CARDINAL FREEMAN VILLAGE

Supporting Documentation

Appendix P

Tree Impact Assessment

Prepared by **Earthscape Arborist**

aevum LIMITED

EARTHSCAPE HORTICULTURAL SERVICES
Arboricultural, Horticultural and Landscape Consultants

ABN 36 082 126 027

ARBORICULTURAL ASSESSMENT REPORT

CONCEPT PLAN DEVELOPMENT

CARDINAL FREEMAN VILLAGE
137 VICTORIA STREET, ASHFIELD

March 2010

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1 INTRODUCTION

1.1.1 This report was commissioned by Greengate Property Group on behalf of Aevum Limited to assess the health and condition of approximately two-hundred and fifty-five (255) trees located within or immediately adjacent to Cardinal Freeman Village, 137 Victoria Street, Ashfield. The report has been prepared to aid in the assessment of a development application for the re-development of the facilities within the property in several stages (Concept Plan Development).

1.1.2 This report follows an initial Pre-development Tree Assessment Report prepared by Earthscape dated June 2008. The purpose of Pre-Development report was to determine the Retention Value of the trees within the site and the Tree Protection Zones needed to maintain their viability. The Pre-development Tree Assessment Report has been used to inform overall site planning and design by indicating the potential constraints imposed by existing trees, with the aim of retaining as many High and Moderate Value trees as possible.

1.1.3 The purpose of this report is to describe, in broad terms, the implications of the proposed Concept Plan Development on tree removal and retention within the site and make recommendations for replacement planting where appropriate to compensate for any loss of amenity. A further stage of assessment will examine in detail the potential impact of various stages of the proposal on existing trees.

2 THE SITE

2.1.1 The subject property is a Retirement Village known as Lot 101 in DP 702245, Lot 4 in DP 717062, Lots 6 & 7 in DP 717644 and Lot 1 in DP 1126717, being Cardinal Freeman Retirement Village, 137 Victoria Street, Ashfield. For the purposes of this report the subject allotments will be referred to as "the Site". The site contains a number of multi-unit residential dwellings together with other services and amenity buildings and a chapel. The total area of the site is approximately 40,851 m². The site has a moderate north-easterly gradient. The site contains established lawns and gardens, with a mixture of mature exotic and native trees, shrubs and palms.

2.1.2 Soils of this area are typical of the Blacktown Soil Landscape Group (as classified in the Soil Landscapes of the Sydney 1:100,000 Sheet), consisting of shallow to moderately deep (less than 1000 mm) *Red & Brown Podzolic Soils* on crests, upper slopes and well drained areas. Soils on lower slopes and areas of poor drainage consist of deep (1500-3000 mm) *Yellow Podzolic Soils and Soloth Soils* derived Wianamatta Group & Hawkesbury Shales.[1] The landscape generally consists of undulating rises with slopes ranging usually less than 5% grade.

2.1.3 The original vegetation of this area consisted of Turpentine-Ironbark Forest, most of which was cleared for residential development in the mid-twentieth century.[2]. Dominant locally-indigenous tree species formerly occurring in this area included *Syncarpia glomulifera* (Turpentine), *Eucalyptus fibrosa ssp. fibrosa* (Broad-leaved Ironbark), *Eucalyptus eugenioides* (Thin-leaved Stringybark), *Eucalyptus longifolia* (Woollybutt) and *Eucalyptus parramattensis* (Drooping Red Gum). Other species found in this association may include *Melaleuca decora* (White Feather Honey Myrtle) and *Melaleuca nodosa*. There are no remaining locally-indigenous species within the site.

3 SUBJECT TREES

3.1.1 The subject trees were inspected by Earthscape Horticultural Services (EHS) on the 11th March 2008. Each tree has been provided with an identification number for reference purposes denoted on the attached Tree Location Plan (Appendix 6), based on the survey prepared by Lockley Land Title Solutions, Dwg. Ref No. 29838DT-D dated 18th February 2010. The numbers used on this plan correlate with the Tree Assessment Schedule (Appendix 4).

