



Visual Tree Assessment and Management Report
for
Urambi Village
Crozier Circuit Kambah
ACT 2902

| | |
|----------------------|--|
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| Phone | 1800 873 343 |
| Report Date | 14 January 2020 |

Project Details

| | |
|-------------------------|---|
| Job | 425591 |
| Site Address | Urambi Village Crozier Circuit Kambah ACT |
| Client | Azure Hermes |
| Client Mobile | 0458 354 604 |
| Commission Brief | <p>The author of this report has:</p> <ul style="list-style-type: none"> • visited the site • advised genus/species of trees and location • observed health of the trees on common land areas • provided a Visual Tree Assessment (VTA) • addressed present risk management of the trees and rate them • provided further Recommendations <p>Retention of trees is the aim unless posing undue risk to people and property. Recommendations made by the Arborist in this Report is to be in accordance with Australian Standards; Pruning of Amenity Trees.</p> <p style="text-align: center; border: 1px dashed green; padding: 5px;"><i>AS 4373--2007 also AS 4970-2009</i></p> |

Figure 1. One of the excellent mature Eucalypts at Urambi Village Kambah ACT



Version History

| Ver. No. | Ver. Date | Revised By | Description |
|----------|-----------|-----------------|-----------------------------|
| V0.1 | 14/01/20 | Steve Griffiths | Initial draft report |
| V0.2 | 15/01/20 | Jan Bartlett | Proof and format content |
| V1.0 | 19/01/20 | Steve Griffiths | Final Report for submission |

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1. Report Summary

1.1 Background

1.1.1 Purpose

This multi-unit complex at Kambah ACT, is going through a stage where some trees are getting well on in years from an urban aspect. Larger trees are possibly overshadowing, obstructing buildings and lifting minor structures with their roots. This is a great complex in regards tree variations and form, and as nature does, they create their own ecosystem and mesh in.

The Body Corporate has requested Treeworks (ACT/NSW) Pty Ltd to advise on all trees within the common ground area within the complex, to recognise problem trees, addressing future tree-related issues, advising work where needed.

Due to the high number of units in this complex and many people using these grounds, it is important that the trees and shrubs are kept in good condition and risk levels are monitored regularly. The purpose of this Report is to assess all trees and shrubs in the common area over 3m in height, assessing potential structural weakness, life expectancies of the trees and plants, ecosystem issues, pests and diseases being abiotic or biotic and to give recommendations for future tree plantings on this site.

No matter how low the risk is, there is a duty of care to consider any potential risks from the trees within the complex grounds. The Body Corporate, responsible for managing common property, have a duty of care to ensure that people and structures are not exposed to unreasonable levels of risk and damage caused by the site trees.

Quantified Tree Risk Assessment (QTRA) User Manual Version 5 UK

1.1.2 Important Notes

The majority of trees have defects that may or may not be detectable without invasive diagnostic tooling methods. These defects could be from environmental, human or genetic factors and may be hazardous to people and property.

This assessment does not provide the likelihoods of what will or will not happen, but an evaluation of the risks from any individual tree hazard.

QTRA User Manual Version 5 UK

1.1.3 Tree Identification

When identifying species and cultivars, it is important to note that some macro botanical characteristics change over time. There may be small changes between cultivars and species and not all botanical signs are featured at the date of inspection. If an absolute identification is required, a further re-examination of micro characteristics will determine species or cultivar.

1.2 Recommendations

Due to the number of trees reviewed in this report, we have included our recommendations for each tree in the Tree Survey Schedule on page 7 in the column headed *Recommendations*.

A summary table (on page 15) re-stating where work is recommended to be done has also been included with details of pricing for work that Treeworks (ACT/NSW) Pty Ltd can provide.

It is advised to get all the medium work and some of the low rated work done. Monitoring will also be needed yearly. Please keep up the watering and mulching around the trees.

The next tree report will be given to you sooner and at nearly half the price. We deeply apologise for the time this assessment and report took to complete.

Thank you for the opportunity to provide this report. Should you have any questions, please feel free to call me on 1800 873 343.

Kind regards



Stephen Griffiths
Level 5 Consulting Arborist

2. Report Details

2.1 Method and Limitations

Data collected for this Visual Tree Assessment (VTA¹) was conducted on 19 and 20 October and 3 and 27th December 2019. In total, there were four visits to this complex when observations and data were collected. No invasive testing was conducted and there was no aerial inspection required. Cooperation and assistance were provided by tenants and owners in regards to common land boundaries. Consideration was given to:

- Possible risk of harm (ROH) to public and property rated as High Medium and Low.
- Condition of the tree assessed, at the time analysis
- Long term impacts of this tree
- Whether the tree is regulated (TCCS) or non-regulated (TCCS)
- Recommendations
- Other recommendations and advice for moving forward.

2.2 Tools used to Collect Data

- Soft hammer (nylon type) for detecting acoustic variances in the trunk
- Tape measure for measuring trunk diameters at breast height (DBH)
- Camera for documentation of photos for further examination.

2.3 Tree Survey Schedule

| Tree # | Species | Cond | Status (TCCS) | ULE (Yrs) | Recommendations | Priority of Work | Code Area | Other Information |
|--------|-------------------------------|------|---------------|-----------|--|------------------|-----------|---|
| 1 | <i>Eucalyptus bridgesiana</i> | Good | Regulated | 30 | Removal of deadwood | Low | 3 | - |
| 2 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 2 | Tree is suppressed, over shading from neighbouring tree, but OK |
| 3 | <i>Eucalyptus melliodora</i> | Good | Regulated | 30 | No action required | Low | 6 | - |
| 4 | <i>Eucalyptus blakelyi</i> | Fair | Regulated | 20 | Removal of deadwood | Low | 2 | Deadwood throughout tree |
| 5 | <i>Eucalyptus melliodora</i> | Fair | Regulated | 20 | Remove deadwood from this unit complex side | Medium | - | Possible Government tree |
| 6 | <i>Eucalyptus melliodora</i> | Fair | Regulated | 20 | Removal of deadwood | Medium | 2 | - |
| 7 | <i>Eucalyptus blakelyi</i> | Fair | Regulated | 20 | Removal of deadwood at this stage | Low | 1 | Monitor hollow in 12 mths, 1m [^] trunk <i>Phellinus sp.</i> (White Rot) evident |
| 8 | <i>Acacia sp.</i> | Good | Non-Regulated | 10 | No action required | Low | 2 | - |
| 9 | <i>Prunus hedge</i> | Good | Non-Regulated | 20 | No action required | Low | 1 | - |
| 10 | <i>Prunus mume</i> | Good | Non-Regulated | 10 | No action required | Low | 1 | - |
| 11 | <i>Prunus sp.</i> | Fair | Non-Regulated | 10 | Advise: Treat leaf curl - remove old leaves on ground | Low | 1 | Advice: Apply copper sulphate x2 applications |
| 12 | <i>Acer negundo</i> | Good | Non-Regulated | 25 | No action required | Low | 2 | Minor deadwood present |

