brown Pine	5-10	400	15-20	1	Good	Fair	Semi-Mature	25-50	Parasitic plant/Mistletoe;Co-dominant stems;Included bark	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	4.8
705	Podocarpus elatus	Brown Pine	5-10	400	15-20	1	Good	Good	Semi-Mature	25-50	Parasitic plant/Mistletoe;Co-dominant stems;Previous failures;Wound(s);Hanger(s)	Amenity value/shade	Remove hanging limb;Weed control	31/07/15-Vine is smothering canopy. Remove vine and hangers. - Jul 31 2015 - alexunsw - 31/07/2015	450.00	Failure Possible	Moderate	Medium	4.8
706	Eucalyptus sp.	Eucalypt	5-10	500	15-20	1	Fair	Good	Semi-Mature	>50	Epicormic growth	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	6.0
707	Podocarpus elatus	Brown Pine	5-10	500	15-20	1	Good	Fair	Semi-Mature	25-50	Co-dominant stems;Included bark	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	6.0
708	Melaleuca styphelioides	Prickly-leaved Paperbark	5-10	250	10-15	1	Good	Good	Semi-Mature	25-50	Suppressed	Amenity value/shade			0.00	Failure Unlikely	Minor	Very Low	3.0
709	Podocarpus elatus	Brown Pine	<5	150	5-10	1	Good	Good	Semi-Mature	>50		Amenity value/shade			0.00	Failure Unlikely	Minor	Very Low	1.8
710	Melia azedarach	White Cedar	<5	150	5-10	1	Fair	Fair	Semi-Mature	10-15	Suppressed;Epicormic growth				0.00	Failure Unlikely	Minor	Very Low	1.8
711	Casuarina glauca	Swamp she-oak	5-10	700	20-30	1	Good	Good	Mature	>50	Wound(s)	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	8.4
712	Casuarina glauca	Swamp she-oak	5-10	250	10-15	1	Good	Good	Semi-Mature	15-25	Suppressed	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	3.0
713	Archontophoenix cunninghamiana	Bangalow Palm	<5	100	10-15	2	Good	Good	Semi-Mature	>50		Amenity value/shade			0.00	Failure Unlikely	Minor	Very Low	1.2
714	Syzygium paniculatum	Magenta Brush Cherry	5-10	200	10-15	1	Good	Good	Semi-Mature	>50		Amenity value/shade			0.00	Failure Unlikely	Minor	Very Low	2.4
715	Syzygium sp.	Lilly Pilly	5-10	200	10-15	1	Good	Good	Semi-Mature	25-50	Suppressed	Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	2.4
718	Toona australis	Red Cedar	15-20	500	15-20	1	Good	Good	Mature	25-50	Co-dominant stems	Amenity value/shade;Attractive landscape feature			0.00	Failure Unlikely	Moderate	Low	6.0
719	Podocarpus elatus	Brown Pine	<5	150	5-10	1	Good	Good	Semi-Mature	>50	Suppressed	Amenity value/shade			0.00	Failure Unlikely	Minor	Very Low	1.8
720	Syzygium paniculatum	Magenta Brush Cherry	5-10	200	10-15	1	Good	Fair	Semi-Mature	15-25	Wound(s);Suppressed	Amenity value/shade	Shape from infrastructure	31/07/15- Provide 1.5m roof clearance - Jul 31 2015 - alexunsw - 31/07/2015	150.00	Failure Possible	Moderate	Medium	2.4
722	Syzygium paniculatum	Magenta Brush Cherry	5-10	350	10-15	1	Good	Fair	Semi-Mature	25-50	Suppressed	Amenity value/shade	Shape from infrastructure	31/07/15- Provide 1.5m roof clearance. - Jul 31 2015 - alexunsw - 31/07/2015	300.00	Failure Possible	Moderate	Medium	4.2
723	Acacia elata	Cedar Wattle	10-15	800	15-20	1	Fair	Poor	Senescent	<5	Dead wood in canopy;Dieback;Epicormic growth;Excessive thinning;Wound(s)	Amenity value/shade	Consider removing;Remove deadwood/stubs; Monitor	31/07/15- Tree health declining - limited TLE. Deadwood to 100mm diameter observed including terminal leader. Monitor tree health and for deadwood build up. - Jul 31 2015 - alexunsw - 31/07/2015	2400.00	Failure Possible	Serious	Medium	9.6
724	Syzygium sp.	Lilly Pilly	5-10	200	5-10	1	Fair	Fair	Semi-Mature	25-50	Suppressed;Parasitic plant/Mistletoe	Amenity value/shade	Weed control	31/07/15- Sever vine at ground level - Jul 31 2015 - alexunsw - 31/07/2015	75.00	Failure Possible	Minor	Low	2.4
725	Brachychiton acerifolius	Illawarra Flame Tree	5-10	200	10-15	1	Good	Fair	Semi-Mature	25-50	Co-dominant stems	Amenity value/shade			0.00	Failure Unlikely	Minor	Very Low	2.4
726	Cupaniopsis anacardioides	Tuckaroo	<5	200	5-10	2	Good	Good	Semi-Mature	15-25	Suppressed	Amenity value/shade			0.00	Failure Unlikely	Minor	Very Low	2.4
727	Brachychiton acerifolius	Illawarra Flame Tree	5-10	350	10-15	1	Good	Good	Semi-Mature	25-50		Amenity value/shade			0.00	Failure Unlikely	Moderate	Low	4.2
728	Ulmus minor	Field Elm	15-20	700	15-20	1	Good	Good	Mature	25-50	Wound(s);Co-dominant stems;Dieback;Dead wood in canopy;Soil compaction	Amenity value/shade;Attractive landscape feature;Significant due to age/size	Mulching;Remove deadwood/stubs;Shape from infrastructure	31/07/15- Species not definite due to absence of foliage at time of inspection. Provide 1.5m roof clearance. - Jul 31 2015 - alexunsw - 31/07/2015	450.00	Failure Likely	Moderate	Medium	8.4