4 HEALTH AND CONDITION ASSESSMENT:-

4.1 Methodology

4.1.1 An assessment of each tree was made using the Visual Tree Assessment (VTA) procedure. [3] All of the trees were assessed in view from the ground. No aerial inspection or diagnostic testing has been undertaken as part of this assessment.

4.1.2 The following information was collected for each tree:-

- Tree Species (Botanical & Common Name);
- Approximate height;
- Canopy spread; measured using a metric tape and an average taken.
- Trunk Diameter measured at Breast Height (DBH) (1.4 metres from ground level);
- Live Crown Size; (measured by subtracting the total height of the tree from the lowest point of the crown and multiplying by the average crown spread to give a value in square metres).
- Health & vigour; using foliage size, colour, extension growth, presence of disease or pest infestation, canopy density, presence of deadwood, dieback and epicormic growth as indicators,
- Condition; using visible evidence of structural defects, instability, evidence of previous pruning and physical damage as indicators.
- Suitability of the tree to the site and its existing location; in consideration of damage or potential damage to services or structures, available space for future development and nuisance issues.

This information is presented in a tabulated form in **Appendix 4.**

4.2 Safe Useful Life Expectancy (SULE)

4.2.1 The remaining Safe Useful Life Expectancy [4] of the tree is an estimate of the sustainability of the tree in the landscape, calculated based on an estimate of the average age of the species in an urban area in Sydney, less its estimated current age. The life expectancy of the tree has been further modified where necessary in consideration of its current health and vigour, condition and suitability to the site. The estimated SULE of each tree is shown in **Appendix 4.**

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

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

5 LANDSCAPE SIGNIFICANCE

5.1 Methodology for Determining Landscape Significance

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

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

1. **Significant**
2. **Very High**

3. **High**
4. **Moderate**
5. **Low**
6. **Very Low**
7. **Insignificant**

5.2 Environmental Significance

5.2.1 A Tree Preservation Order (TPO) exists within the Municipality of Ashfield, made under the Ashfield Local Environment Plan 1985 (as amended 2007). The TPO generally protects all trees with a height of five metres or greater. Some exemptions apply. The following trees are exempt (not protected) under the provisions of Ashfield Council's Tree Preservation Order:-

Tree No.	Species	Exemption
10, 16, 16f, 16g, 27, 28, 29, 30, 31, 32, 35, 36, 37, 45, 204, 205, 206	*Cinnamomum camphora* (Camphor Laurel)	Environmental Weed Species (less than 10 metres in height)
75	*Erythrina crista-galli* (Cockscomb Coral)	Environmental Weed Species
66, 92b, 207	*Olea africana* (African Olive)	Environmental Weed Species
17, 181a, 181b, 187a, 187b, 187c	*Syragus romanzoffianum* (Cocos Palm)	Nuisance Species
50, 127	*Morus nigra* (Mulberry)	Environmental Weed Species
119	*Liquidambar styraciflua* (Liquidambar)	Environmental Weed Species (less than 10 metres in height)
131, 189	*Plumeria acutifolia* (Frangipani)	Less than 5 metres in height
83, 84	*Prunus sp.* (Ornamental Peach)	Less than 5 metres in height
130	*Callistemon viminalis* (Weeping Bottlebrush)	Less than 5 metres in height
168, 169	*Ulmus glabra* 'Lutescens' (Golden Elm)	Less than 5 metres in height
212	*Phoenix canariensis* (Canary Island Palm)	Less than 5 metres in height
156a	*Gleditsia triacanthos* (Honey Locust)	Less than 5 metres in height
143	*Cupressocyparis x leylandii* (Leyland Cypress) (Row of 11 trees)	Nuisance Species
16b	*Ligustrum lucidum* (Large-leaf Privet)	Environmental Weed Species

5.2.2 The remainder of the trees are protected under Council's TPO.

5.2.3 All of the trees assessed are exotic or non-local native species that would be of some benefit to native wildlife (shelter, food sources etc). However, none of the trees contain cavities suitable as

nesting hollows for arboreal mammals or birds or other visible signs of wildlife habitation. All of the trees assessed have either been planted or are self-sown. There are no remaining locally indigenous species within the site.