| Tree # | Species | Cond | Status (TCCS) | ULE (Yrs) | Recommendations | Priority of Work | Code Area | Other Information |
|--------|--|------|---------------|-----------|----------------------------------|------------------|-----------|---|
| 13 | <i>Ulmus parvafolia</i> | Good | Non-Regulated | 25 | No action required | Low | 6 | This tree has a dual leader |
| 14 | <i>Ulmus parvafolia</i> | Good | Non-Regulated | 30 | No action required | Low | 6 | Advice: remove Ivy from trunk |
| 15 | <i>Ulmus parvafolia</i> | Good | Non-Regulated | 30 | Lift canopy to 8ft | Low | 3 | To help prevent possible eye damage |
| 16 | <i>Pittosporum sp.</i> (x4 Trees) | Poor | Non-Regulated | 5 | Remove deadwood | Low | 3 | Advice: Compacted soil area; needs water and aeration |
| 17 | <i>Hakea sp.</i> | Good | Non-Regulated | 15 | No action required | Low | 3 | - |
| 18* | Stump | - | Non-Regulated | - | Grind stump | Low | 1 | To prevent possible trip hazard |
| 19 | <i>Acer buergerianum</i> | Poor | Non-Regulated | 10 | Monitor in 2 years' time | Low | 2 | Possible Phytophthora fungi decay present |
| 20 | <i>Cedrus deodara</i> | Fair | Regulated | 20 | No action required at this stage | Low | 2 | Monitor compression union structure of tree 5m^ trunk |
| 21 | <i>Eucalyptus blakelyi</i> (x3 trees) | Fair | Regulated | 20 | Remove wisteria around trunk | Low | 4 | Wisteria can ring bark this tree and cause other abiotic diseases |
| 22 | <i>Acacia sp.</i> | Good | Non-Regulated | 10 | Sever Wisteria at base | Low | 1 | - |
| 23 | <i>Gleditsia tricanthos</i> | Good | Non-Regulated | 30 | No action required | Low | 4 | This tree has a phototropic lean to the north-west, but ok |
| 24 | <i>Eucalyptus blakelyi</i> | Good | Non-Regulated | 30 | No action required | Low | 1 | - |
| 25 | <i>Pyrus ussuriensis</i> | Good | Regulated | 20 | No action required at this stage | Low | 1 | Monitor compression union at base in 2 years' time |
| 26* | <i>Eucalyptus nicholli</i> | Dead | Non-Regulated | - | Remove and grind stump | Medium | 2 | - |
| 27 | <i>Eucalyptus blakelyi</i> | Poor | Non-Regulated | 20 | Remove large deadwood | Low | 1 | This tree has deadwood greater than 50mm dia. |
| 28 | <i>Eucalyptus polyanthemos</i> | Good | Regulated | 30 | No action required | Low | 3 | - |
| 29* | <i>Eucalyptus nicholli</i> | Poor | Regulated | 5 | Remove tree | Medium | 3 | Tree is in spiral decline |
| 30 | <i>Ulmus parvafolia</i> | Good | Regulated | 30 | No action required | Low | 5 | Minor deadwood present |
| 31 | <i>Acacia sp.</i> | Fair | Non-Regulated | 10 | No action required at this stage | Low | 5 | Evidence of fungal Gall; monitor in 12 mths |
| 32 | <i>Eucalyptus sideroxylon</i> | Good | Regulated | 30 | Removal of deadwood | Low | 6 | - |
| 33 | <i>Eucalyptus sideroxylon</i> | Good | Regulated | 20 | No action required at this stage | Low | 6 | Trunk scar - monitor wound on trunk in 2 years' time |
| 34 | <i>Melaleuca sp.</i> | Fair | Non-Regulated | 20 | No action required | Low | 5 | Tree has lack of light due to suppression |
| 35 | <i>Eucalyptus cinerea</i> | Good | Regulated | 30 | Removal of deadwood | Low | 3 | This tree has a phototropic lean to the north |
| 36* | <i>Eucalyptus nicholli</i> | Poor | Non-Regulated | 1 | Removal of tree and grind stump | Medium | 3 | This tree is in spiral decline |
| 37 | <i>Eucalyptus mannifera</i> | Good | Non-Regulated | 20 | No action required | Low | 4 | Tree has a bird box in it and minor deadwood |
| 38 | <i>Eucalyptus melliodora</i> | Good | Regulated | 30 | No action required | Low | 2 | Minor deadwood and bees present in tree |
| 39 | <i>Brachychiton populneus</i> | Good | Non-Regulated | 30 | No action required | Low | 6 | - |

| Tree # | Species | Cond | Status (TCCS) | ULE (Yrs) | Recommendations | Priority of Work | Code Area | Other Information |
|--------|-----------------------------------|------|---------------|-----------|---|------------------|-----------|---|
| 40 | <i>Allocasuarina</i> | Good | Non-Regulated | 20 | No action required | Low | 6 | Minor deadwood in tree |
| 41 | <i>Cupressus glabra</i> | Fair | Non-Regulated | 20 | No action required at this stage | Low | 4 | Monitor compression union in 12 months' time |
| 42 | <i>Acacia decurrens</i> | Fair | Non-Regulated | 3 | No action required | Low | 4 | Minor deadwood present |
| 43 | <i>Callistemon viminalis</i> (x6) | Fair | Non-Regulated | 15 | Removal of deadwood from these 6 trees | Low | 4 | - |
| 44 | <i>Eucalyptus blakelyi</i> | Fair | Non-Regulated | 20 | Evidence of Psyllid infestation | Low | 5 | Evidence of Lerp on leaves |
| 45 | <i>Callistemon viminalis</i> | Fair | Non-Regulated | 20 | No action required | Low | 4 | Minor deadwood present |
| 46 | <i>Acacia delbata</i> | Good | Non-Regulated | 15 | No action required | Low | 4 | - |
| 47 | <i>Eucalyptus elata</i> | Good | Regulated | 25 | No action required at this stage | Low | 4 | Monitor compression union at base in 12 months' time |
| 48 | <i>Hakea sp.</i> (x2) | Good | Non-Regulated | 15 | No action required | Low | 4 | Both trees have minor deadwood present |
| 49 | <i>Feijoa sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 4 | - |
| 50 | <i>Callistemon viminalis</i> | Fair | Non-Regulated | 25 | Removal of lodged hanger | Low | 4 | Tree has minor deadwood present |
| 51 | Various small plantings | Good | Non-Regulated | 30 | No action required | Low | 4 | Oak, Callistemon and Acacia present |
| 52 | <i>Hakea sp.</i> | Good | Non-Regulated | 20 | Removal of lodged hanger | Medium | 4 | Tree has minor deadwood present |
| 53 | <i>Callistemon & wattles</i> | Good | Non-Regulated | 20 | No action required | Low | 4 | - |
| 54 | <i>Pittosporum sp.</i> (x6) | Fair | Non-Regulated | 15 | No action required | Low | 4 | In hedge formation |
| 55 | <i>Photinia robusta</i> | Good | Non-Regulated | 20 | No action required | Low | 4 | - |
| 56 | <i>Fraxinus oxycarpa</i> | Fair | Regulated | 20 | No action required at this stage | Low | 4 | Signs of early dieback, monitor tree in 12 months' time |
| 57 | <i>Ulmus procera</i> | Good | Regulated | 30 | Removal of lodged hanger | Low | 3 | - |
| 58 | <i>Crataegus sp.</i> | Good | Non-Regulated | 30 | No action required | Low | 2 | - |
| 59 | <i>Eucalyptus mannifera</i> | Fair | Regulated | 30 | Removal of deadwood | Medium | 2 | Due to parrot damage |
| 60 | <i>Fraxinus oxycarpa</i> | Fair | Regulated | 20 | Removal of deadwood and clear from path light | Low | 4 | - |
| 61 | <i>Pseudo acacia</i> | Fair | Non-Regulated | 20 | No action required | Low | 4 | This tree is suppressed and has minor deadwood |
| 62 | <i>Callistemon viminalis</i> (x2) | Good | Non-Regulated | 20 | No action required | Low | 3 | - |
| 63 | Small plantings | Good | Non-Regulated | 20 | No action required | Low | 3 | - |
| 64 | <i>Eucalyptus melliodora</i> | Good | Regulated | 30 | Removal of deadwood | Medium | 2 | - |
| 65 | <i>Pistacia chinensis</i> | Good | Non-Regulated | 20 | No action required | Low | 4 | - |
| 66 | <i>Pittosporum sp.</i> (x2) | Good | Non-Regulated | 20 | No action required | Low | 5 | In hedge formation |
| 67 | <i>Eucalyptus melliodora</i> | Fair | Non-Regulated | 30 | No action required | Low | 4 | This tree is suppressed by another tree, but ok |
| 68 | <i>Melaleuca sp.</i> | Fair | Regulated | 20 | Requires weight reduction throughout by 10% | Medium | 6 | To reduce pressure on compression unions |