Total of 62 Trees for UNSW Kensington Campus

6 Risk Assessment

- 6.1.1 Risk assessment was completed based on the condition of the trees at the time of on site assessment by the author in accordance with the ArborPlan Risk Matrix (see Fig. 1) and risk outcome per tree is shown in the Table of Findings in the column titled Current Risk per tree.

7 Discussion

- 7.1.1 Discussion on each of the subject trees is displayed in the column titled Arborist Comments within the Table of Findings per tree.

8 Recommendations

- 8.1.1 Recommended remedial actions on each of the subject trees is displayed in the column titled Remedial Work Actions within the Table of Findings per tree.

9 Quality of Arboricultural Works

- 9.1.1 To ensure a high standard of works is achieved, all arboricultural works administered to the subject tree must be completed by a suitably qualified and experienced Arborist(s) (minimum AQF Level 3), in accordance with the Australian Standard (AS 4373-2007 Pruning of Amenity Trees).

10 References

Mattheck. C, & Breloer. H. 1994. *The body language of trees*. The Stationary Office London
Standards Australia. 2007. AS:4373-2007 *Pruning of Amenity Trees*, Standards Australia, G.P.O. Box 476, Sydney, New South Wales, 2001.

11 Appendices

11.1 Appendix A – Arboricultural Reporting Assumptions and Limiting Conditions

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

11.2 Appendix B – Explanation of Tree Assessment Terms

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

Age: Refers to the life cycle of the tree.

Category	Description
Young	Tree is small in terms of its potential physical size and has not reached its full reproductive ability, may have been recently planted.
Semi-mature	Tree in active growth phase of life cycle and not yet attained an expected maximum physical size for its species and/or its location.
Mature	Tree has reached an expected maximum physical size for the species and/or location and is showing a reduction in the rate of seasonal extension growth.
Senescent	Tree is approaching the end of its life cycle and is exhibiting a reduction in vigour often evidenced by natural deterioration in health and structure.

Health: Summarises the health and vigour of the tree.

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

Structure: Summarises the structure of the tree from root to crown.

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

11.3 Appendix C – Enlarged Tree Map





ArborPlan

SOFTWARE SYSTEMS FOR TREE INVENTORY MANAGEMENT



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For any questions or further information
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