5.2.4 *Ligustrum lucidum* (Large-leaf Privet) [T16b] is scheduled as a Class 4 Noxious Weed under the meaning of the *Noxious Weeds Act* (NSW) 1993. The growth and spread of this plant must be controlled according to the measures specified in a management plan published by the local control authority and the plant may not be sold, propagated or knowingly distributed. Trees 62, 69, 76, 90 & 121, [all *Acer negundo* (Box Elder)] whilst protected under Council's TPO is considered an Environmental Weed Species in many Local Government Areas.

5.2.5 None of the trees assessed are listed as Threatened or Vulnerable Species or form part of Endangered Ecological Communities under the provisions of the *Threatened Species Conservation Act* 1995 (NSW) or the *Environmental Protection and Biodiversity Conservation Act* 1999.

5.3 Heritage Significance

5.3.1 The Chapel within the site (constructed in 1942) is listed as a Heritage Item under Schedule 7 of the Ashfield Local Environment Plan (1985) and formerly formed part of the "Convent of the Good Shepherd" (founded about 1913). 'Glentworth House' is also listed as a heritage item under the LEP. Glentworth House is a Victorian Italianate mansion thought to have been constructed between 1876 and 1900. Tree 56, Tree 39 and Tree 210 (all Port Jackson Figs), Tree 42 (Small-leaf Fig) and Tree 61 (Cotton Palm) are all large mature trees in the order of 100-120 years old and were probably planted about this time. The Ashfield Heritage Study[5] prepared by Godden Mackay Pty Ltd, makes specific mention of the Fig trees within the grounds of Glentworth House. These trees are therefore considered to have some heritage significance given their association with the heritage item and the likely period of planting, being typical species of the Victorian Era.

5.3.2 Tree 91 (a Pin Oak), Tree 54 (Swamp Cypress), and the row of Camphor Laurels along Victoria Street T27-32 & 35, 36 & 37 were probably planted in the 1930's or 40's. Trees 34, 35, 36, & 37 (Broadleaved Paperbarks) appear to be older than the majority of trees on the site (with exception of those mentioned above) and were probably planted c. 1960-70. Trees 20 & 21, (both Lemon-scented Gums) whilst relatively large trees, were probably planted in the mid to late 1970's. The majority of the remaining trees assessed appear to have been planted post 1970's. These trees have no known or suspected heritage significance.

5.4 Amenity Value

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

6 RETENTION VALUES

6.1.1 The Retention Values shown in **Appendix 4 and Appendix 7** have been determined on the basis of the estimated longevity of the trees and their landscape significance rating, in accordance with **Table One**. Together with guidelines contained in **Section 7** (Tree Protection Zones) this information has been used to determine the most appropriate position of building footprints and other infrastructure within the site, with due consideration to other site constraints, to minimise the impact on trees considered worthy of preservation.

TABLE 1 – TREE RETENTION VALUES – ASSESSMENT METHODOLOGY

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

7 TREE PROTECTION ZONES

7.1.1 Tree Protection Zones and Minimum Set-back Distances to construction for each tree are shown in **Appendix 4**. These have been determined using the methodology shown in **Appendix 3**.

8 PROPOSED DEVELOPMENT

8.1.1 The proposed development is a Concept Plan Development of the site. The progressive re-development of the site for aged care facilities and residential buildings will be undertaken in several stages, to be lodged as separate applications.

8.1.2 The Landscape Master Plan for the site has sought to maximise the retention of High and Moderate Value trees within the site, whilst responding other planning constraints. Whilst the Concept Plan will necessitate the removal of a number of trees within the site, the Landscape Master Plan makes allowance for the replacement of new trees in appropriate locations to ensure sustained amenity and improvement of the visual character of the site following implementation. The Landscape Master Plan includes new open space areas and new tree plantings throughout the site to improve to overall visual character and amenity and reduce the visual impact of the proposal on surrounding properties and the streetscape.