| Tree # | Species | Cond | Status (TCCS) | ULE (Yrs) | Recommendations | Priority of Work | Code Area | Other Information |
|--------|--|-----------|---------------|-----------|---|------------------|-----------|---|
| 69 | <i>Melaleuca sp.</i> | Fair | Non-Regulated | 15 | No action required | Low | 6 | Advice: Needs more light |
| 70 | <i>Eucalyptus mannifera</i> | Fair | Non-Regulated | 20 | No action required | Low | 6 | Abnormal growth, due to forest type setting, all ok |
| 71 | <i>Eucalyptus cinerea</i> | Good | Regulated | 30 | No action required | Low | 6 | Minor borer activity; monitor in 12 mths |
| 72 | <i>Callistemon viminalis</i> | Good | Non-Regulated | 20 | No action required | Low | 6 | - |
| 73 | <i>Casuarina cunninghamiana</i> | Fair | Regulated | 20 | Removal of deadwood | Medium | 4 | - |
| 74 | <i>Callistemon viminalis</i> | Good | Non-Regulated | 30 | No action required | Low | 3 | - |
| 75 | <i>Eucalyptus melliodora</i> | Fair | Non-Regulated | 20 | Removal of deadwood | Medium | 3 | - |
| 76 | <i>Eucalyptus bridgesiana</i> | Very Good | Regulated | 30 | No action required | Low | 2 | - |
| 77 | <i>Acacia sp.</i> | Good | Non-Regulated | 15 | No action required | Low | 5 | Slight suppression on this tree, but ok |
| 78 | <i>Eucalyptus cinerea</i> | Good | Regulated | 30 | Removal of Pistachio sucker at base | Low | 3 | - |
| 79 | <i>Eucalyptus polyanthemos</i> | Fair | Non-Regulated | 30 | No action required | Low | 2 | Minor deadwood present |
| 80 | <i>Eucalyptus polyanthemos</i> | Fair | Non-Regulated | 20 | No action required | Low | 2 | Minor deadwood present |
| 81 | <i>Eucalyptus melliodora</i> | Good | Non-Regulated | 20 | No action required | Low | 2 | Minor deadwood present and phototropic lean (to receive more light), but ok |
| 82 | <i>Fraxinus oxycarpa</i> | Poor | Non-Regulated | 30 | No action required | Low | 2 | Minor deadwood and dieback present |
| 83 | <i>Ulmus parvifolia</i> | Very Good | Non-Regulated | 30 | No action required | Low | 2 | Excellent tree, well placed |
| 84 | <i>Eucalyptus melliodora (X2 trunks)</i> | Good | Regulated | 30 | No action required | Low | 4 | Minor deadwood present |
| 85 | <i>Eucalyptus blakelyi</i> | Good | Regulated | 30 | No action required | Medium | 2 | Minor deadwood present |
| 86 | <i>Melaleuca sp.</i> | Fair | Regulated | 20 | No action required | Low | 2 | Minor deadwood and scale present |
| 87 | <i>Hakea sp.</i> | Fair | Regulated | 20 | No action required | Low | 2 | There is a hollow in the tree |
| 88 | <i>Photinia robusta</i> | Good | Non-Regulated | 20 | No action required | Low | 2 | - |
| 89 | <i>Melia azedarach</i> | Good | Regulated | 20 | No action required | Low | 3 | - |
| 90 | <i>Eucalyptus mannifera</i> | Fair | Regulated | 25 | Removal of deadwood | Medium | 2 | - |
| 91 | <i>Eucalyptus crebra</i> | Fair | Non-Regulated | 20 | No action required | Low | 2 | Minor deadwood present |
| 92 | <i>Fraxinus oxycarpa</i> | Very Good | Non-Regulated | 30 | No action required | Low | 4 | - |
| 93 | <i>Eucalyptus mannifera</i> | Fair | Regulated | 25 | Removal of deadwood | Medium | 2 | - |
| 94 | <i>Casuarina cunninghamiana</i> | Fair | Regulated | 20 | Removal of deadwood | Low | 2 | - |
| 95 | <i>Eucalyptus sideroxylon</i> | Good | Non-Regulated | 30 | Requires weight reduction over pathway by 10% | Low | 3 | Reduction of lean is needed here |
| 96 | <i>Casuarina cunninghamiana</i> | Good | Regulated | 20 | No action required | Low | 4 | Minor deadwood present |
| 97 | <i>Eucalyptus mannifera</i> | Fair | Non-Regulated | 20 | No action required | Low | 4 | - |

| Tree # | Species | Cond | Status (TCCS) | ULE (Yrs) | Recommendations | Priority of Work | Code Area | Other Information |
|--------|---|------|---------------|-----------|---|------------------|-----------|---|
| 98 | <i>Melia azedarach</i> | Fair | Regulated | 30 | Minor dieback present. No action required at this stage | Low | 6 | Monitor Phytophthora fungi spread in 12 mths |
| 99 | <i>Betula pendula</i> | Poor | Non-Regulated | 10 | Removal of deadwood | Medium | 5 | Major deadwood present |
| 100 | <i>Eucalyptus blakelyi</i> | Good | Regulated | 30 | No action required | Low | 4 | Minor deadwood present |
| 101 | <i>Eucalyptus nicholli</i> | Fair | Regulated | 20 | Clear tree from unit roof | Low | 4 | Minor deadwood present |
| 102 | <i>Callistemon viminalis</i> | Good | Non-Regulated | 20 | No action required | Low | 5 | Minor scale infestation |
| 103 | <i>Acer buergerianum</i> (x2 trees) | Good | Non-Regulated | 40 | No action required | Low | 4 | Both young plantings |
| 104 | <i>Eucalyptus cinerea</i> | Fair | Non-Regulated | 20 | No action required | Low | 4 | Strong Advice: This tree has a history of branch failure. Monitor this tree after storm events |
| 105 | <i>Eucalyptus polyanthemos</i> | Good | Regulated | 30 | No action required | Low | 4 | Minor deadwood present |
| 106 | <i>Eucalyptus nicholli</i> | Poor | Regulated | 10 | Removal of deadwood | Low | 4 | - |
| 107 | <i>Brachychiton populneus</i> | Good | Non-Regulated | 40 | No action required | Low | 5 | - |
| 108 | <i>Eucalyptus polyanthemos</i> | Good | Regulated | 30 | No action required | Low | 4 | Monitor hollow at base of tree in 12 mths |
| 109 | <i>Melaleuca sp.</i> | Fair | Non-Regulated | 20 | No action required | Low | 3 | - |
| 110 | <i>Eucalyptus nicholli</i> | Good | Regulated | 20 | No action required | Low | 4 | Monitor girdling roots in 12 mths |
| 111 | <i>Eucalyptus mannifera</i> | Good | Regulated | 20 | Aerial inspection required | Low | 4 | Due to parrot damage and possible secondary pathogens |
| 112 | <i>Eucalyptus bridgesiana</i> | Good | Regulated | 30 | No action required | Low | 3 | - |
| 113 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 4 | - |
| 114 | <i>Eucalyptus macrorhyncha</i> | Fair | Non-Regulated | 20 | No action required | Low | 4 | Minor deadwood present |
| 115 | <i>Eucalyptus macrorhyncha</i> (x2 trees) | Fair | Regulated | 20 | Removal of deadwood | Low | 3 | - |
| 116 | <i>Eucalyptus macrorhyncha</i> | Fair | Non-Regulated | 20 | No action required | Low | 4 | Minor deadwood present |
| 117 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 3 | Minor deadwood present, has a sign on tree saying #25 |
| 118 | <i>Prunus mume</i> | Good | Non-Regulated | 20 | No action required | Low | 4 | - |
| 119 | <i>Eucalyptus bridgesiana</i> | Fair | Regulated | 30 | Removal of deadwood | Medium | 3 | - |
| 120 | <i>Acacia sp. (x7)</i> | Good | Non-Regulated | 20 | No action required | Low | 4 | - |
| 121 | <i>Various natives</i> | Good | Non-Regulated | 20 | No action required | Low | 2 | Advice: Needs water and mulch in this area |
| 122 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 3 | Slight suppression on this tree, but ok |
| 123 | <i>Eucalyptus bridgesiana</i> | Good | Regulated | 30 | No action required | Low | 3 | - |
| 124 | <i>Prunus x bileriana</i> | Good | Non-Regulated | 20 | No action required | Low | 2 | - |

| Tree # | Species | Cond | Status (TCCS) | ULE (Yrs) | Recommendations | Priority of Work | Code Area | Other Information |
|--------|-------------------------------------|------|---------------|-----------|--|------------------|-----------|---|
| 125 | <i>Malus sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 2 | - |
| 126 | <i>Casuarina cunninghamiana</i> | Good | Non-Regulated | 30 | No action required | Low | 3 | - |
| 127 | <i>Acacia sp.(x3)</i> | Fair | Non-Regulated | 15 | No action required | Low | 3 | - |
| 128 | <i>Eucalyptus melliodora</i> | Good | Non-Regulated | 40 | No action required | Low | 3 | - |
| 129 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 30 | No action required | Low | 3 | -- |
| 130 | <i>Melaleuca sp.(x2)</i> | Good | Regulated | 30 | No action required | Low | 3 | - |
| 131 | <i>Tilia sp.</i> | Good | Non-Regulated | 30 | No action required | Low | 2 | - |
| 132 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 30 | No action required | Low | 2 | - |
| 133 | <i>Eucalyptus polyanthemos (x3)</i> | Good | Regulated | 40 | No action required | Low | 1 | Minor deadwood present on all 3 trees |
| 134 | <i>Eucalyptus polyanthemos</i> | Fair | Regulated | 30 | Remove deadwood | Low | 1 | - |
| 135 | <i>Eucalyptus sp.</i> | Good | Regulated | 30 | No action required | Low | 4 | Advice: removing Banksia Rose around this tree |
| 136 | <i>Eucalyptus viminalis</i> | Good | Regulated | 20 | No action required | Low | 4 | Monitor compression union at base of tree in 12 months |
| 137 | <i>Gleditsia tricanthos</i> | Good | Non-Regulated | 30 | No action required | Low | 1 | - |
| 138 | <i>Eucalyptus sp.</i> | Good | Regulated | 30 | No action required | Low | 1 | - |
| 139 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 1 | - |
| 140 | <i>Casuarina cunninghamiana</i> | Fair | Non-Regulated | 30 | No action required | Low | 2 | - |
| 141 | <i>Eucalyptus nicholli</i> | Fair | Regulated | 25 | No action required | Low | 2 | Monitor fungal decay 5m [^] trunk of tree in 12 months |
| 142 | <i>Acacia decurrens</i> | Fair | Non-Regulated | 10 | No action required | Low | 2 | - |
| 143 | <i>Eucalyptus mannifera</i> | Good | Regulated | 30 | No action required | Low | 3 | Minor deadwood present |
| 144 | <i>Eucalyptus sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 3 | Minor deadwood present |
| 145 | <i>Eucalyptus cinerea</i> | Good | Regulated | 30 | No action required | Low | 3 | Minor deadwood present |
| 146 | <i>Eucalyptus nicholli</i> | Fair | Regulated | 25 | No action required | Low | 4 | Minor deadwood present |
| 147 | <i>Eucalyptus nicholli</i> | Fair | Non-Regulated | 20 | Clear pergola roof and remove deadwood | Low | 5 | Branches are rubbing on structure |
| 148 | <i>Eucalyptus nicholli</i> | Good | Non-Regulated | 30 | No action required | Low | 6 | Young tree |
| 149 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 25 | No action required | Low | 5 | Young tree |
| 150 | <i>Casuarina cunninghamiana</i> | Good | Non-Regulated | 30 | No action required | Low | 5 | This tree is suppressed, but ok |
| 151 | <i>Eucalyptus rubida</i> | Good | Regulated | 30 | Removal of deadwood | Low | 5 | - |
| 152 | <i>Callistemon sp.</i> | Good | Non-Regulated | 30 | No action required | Low | 6 | Minor deadwood present |
| 153 | <i>Eucalyptus mannifera (x3)</i> | Good | Regulated | 30 | Removal of deadwood from these 3 trees | Low | 4 | - |

| Tree # | Species | Cond | Status (TCCS) | ULE (Yrs) | Recommendations | Priority of Work | Code Area | Other Information |
|--------|---------------------------------|------|---------------|-----------|---|------------------|-----------|--|
| 154 | <i>Eucalyptus maculosa</i> | Good | Regulated | 40 | No action required | Low | 3 | - |
| 155 | <i>Melaleuca sp.</i> | Fair | Non-Regulated | 10 | No action required | Low | 3 | - |
| 156 | <i>Ulmus procera</i> | Fair | Regulated | 30 | Stem injection with Imidacloprid | Medium | 4 | To rid Elm Leaf Beetle |
| 157 | <i>Eucalyptus mannifera</i> | Fair | Regulated | 30 | No action required | Low | 4 | Monitor hollows in tree in 12 months |
| 158 | <i>Casuarina cunninghamiana</i> | Good | Regulated | 20 | No action required | Low | 3 | Minor deadwood present |
| 159 | <i>Casuarina cunninghamiana</i> | Good | Non-Regulated | 25 | No action required | Low | 3 | Minor deadwood present |
| 160 | <i>Callistemon sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 6 | Tree is suppressed, but ok |
| 161 | <i>Casuarina cunninghamiana</i> | Good | Regulated | 30 | No action required | Low | 6 | Monitor compression union near base in 12 months |
| 162 | <i>Casuarina cunninghamiana</i> | Fair | Regulated | 20 | Removal of deadwood | Low | 5 | - |
| 163 | <i>Allo casuarina</i> | Good | Regulated | 20 | No action required | Low | 4 | Minor deadwood present |
| 164 | <i>Brachychiton populneus</i> | Good | Non-Regulated | 30 | No action required | Low | 3 | - |
| 165 | <i>Acacia sp.</i> | Fair | Non-Regulated | 5 | No action required | Low | 3 | Minor deadwood and dieback present in tree |
| 166 | <i>Eucalyptus cinerea</i> | Good | Regulated | 30 | No action required | Low | 3 | Minor deadwood present |
| 167 | <i>Eucalyptus pauciflora</i> | Poor | Non-Regulated | 20 | Removal of deadwood and hanger lodged in tree | Medium | 4 | - |
| 168 | <i>Eucalyptus cinerea</i> | Good | Regulated | 30 | No action required | Low | 6 | Minor deadwood present |
| 169 | <i>Cupressus sp.</i> | Good | Non-Regulated | 30 | No action required | Low | 5 | - |
| 170* | <i>Acacia sp.</i> | Poor | Non-Regulated | 1 | Removal of tree | Medium | 4 | Due to decay and secondary pathogens |
| 171 | <i>Eucalyptus sp. (x4)</i> | Good | Regulated | 30 | No action required | Low | 3 | - |
| 172 | <i>Ulmus procera</i> | Good | Regulated | 20 | Clear branches from building and lift canopy to 8ft | Low | 4 | - |
| 173 | <i>Melaleuca sp.</i> | Poor | Non-Regulated | 10 | No action required | Low | 3 | Advise: Water and mulch. Monitor tree health in 12 months |
| 174 | <i>Callistemon sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 4 | - |
| 175 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 20 | Clear building | Low | 5 | - |
| 176 | <i>Callistemon sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 6 | Minor deadwood present |
| 177 | <i>Acacia sp.</i> | Good | Non-Regulated | 10 | No action required | Low | 6 | Tree has a lean and minor deadwood present |
| 178 | <i>Melaleuca sp.</i> | Fair | Non-Regulated | 20 | No action required | Low | 6 | Minor deadwood present |
| 179 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 6 | Minor deadwood present |
| 180 | <i>Eucalyptus mannifera</i> | Good | Regulated | 25 | Removal of deadwood | Low | 6 | - |
| 181 | <i>Eucalyptus sp.</i> | Fair | Regulated | 20 | Removal of deadwood | Medium | 2 | - |
| 182 | <i>Callistemon sp.</i> | Good | Non-Regulated | 10 | No action required | Low | 4 | - |