8.1.3 The proposed development will necessitate the removal of thirteen (13) trees of very low retention value (Tree No.s 16b, 35, 36, 37, 50, 75, 115b, 127, 131, 204, 205, 206 & 207) and sixty-eight (68) trees of low retention value (Tree No.s 17, 24, 25, 26, 40, 43, 45, 51, 52, 53, 54a, 54b, 54c, 55, 57, 58, 60, 62, 63, 66, 67, 76, 78, 81, 81a, 84, 86, 87, 88b, 90, 92, 93, 94, 95, 96, 97b, 97c, 103, 106, 107, 108, 108a, 109, 115a, 115b, 115c, 115d, 115e, 116a, 119, 120, 121, 124, 126, 128, 130, 135, 143, 143a, 144, 145a, 153, 154, 156a, 157, 212, 217 & 218). None of these trees are considered significant or worthy of special measures to ensure their preservation. It should be noted that twenty (20) of these trees, Tree No.s 35, 36, 37, 45, 204, 205 & 206 (all Camphor Laurels), 16b (Large Leaf Privet), Trees 50 & 127 (Mulberry), Tree 17 (Cocos Palm), Trees 66, 97b & 207 (African Olive), Tree 75 (Cock's Comb Coral), Tree 131 (Dead Frangipani), Tree 212 (Canary Island Palm), 143 (row of 10 x Leyland Cypress), 156a (Honey Locust) and Tree 119 (Liquidambar) are all exempt from Council's Tree Preservation Order.

8.1.4 The proposed development will necessitate the removal of a further forty-three (43) trees of moderate retention value. These include Trees 23, 33, 42, 48, 49, 68, 79, 80, 82, 83, 85, 88, 89, 97a, 101, 102, 103a, 104, 105, 110, 111, 112, 113, 114, 115, 116, 118, 122, 123, 125, 129, 131a, 132, 133, 134, 137, 142, 152, 156, 199, 202, 203 & 213. These trees are not considered significant,

but are in good health and condition and make a fair contribution to the amenity of the site and surrounding properties. Tree 42 (a Small leaf Fig), appears to be one of the earlier plantings on the site, but is currently in relatively poor health and condition with a short remaining lifespan. This tree is considered beyond remedial treatment and therefore its removal and replacement would achieve a better long term outcome than attempting to retain it in its current condition.

8.1.5 The proposed development will also necessitate the removal of a further two (2) trees of high retention value. These include Tree 117 (a Tallowwood) & Tree 91 (a Pin Oak). Both of these trees are in good health and condition and make a positive contribution to the amenity of the site. Both of these trees are difficult to retain given their central location within the proposed building envelope. It should be noted that neither of the subject trees have any known or suspected heritage or ecological significance. Tree 117 is likely to have been planted in the early 1980's. Tree 91 was probably planted in the 1940's, but does not appear to have been planted in relation to any of the early buildings. It should be noted that the majority of high retention value trees within the site are proposed to be retained.

9 REPLACEMENT PLANTING STRATEGY

9.1.1 The Landscape Master Plan prepared by Jane Irwin Landscape Architects includes a total of 100 new trees to be planted within the site, including approx 20 large canopy trees and approximately 80 small ornamental trees. These are a mix of native and exotic species. The proposed canopy species are considered appropriate to the site conditions and sympathetic to the original landscape era of the site. The indicative species are typical of the late Victorian era (typically evergreen Australian rainforest trees (*Ficus sp., Syzygium sp., Waterhousea sp., Stenocarpus sp.*), Australian conifers (*Agathis sp. & Araucaria sp.*) and Palms (*Washingtonia filifera, Jubaea chilensis*). Together with the proposed small scale ornamental trees, the replacement planting will compensate for any loss of amenity.

10 CONCLUSIONS:-

10.1.1 A total of two-hundred and fifty-five (255) trees stand within the nominated area of the site. These are a mix of non-local native and exotic species in fair to good health and condition. Whilst some of the trees are likely to have been planted in association with Glentworth House (listed as a heritage item), most of the trees within the site are relatively recent plantings, planted post-1970.

10.1.2 The proposed development is likely to necessitate the removal of eighty-one (81) trees of low and very low retention value. None of these trees are considered significant or worthy of special measures to ensure their preservation. Twenty (20) of these trees are exempt from Council's Tree Preservation Order.

10.1.3 The proposed development will necessitate the removal of a further forty-three (43) trees of moderate retention value. These trees are not considered significant, but are in good health and condition and make a fair contribution to the amenity of the site and surrounding properties.