| Tree # | Species | Cond | Status (TCCS) | ULE (Yrs) | Recommendations | Priority of Work | Code Area | Other Information |
|--------|--------------------------------------|------|---------------|-----------|--|------------------|-----------|---|
| 183 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 10 | No action required | Low | 4 | - |
| 184 | <i>Callistemon sp. (x2)</i> | Good | Non-Regulated | 15 | No action required | Low | 3 | - |
| 185 | <i>Eucalyptus viminalis</i> | Fair | Regulated | 20 | Remove deadwood | Medium | 3 | - |
| 186 | <i>Melaleuca sp.</i> | Fair | Non-Regulated | 20 | No action required | Low | 6 | Minor deadwood present |
| 187 | <i>Eucalyptus rubida</i> | Good | Non-Regulated | 20 | No action required | Low | 4 | Minor deadwood present |
| 188* | Dead Tree | Dead | Non-Regulated | - | Possible dead Street tree, contact TCCS about this | Medium | 4 | - |
| 189 | <i>Eucalyptus rubida</i> | Fair | Non-Regulated | 20 | Removal of deadwood | Low | 4 | - |
| 190 | <i>Melaleuca sp.</i> | Fair | Non-Regulated | 20 | No action required | Low | 6 | Minor deadwood present |
| 191 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 3 | - |
| 192 | <i>Acacia sp.</i> | Good | Non-Regulated | 10 | No action required | Low | 3 | - |
| 193 | <i>Casuarina cunninghamiana</i> | Good | Non-Regulated | 20 | No action required | Low | 3 | - |
| 194 | <i>Eucalyptus sp.</i> | Good | Regulated | 30 | No action required | Low | 3 | - |
| 195 | <i>Eucalyptus rubida</i> | Good | Regulated | 30 | No action required | Low | 4 | Minor deadwood present |
| 196 | <i>Eucalyptus mannifera</i> | Fair | Non-Regulated | 20 | Removal of deadwood | Low | 4 | - |
| 197 | <i>Eucalyptus mannifera</i> | Fair | Non-Regulated | 20 | Removal of deadwood | Low | 3 | Scar on trunk, monitor in 12 months |
| 198 | <i>Eucalyptus mannifera (x3)</i> | Fair | Non-Regulated | 20 | No action required | Low | 3 | Minor deadwood present |
| 199 | <i>Eucalyptus mannifera</i> | Good | Non-Regulated | 20 | No action required | Low | 3 | Minor deadwood present |
| 200 | <i>Eucalyptus melliodora</i> | Good | Non-Regulated | 20 | No action required | Low | 3 | - |
| 201 | <i>Eucalyptus mannifera</i> | Good | Non-Regulated | 20 | No action required | Low | 3 | Minor deadwood present |
| 202 | <i>Eucalyptus mannifera</i> | Good | Regulated | 20 | Aerial inspection required on unions throughout tree | Medium | 3 | - |
| 203 | <i>Casuarina cunninghamiana</i> | Good | Regulated | 30 | No action required | Low | 4 | - |
| 204 | <i>Casuarina cunninghamiana</i> | Good | Regulated | 30 | No action required | Low | 4 | - |
| 205 | <i>Eucalyptus mannifera</i> | Good | Non-Regulated | 20 | No action required | Low | 3 | Minor deadwood present |
| 206 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 3 | Tree is suppressed |
| 207 | (x3) <i>Casuarina cunninghamiana</i> | Good | Non-Regulated | 20 | No action required | Low | 2 | - |
| 208 | <i>Casuarina cunninghamiana</i> | Fair | Non-Regulated | 20 | Remove deadwood and clear tree from Evo energy (high voltage) electrical box | Medium | 2 | Require Treeworks High Voltage Crew to safely conduct this work |
| 209 | <i>Eucalyptus rubida</i> | Good | Regulated | 30 | No action required | Low | 3 | Minor deadwood present |
| 210 | <i>Eucalyptus mannifera</i> | Fair | Regulated | 20 | Removal of deadwood | Low | 3 | - |
| 211 | <i>Eucalyptus nicholli</i> | Fair | Regulated | 20 | Removal of deadwood | Low | 4 | - |

| Tree # | Species | Cond | Status (TCCS) | ULE (Yrs) | Recommendations | Priority of Work | Code Area | Other Information |
|--------|---------------------------------|------|---------------|-----------|---------------------|------------------|-----------|-----------------------------------|
| 212 | <i>Eucalyptus mannifera</i> | Fair | Regulated | 30 | No action required | Low | 3 | Minor deadwood present |
| 213 | <i>Eucalyptus mannifera</i> | Fair | Regulated | 30 | No action required | Low | 3 | Minor deadwood present |
| 214 | <i>Eucalyptus sideroxylon</i> | Fair | Regulated | 30 | No action required | Low | 2 | Monitor compression union at base |
| 215 | <i>Casuarina cunninghamiana</i> | Fair | Regulated | 20 | No action required | Low | 2 | Minor deadwood present |
| 216 | <i>Eucalyptus blakelyi</i> | Fair | Non-Regulated | 20 | Removal of deadwood | Medium | 2 | - |
| 217 | <i>Melaleuca sp.</i> | Good | Non-Regulated | 20 | No action required | Low | 4 | - |

Table 1. Tree Survey Schedule

* Note trees marked with an asterisk are trees to be removed.

2.4 Work Summary and Price

Note: All mulch can be left on site, and the area will be left tidy and safer.

| Tree # | Tree Name | Description of Works | Requires TCCS application | Pricing ex-GST | |
|--------|---------------------------------|----------------------------------|---------------------------|----------------|-------------------|
| | | | | Arbor Work \$ | Stump Grinding \$ |
| 1 | <i>Eucalyptus bridgesiana</i> | Removal of deadwood | No | 200.00 | |
| 4 | <i>Eucalyptus blakelyi</i> | Removal of deadwood | No | 200.00 | |
| 5 | <i>Eucalyptus melliodora</i> | Removal of deadwood | No | 300.00 | |
| 6 | <i>Eucalyptus melliodora</i> | Removal of deadwood | No | 400.00 | |
| 7 | <i>Eucalyptus blakelyi</i> | Removal of deadwood | No | 200.00 | |
| 15 | <i>Ulmus parvafoia</i> | Lift canopy to 8ft | No | 100.00 | |
| 16 | <i>Pittosporums (x4)</i> | Removal of deadwood | No | 100.00 | |
| 18 | Stump | Grind stump | No | | 70.00 |
| 21 | <i>Eucalyptus blakelyi (x3)</i> | Removal of Wisteria | No | 700.00 | |
| 22 | <i>Acacia delbata</i> | Sever wisteria at base | No | 100.00 | |
| 26 | Dead Tree | Remove and grind stump | No | 400.00 | 120.00 |
| 27 | <i>Eucalyptus blakelyi</i> | Removal of deadwood | No | 200.00 | |
| 29 | <i>Eucalyptus nicholli</i> | Remove and grind stump | Yes | 1200.00 | 120.00 |
| 32 | <i>Eucalyptus sideroxylon</i> | Removal of deadwood | No | 100.00 | |
| 35 | <i>Eucalyptus cinerea</i> | Removal of deadwood | No | 100.00 | |
| 36 | <i>Eucalyptus nicholli</i> | Remove and grind stump | No | 400.00 | 70.00 |
| 43 | <i>Callistemon (x6)</i> | Removal of deadwood | No | 200.00 | |
| 44 | <i>Eucalyptus blakelyi</i> | Stem inject | No | 200.00 | |
| 50 | <i>Callistemon viminalis</i> | Removal of hanger | No | 100.00 | |
| 52 | <i>Hakea sp.</i> | Removal of hanger | No | 100.00 | |
| 57 | <i>Ulmus procera</i> | Removal of hanger | No | 100.00 | |
| 59 | <i>Eucalyptus mannifera</i> | Removal deadwood | No | 200.00 | |
| 60 | <i>Fraxinus oxycarpa</i> | Removal of deadwood, clear light | No | 100.00 | |
| 64 | <i>Eucalyptus melliodora</i> | Removal of deadwood | No | 200.00 | |
| 68 | <i>Melaleuca sp.</i> | Weight reduce | No | 200.00 | |

| Tree # | Tree Name | Description of Works | Requires TCCS application | Pricing ex-GST | |
|--------|---|---|---------------------------|----------------|-------------------|
| | | | | Arbor Work \$ | Stump Grinding \$ |
| 73 | <i>Casuarina cunninghamiana</i> | Removal of deadwood | No | 200.00 | |
| 75 | <i>Eucalyptus melliodora</i> | Removal of deadwood | No | 200.00 | |
| 78 | <i>Eucalyptus cinerea</i> | Remove suckers at base | No | 100.00 | |
| 90 | <i>Eucalyptus mannifera</i> | Removal of deadwood | No | 200.00 | |
| 93 | <i>Eucalyptus mannifera</i> | Removal of deadwood | No | 100.00 | |
| 94 | <i>Casuarina cunninghamiana</i> | Removal of deadwood | No | 100.00 | |
| 95 | <i>Eucalyptus sideroxylon</i> | Weight reduce over path | No | 100.00 | |
| 99 | <i>Betula pendula</i> | Removal of deadwood | No | 400.00 | |
| 101 | <i>Eucalyptus nicholli</i> | Clear unit roof | No | 200.00 | |
| 106 | <i>Eucalyptus nicholli</i> | Removal of deadwood | No | 200.00 | |
| 111 | <i>Eucalyptus mannifera</i> | Aerial inspection | No | 400.00 | |
| 115 | <i>Eucalyptus macrorhyncha</i> (x2 trees) | Removal of deadwood | No | 200.00 | |
| 119 | <i>Eucalyptus bridgesiana</i> | Removal of deadwood | No | 200.00 | |
| 134 | <i>Eucalyptus polyanthemos</i> | Removal of deadwood | No | 600.00 | |
| 147 | <i>Eucalyptus nicholli</i> | Removal of deadwood clear roof | No | 200.00 | |
| 151 | <i>Eucalyptus rubida</i> | Removal of deadwood | No | 300.00 | |
| 153 | <i>Eucalyptus mannifera</i> (x3) | Removal of deadwood | No | 300.00 | |
| 156 | <i>Ulmus procera</i> | Stem Inject | No | 400.00 | |
| 162 | <i>Casuarina cunninghamiana</i> | Removal of deadwood | No | 200.00 | |
| 167 | <i>Eucalyptus pauciflora</i> | Removal of deadwood and hanger | No | 200.00 | |
| 170 | <i>Acacia sp.</i> | Remove and grind | No | 400.00 | 70.00 |
| 172 | <i>Ulmus procera</i> | Clear building lift canopy 8ft | No | 300.00 | |
| 175 | <i>Melaleuca sp.</i> | Clear building | No | 200.00 | |
| 180 | <i>Eucalyptus mannifera</i> | Removal of deadwood | No | 200.00 | |
| 181 | <i>Eucalyptus sp.</i> | Removal of deadwood | No | 500.00 | |
| 185 | <i>Eucalyptus viminalis</i> | Removal of deadwood | No | 300.00 | |
| 188 | Dead Tree | Remove tree, grind stump; Contact <i>Fix My Street</i> to organise free government tree inspection | No | 400.00 | 120.00 |
| 189 | <i>Eucalyptus rubida</i> | Removal of deadwood | No | 200.00 | |
| 196 | <i>Eucalyptus mannifera</i> | Removal of deadwood | No | 200.00 | |
| 197 | <i>Eucalyptus mannifera</i> | Removal of deadwood | No | 200.00 | |
| 202 | <i>Eucalyptus mannifera</i> | Aerial inspection and remove deadwood | No | 300.00 | |
| 208 | <i>Casuarina cunninghamiana</i> | Removal of deadwood clear electrical H/V box | No | 200.00 | |

| Tree # | Tree Name | Description of Works | Requires TCCS application | Pricing ex-GST | |
|--------|-----------------------------|----------------------|---------------------------|----------------|-------------------|
| | | | | Arbor Work \$ | Stump Grinding \$ |
| 210 | <i>Eucalyptus mannifera</i> | Removal of deadwood | No | 200.00 | |
| 211 | <i>Eucalyptus nicholli</i> | Removal of deadwood | No | 200.00 | |
| 216 | <i>Eucalyptus blakelyi</i> | Removal of deadwood | No | 200.00 | |

Table 2. Work Summary and Price

- Please note; GST needs to be added on to Pricing, area will be left tidy and safer, mulch can left in designated areas within the complex.

2.5 Code Area

The request was to list various trees and shrubs that will suit growing in this complex. This Code Area was put in this report:

- To advise what type of trees would suit a particular area
- To be used if wanting to replace a tree in a particular area.

All trees picked for the Code Area are suited for the Canberra climate and conditions. Immediate surrounds are taken into consideration when selecting trees in the Code.

2.6 Tree/Shrub Description and Recommended Planting by Code Area

| Code Area | Code Description | Type of Tree/Shrub Recommended for the Area |
|-----------|---|---|
| 1 | This is wide broad space where tree roots will not be interrupted by hardpan areas (compaction). This is the area where planting large to medium sized trees is acceptable. | <i>Taxodium distichum, Pistacia chinensis, Quercus suber, Eucalyptus polyanthemos, Quercus pulustris, Liriodendron tulipifera</i> |
| 2 | This is a space that appears to be a good area for root growth and light. Medium sized trees are recommended in this zone. | <i>Arbutus unedo, Acacia delbata, Koelreuteria paniculata, Cupressus sempervirens, Zelkova serrata</i> |
| 3 | Similar to Code two above, but with slight restriction of ground available for medium sized trees. Trees for this area are to have non-aggressive roots and medium to small trees only. | <i>Lagerstroemia indica, Aced davidi, Pyrus ussuriensis, Prunus sp.</i> |
| 4 | When limited light is available, small trees that are darker leafed and small in size are ideal for understory plantings. | <i>Acer palmatum</i> or dark leaf shrubs |
| 5 | Only small sized trees planted here due to the limited soil available to the roots - drought tolerant type trees. | Small shrubs suitable for this terrain |
| 6 | This is an area where no trees are recommended to be planted due to the unsuitable conditions. Ground covers and small shrubs are acceptable here. | Diosma, Nandinas, many ground covers |