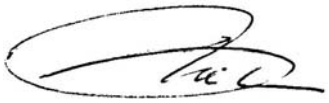
10.1.4 Tree 42 (a Small leaf Fig) is also proposed to be removed to accommodate the proposed works. This tree appears to be one of the earlier plantings on the site, but is currently in relatively poor health and condition with a short remaining lifespan. This tree is considered beyond remedial treatment and therefore its removal and replacement would achieve a better long term outcome than attempting to retain it.

10.1.5 The proposed development is also likely to necessitate the removal of a further two (2) trees of high retention value. These include Tree 117 (a Tallowwood) & Tree 91 (a Pin Oak). Both of these trees are in good health and condition and make a positive contribution to the amenity of the site. The retention of these trees has been carefully considered but is not considered feasible in this

instance due to their centralised position within the site and other site constraints. Neither tree has any known or suspected heritage or ecological significance.

11 RECOMMENDATIONS:-

1. The following Tree Protection Measures (Appendix 2) should be implemented to ensure the long term survival of all trees within the site to be retained as part of the development.



Andrew Morton
EARTHSCAPE HORTICULTURAL SERVICES
4th March 2010

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[2] Benson, Doug & Howell, Jocelyn (1990)
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[3] Mattheck, Dr. Claus & Breloer, Helge (1994) – Sixth Edition (2001)
The Body Language of Trees – A Handbook for Failure Analysis
The Stationery Office, London, England

[4] Barrell, Jeremy (1996)
Pre-development Tree Assessment
Proceedings of the International Conference on Trees and Building Sites (Chicago)
International Society of arboriculture, Illinois, USA

[5] Godden Mackay Pty Ltd (1991/92)
Ashfield Heritage Study
(Ref No. 277 'Glentworth House' & No.278 'Chapel of the Convent of the Good Shepherd')
Ashfield Council, Ashfield NSW

APPENDIX ONE - CRITERIA FOR ASSESSMENT OF LANDSCAPE SIGNIFICANCE

The level of landscape significance has been determined using the following key criteria as a guide:

1. SIGNIFICANT

- The subject tree is listed as a Heritage Item under the Local Environment Plan (LEP) with a local, state or national level of significance; or
- The subject tree forms part of the curtilage of a Heritage Item (building /structure /artefact as defined under the LEP) and has a known or documented association with that item; or
- The subject tree is a Commemorative Planting having been planted by an important historical person (s) or to commemorate an important historical event; or
- The subject tree is scheduled as a Threatened Species as defined under the *Threatened Species Conservation Act* 1995 (NSW) or the *Environmental Protection and Biodiversity Conservation Act* 1999; or
- The tree is a locally indigenous species, representative of the original vegetation of the area and is known as an important food, shelter or nesting tree for endangered or threatened fauna species; or
- The subject tree is a Remnant Tree, being a tree in existence prior to development of the area; or
- The subject tree has a very large live crown size exceeding 300m² with normal to dense foliage cover, is located in a visually prominent in the landscape, exhibits very good form and habit typical of the species and makes a significant contribution to the amenity and visual character of the area by creating a sense of place or creating a sense of identity; or
- The tree is visually prominent in view from surrounding areas, being a landmark or visible from a considerable distance.
- The species, cultivated variety or form is rare in cultivation within the region.

2. VERY HIGH

- The tree has a strong historical association with a heritage item (building/structure/artefact/garden etc) within or adjacent the property and/or exemplifies a particular era or style of landscape design associated with the original development of the site; or
- The subject tree is listed on Council's Significant Tree Register; or
- The tree is a locally-indigenous species, representative of the original vegetation of the area and forms part of the assemblage of species of an Endangered Ecological Community;
- The subject tree has a very large live crown size exceeding 200m²; a crown density exceeding 70% Crown Cover (normal-dense), is a very good representative of the species in terms of its form and branching habit or is aesthetically distinctive and makes a positive contribution to the visual character and the amenity of the area.
- The species, cultivated variety or form is uncommon in cultivation (few examples in cultivation within the region)

3. HIGH

- The tree has a suspected historical association with a heritage item or landscape supported by anecdotal or visual evidence; or
- The tree is a locally-indigenous species and representative of the original vegetation of the area and the tree is located within a defined Vegetation Link / Wildlife Corridor or has known wildlife habitat value;
- The subject tree has a large live crown size exceeding 100m²; and
- The tree is a good representative of the species in terms of its form and branching habit with minor deviations from normal (eg crown distortion/suppression) with a crown density of at least 70% Crown Cover (normal); and
- The subject tree is visible from the street and surrounding properties and makes a positive contribution to the visual character and the amenity of the area.