Table 3. Trees recommended by Coded area

| Tree/Shrub Name | Common Name and Brief Description of this Tree/Shrub |
|---------------------------------------|---|
| <i>Acacia dealbata</i> | This Silver Wattle tree is great if you need a fast-growing evergreen tree. They can grow to about 15m tall in Canberra soils and conditions and is native to this area. The leaves are bipinnate (a leaf resembling a feather), glaucous blue-green to silvery grey. Trees generally do not live longer than 30 years. |
| <i>Aced davidi</i> | Snake Bark Maple is a small deciduous tree growing to approximately 6-7m tall with a spreading crown with arching branches. The bark looks like a snake (hence the name). A very handsome tree to look at and ideal as a feature courtyard tree. Leaves are dark green above, paler below and turn to bright yellow, orange or red in Autumn. |
| <i>Acer palmatum</i> | Japanese Maple is a deciduous small tree reaching heights averaging up to 6m, depending on light available and soil conditions. Often growing as an understory plant where only low light is available. It may have multiple trunks joining close to the ground. Has bright Autumn leaves, stunning to look at and over 30 different cultivars to choose from. |
| <i>Cupressus sempervirens</i> | Pencil Pine is a very hardy Conifer able to withstand drought, mild frosts and neglect. Ideal for limited spaces and a habitat for possums. This evergreen can grow quite high, but is very conical in shape. |
| <i>Diosma</i> | Diosma is a frost-tolerant dwarf spreading evergreen shrub, with pink star shaped flowers. Grows into a rounded shrub without clipping or pruning. Suitable for full sun to part shade positions and requires little water once established. This plant does not take up too much space. |
| <i>Eucalyptus polyanthemos</i> | Red Box is an Australian native tree, great for Canberra conditions and is capable of tolerating difficult, dry, stony soils. This is a strong safer Gum tree which only grows to about 10m, with foliage oval in shape and grey-green. The short trunk can be smooth or box like (fissured). Flowering occurs from September to January during which small white flowers appear. |
| <i>Koelreuteria paniculata</i> | Golden Rain is a deciduous, wide crowned tree. Likes full sun, rich soil and regular watering. Tolerates hot dry conditions and Canberra soils. Green, heavily veined leaves that turn gold in Autumn. The tree has deep yellow flowers in Summer, followed by small, bladder like seed pods in Autumn. Grows approximately 60cm per year and up to 7m tall (average). |
| <i>Lagerstroemia indica</i> | Crepe Myrtle is a deciduous, vase-shaped tree about 6m tall in Canberra conditions. Can be grown as a shrub 3-4m tall. Trusses of white, pink, mauve or purple blooms appear in late Summer. The petals are ruffled, with a crepe-like texture. In Autumn the mid-green leaves turn yellow, orange or red (depending on the variety) before falling. Unpruned Crepe Myrtles develop beautifully coloured, smooth, mottled trunks. |
| <i>Liriodendron tulipifera</i> | Tulip Tree is a deciduous upright tree of perfect form making an excellent shade tree. Saddle shaped leaves are mid green turning to clear golden-yellow in Autumn. Fragrant tulip shaped flowers are yellow-green with prominent gold stamens in Spring. It has a deep root system and prefers deep, fertile, free-draining soil in full sun. Tolerates part shade. Can grow large in Canberra soils. |
| <i>Nandina domestica</i> | Sacred Bamboo is not a Bamboo. It is widely grown in gardens such as courtyards and ideal for filling up a small space with colour. It is an ornamental plant since it has a number of cultivars that display bright red foliage in the cool months with attractive new foliage in Spring. |
| <i>Pistacia chinensis</i> | Chinese Pistache is part of the Cashew species. This tree is native to central and western China and grows well in Canberra conditions. It is hardy, can withstand harsh conditions and poor quality soils and grows up to 15m. The tree is deciduous with separate male and female plants. The fruit is a small red drupe, turning blue when ripe, containing a single seed. This species is planted as a street tree in temperate areas worldwide due to its attractive fruit and Autumn foliage. |
| <i>Prunus sp.</i> | Often called stone fruit, like Cherry, Peach and Plum, anything with a hard-stone seed in the middle of the fruit. The tree is native to the northern temperate regions and there are 430 different species classified under <i>Prunus</i> . Many members of the genus are widely cultivated for their fruit and for decorative purposes. |

| Tree/Shrub Name | Common Name and Brief Description of this Tree/Shrub |
|----------------------------------|---|
| | Most <i>Prunus</i> fruit and seeds are commonly used in processing, such as jam production, canning, drying or roasting. |
| <i>Pyrus ussuriensis</i> | Manchurian Pear is a very popular selection in unit complexes like this one, largely due to the brilliant display of leaf colour in Autumn. It is a medium-sized tree. Very early flowering, dark brown buds begin to open revealing a light pink colour before bursting into a beautiful spring show of white flowers. Small fruits follow the flowers and although they are generally unpalatable to humans, birds and other wildlife have been known to feed off them. |
| <i>Quercus suber</i> | Commonly called the Cork Oak, this is a medium-sized, evergreen Oak tree. It is the primary source of cork for wine bottle stoppers and other uses. This tree is native to southwest Europe and northwest Africa. It grows up to 14m in Canberra conditions. The leaves are 4-7cm (1.6 to 2.8in) long, weakly lobed or coarsely toothed, dark green above, paler beneath, with the leaf margins often down curved. The acorns are (0.79 2-3cm to 1.18in) long, in a deep cup fringed with elongated scales. |
| <i>Taxodium distichum</i> | Bald Cypress is a deciduous Conifer. It is native to United States. Hardy and tough, this tree adapts to a wide range of soil types, whether wet, dry or swampy. It is noted for the russet-red Autumn colour of its lacy needles. Can grow tall and needs a bit of space. |
| <i>Zelkova serrata</i> | Japanese Elm is a medium to deciduous tree in Canberra soils with a short trunk and erect to spreading branches, forming a broad, round head. The bark is greyish white/brown shedding to reveal an orange inner bark. The leaves are simple and ovate with serrated margins and change to a variety of yellows, oranges and reds in Autumn. |

Table 4. Tree/Shrub Descriptions

3. Legal

3.1 Legislation

The Australian Standards; Pruning of Amenity Trees AS.4373-2007, outlines the required procedures for correct pruning of significant and younger trees. This report highlights the relevant standards you need to follow.

This report is submitted and acknowledged by the client as prepared by Steve Griffiths, Arborist of Treeworks (ACT/NSW) Pty Ltd, as instructed on a limited basis after visual inspection of the trees at ground level only.

Australian Standards; Pruning of Amenity Trees AS. 4373-2007

3.2 Acknowledgements

3.2.1 The client acknowledges:

- a) That Treeworks (ACT/NSW) Pty Ltd has not conducted any invasive procedure or ultrasound test on the trees, nor inspected it at crown level or below surface level;
- b) This report does not and cannot make comment upon, determine or assess defects that may exist in the trees internally. Whether arising from decay, disease, effect of drought, insect infestation or any other inherent condition that may exist.

3.2.2 No Warranty for Non-Discernible Defects or Damage

Accordingly, this report cannot and does not warrant that defects or damage do not exist within the trees that may not be discernible to a competent Arborist making an inspection at ground level.

3.2.3 Reliance Period

The client acknowledges that no reliance may be placed on this report after 12 months following the date of inspection.

3.2.4 Disclaimer of Liability to Third Parties

To the extent permissible by law, Steve Griffiths, Arborist of Treeworks (ACT/NSW) Pty Ltd, is not liable for any loss, damage, personal injury, costs or expenses suffered by any person or persons other than the recipient of this report.

Appendix 1 Further Discussion About the Needs of Trees

A1.1 Soil Aeration

Roots cannot live without oxygen, so aeration is a paramount factor determining the overall rooting depth in most soils. Plants growing on plateau soils need at least 10-12% air-filled aperture size for satisfactory development. Carbon dioxide may be lethal to roots if present in a large application and may also impede water absorption. The mandatory oxygen level for survival of roots is 3% by size 5-12% for root development. In the case of these trees, there appears to be some small areas within the complex where compaction is an issue, are where there are dirt tracks.

A1.2 Mulching Around Trees

Mulching the entire drip line underneath trees will improve tree health by retaining moisture and nutrient levels as well as alleviate the need to mow the grass underneath, which can potentially damage trunks and exposed roots.

Mulch is to be from chipped up trees in varying sized pieces. Green mulch is acceptable if allowed to rest for two weeks and hosed down with water, adding a sprinkling of blood and bone. This mulch must not contain grasses or high nitrogen materials. The mulch should not be hot to touch. The ideal depth of the mulch is 50mm, but keep away from trees trunk.

A1.3 Enhancing and Maintaining Soil in the Complex Grounds

In most unit complex sites, the shallow top layer of debris and leaf litter is removed, along with most of the organics. Organic deposits are mostly inappropriate as it is often labelled as messy and hard to keep neat. In normal systems, organic matter is replenished through the gathering of leaf litter and woody debris. The return of organic components to the soil when once removed is a slow procedure and often requires some years for full value. Organic matter is critical for plants to grow and there needs to be an adequate supply of trace elements in the form of mulch, correct watering and drainage levels.

A1.4 The Benefits of Trees

Trees have many benefits, including:

- Visual amenity, softening or complementing a man-made structure, adding maturity to new developments
- Making places for screening and shade, reducing wind speed and gusts, intercepting hail and rainfall and lessening UV glare
- Displaying the different seasons and providing homes and food for wildlife in built-up areas
- Wind dampening or absorbing: trees absorb energy from the wind, dissipating it primarily through movement of the leaves, branches and trunk with residual energy transferring via the trunk to the roots. Research after Cyclone Tracy showed houses with windbreak protection suffered less damage than wind-exposed buildings.

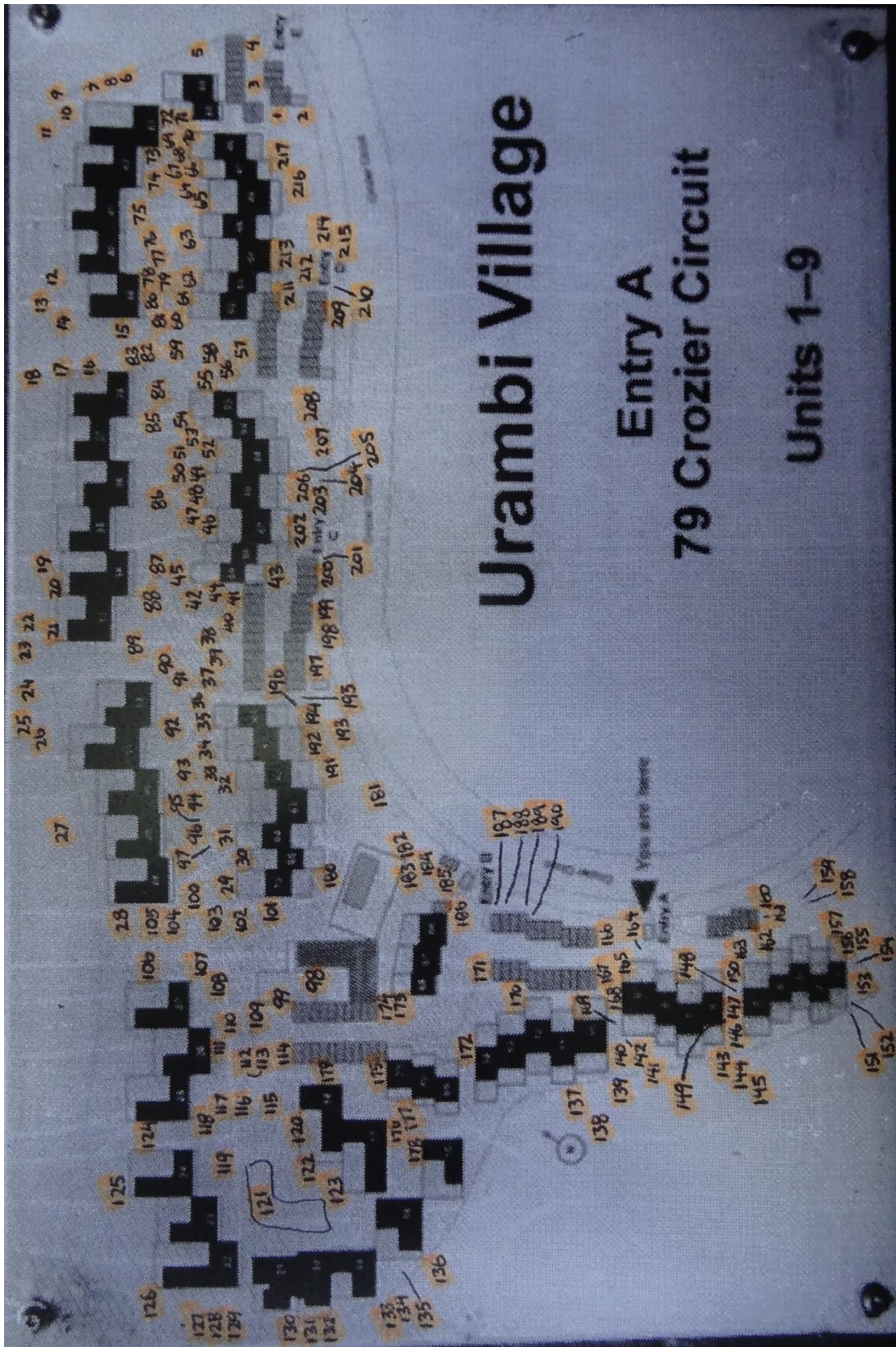
Appendix 2 References

A2.1 Glossary

| Term | Description |
|-----------------------------|--|
| Aberrant | Not growing to its normal form, atypical. |
| Aerial Inspection | Where the visual tree inspection leaves the ground, often photos are taken. |
| Botanical Name | Botanical name is the formal scientific name which conforms to International Code of Nomenclature. |
| Common Name | The common layman's name for a tree. |
| Compression unions | This union is a type of branch defect that often develops when two or more stems grow closely together. The bark grows into the union between the stems, causing a weak v-shaped branch angle to form. |
| Crown | The diameter of the leaf mass in the tree (leaf coverage diameter). |
| DBH | Diameter of the trunk or trunks at breast height (1.4m). |
| Deadwood | Deadwood that is 40mm in diameter or greater. |
| Fungal Gall | A ball shaped fungus that grows on leaf and stems, generally cannot kill the tree. |
| Girdling Roots | Circle roots that grow around the root plate. |
| Habitat Matters | Arboreal animals that live in the tree and others that need the tree to survive. |
| Height | The estimated height of the tree. |
| Hydrophobic | Hydrophobic soil stops water from seeping down to the roots. |
| Imidacloprid | The active ingredient in Silver shield, used to rid Elm leaf beetle and Psyllids. |
| Lerp | Waxy coating the protects Psyllids. |
| Minor deadwood | Deadwood that is under 40mm in diameter. |
| Parrot Damage | Cambium damage caused birds pecking at bark. |
| <i>Phellinus sp.</i> | A white rot fungus that eats lignin in the wood leaving the white wood. |
| Phototropic | Tree that bends and grows towards the sun light. ³ |
| Psyllids | A sap sucking insect that feeds on tree sap via leaf surface |
| Regulated Tree | Regulated trees have been classified by ACT Government as being 12m in height or a canopy spread greater than 12m, or 1.5m circumference at 1m above ground level. |
| ROH | Risk of harm. |
| Scale | A small sap sucking insect, of cause black stain on the tree. |
| Secondary Pathogens | They will only attack weakened trees; they can be biotic or abiotic. |
| Spiral Decline | Where the tree will not recover from pest and disease attack on the tree. |
| Stem Injection | To inject a chemical in the tree via cambium or phloem to rid pests. |
| Suppression | Lack of light that stunts the tree. |
| ULE | Useful Life Expectancy measures the amount of years left in a tree before it becomes a possible mitigation problem or a tree in decline. |
| VTA | Visual Tree Assessment. |
| VTA¹ | On-ground inspection to identify any structural defects using simple equipment such as acoustic mallets, probes and binoculars. |

4. Appendix 3

4.1.1 Site Map; Positioning of Numbered trees



A2.2 Figures

Figure 1. One of the excellent mature Eucalypts at Urambi Village Kambah ACT2

A2.3 Tables

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A2.4 Report References

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