4. MODERATE

- The subject tree has a medium live crown size exceeding 40m²; and
- The tree is a fair representative of the species, exhibiting moderate deviations from typical form (distortion/suppression etc) with a crown density of more than 50% Crown Cover (thinning to normal); and
- The tree makes a fair contribution to the visual character and amenity of the area; and
- The tree is visible from surrounding properties, but is not visually prominent – view may be partially obscured by other vegetation or built forms.
- The tree has no known or suspected historical association

5. LOW

- The subject tree has a small live crown size of less than 40m² and can be replaced within the short term with new tree planting; or
- The subject tree is not visible from surrounding properties (visibility obscured) and makes little contribution the amenity and visual character of the area.

6. VERY LOW

- The subject tree is listed as an Environment Weed Species in the relevant Local Government Area, being invasive, or is a known nuisance species; or
- The tree is a poor representative of the species, showing significant deviations from the typical form and branching habit with a crown density of less than 50% Crown Cover (sparse) or has a negative impact on visual amenity; or
- The subject tree is scheduled as exempt (not protected) under the provisions of the local Council's Tree Preservation Order due to its species, nuisance or position relative to buildings or other structures.

7. INSIGNIFICANT

- The tree is a declared Noxious Weed under the *Noxious Weeds Act* (NSW) 1993

12 APPENDIX TWO – TREE PROTECTION ZONES

12.1 Tree Protection Zones

12.1.1 The Tree Protection Zones are recommended for all trees within the site to be retained shall be equivalent to the Tree Protection Zone as specified in Appendix 5. This is a radial distance measured from the centre of the trunk of the subject tree.

12.1.2 The following activities should be avoided within specified Tree Protection Zones:-

- Excavations and trenching (with exception of the approved foundations and underground services);
- Ripping or cultivation of soil;
- Mechanical removal of vegetation;
- Soil disturbance or movement of natural rock;
- Soil level changes including the placement of fill material (excluding any suspended floor or slab);
- Movement and storage of plant, equipment & vehicles;
- Erection of site sheds;
- Affixing of signage or hoardings to trees;
- Storage of building materials, waste and waste receptacles;
- Disposal of waste materials and chemicals including paint, solvents, cement slurry, fuel, oil and other toxic liquids;
- Other physical damage to the trunk or root system; and
- Any other activity likely to cause damage to the tree.

12.2 Tree Protection Fencing

12.2.1 All trees within the site to be retained shall be protected prior to and during construction from all activities that may result in detrimental impact by erecting a suitable protective fence beneath the canopy to the full extent of the Tree Protection Zone (excluding the footprint of the proposed works and areas within adjoining properties). As a minimum the fence should consist temporary chain wire panels 1.8 metres in height, supported by steel stakes as required and fastened together and supported to prevent sideways movement. The fence shall be erected prior to the commencement of any work on-site and shall be maintained in good condition for the duration of construction. Where tree protection zones merge together a single fence encompassing the area is deemed to be adequate.

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

12.2.3 A 50mm layer of woodchip mulch shall be installed to the full extent of the Tree Protection Zone of all trees to be retained. Mulch shall be installed and spread by hand to avoid soil disturbance and compaction within the root zone.

12.3 Trunk Protection

12.3.1 Where provision of tree protection fencing is in impractical due to its proximity to the proposed building envelope, trunk protection shall be erected around the tree to avoid accidental damage. As a minimum, the trunk protection shall consist of two metre lengths of hardwood timbers (100 x 50mm) spaced at 100-150mm centres secured together with 2mm galvanised wire. These shall be strapped around the trunk (not fixed in any way) to avoid mechanical injury or damage. Trunk protection should be installed prior to any site works and maintained in good condition for the duration of the construction period.

12.4 Tree Damage

12.4.1 In the event of any tree becoming damaged for any reason during the construction period a consulting arborist shall be engaged to inspect and provide advice on any remedial action to minimise any adverse impact. Such remedial action shall be implemented as soon as practicable and certified by the arborist.

12.5 Demolition Works within Tree Protection Zones

Demolition of Pathways and Pavements

12.5.1 Demolition of pathways and paved areas within the Tree Protection Zone of trees to be retained shall be undertaken under the supervision of the Site Arborist. The pavement surface and sub-base shall be stripped-off in layers of no greater than 50mm thick using a small rubber tracked excavator or alternative approved method to avoid damage to underlying roots and minimise soil disturbance. The machine shall work within the footprint of the existing pathway to avoid compaction of the adjacent soil. The final layer of sub-base material shall be removed using hand tools were required to avoid compaction of the underlying soil profile and damage to woody roots.

12.5.2 Following removal of the pavement surface and sub-base, clean, friable topsoil shall be used to fill in the excavated area and bring flush with surrounding levels. Soil shall only be imported and spread when the underlying soil conditions are dry to avoid compaction of the soil profile.

Demolition of Retaining Walls or other Structures

12.5.3 Demolition of low masonry walls within the Tree Protection Zone of trees to be retained shall be undertaken under the supervision of the Site Arborist. The walls shall be demolished using equipment on the street side of the wall. Care shall be taken to avoid the root systems, trunks and lower branches of trees in the vicinity of the existing walls.

12.6 Excavations within Tree Protection Zones

12.6.1 Excavations within the Tree Protection Zone of any tree to be retained shall be avoided wherever possible.

12.6.2 Excavations for foundations and pavement sub-grade within the Tree Protection Zone of any tree to be retained shall be undertaken by hand or using an Air-spade® device to locate and expose roots along the perimeter of the foundation or pavement prior to any mechanical excavation. All care shall be undertaken to preserve root systems intact and undamaged. Any roots less than 50mm in diameter shall be cleanly severed with clean sharp pruning implements at the face of the excavation. The root zone in the vicinity of the excavation shall be kept moist following excavation for the duration of construction to minimise stress on the tree.

12.6.3 Where large woody roots (greater than 50mm diameter) are encountered during excavations, further advice from a qualified arborist shall be sought prior to severance. Where necessary, (to avoid severing large woody roots) consideration should be given to the installation of an elevated structure (e.g. pier and beam footing, suspended slab or floor on piers, cantilevered slab, etc) in preference to structures requiring a deep edge beam or continuous perimeter strip footing. The beam section of any pier and beam footing should be placed **above** grade to avoid excavation within the CRZ.

12.6.4 For masonry walls or fences it may be acceptable to delete continuous concrete strip footings and replace with suspended in-fill panels (eg steel or timber pickets, lattice etc) fixed to pillars.

12.6.5 For paved areas, consideration should be given to raising the proposed pavement level and using a porous fill material in preference to excavation.

12.7 Underground Services

12.7.1 All proposed stormwater lines and other underground services should be located as far away as practicable, or suspended beneath the floor of the building where possible, to avoid excavation within the Tree Protection Zone of trees to be retained.

12.7.2 For underground services, where the incursion to the Root Zone is less than 20% of the total TPZ (i.e. beyond the Minimum Setback Distance), a chain trenching device may be used. A backhoe or skid steer loader is unacceptable due to the potential for excessive compaction and root damage. Where large woody roots (greater than 50mm in diameter) are encountered during excavation or trenching, these shall be retained intact wherever possible (eg by sub-surface boring beneath roots or re-routing the service etc).

12.7.3 Excavations required for underground services within the Critical Root Zone of any tree to be retained should only be undertaken by sub-surface boring. The Invert Level of the pipe, plus the pipe diameter, must be lower than the estimated root zone depth as specified. This will depend on the soil conditions at the site. Where this is not practical and root pruning is the only alternative, proposed root pruning should be assessed by the arborist to determine continued health and stability of the subject tree.

12.7.4 If trees show signs of stress or deterioration, remedial action shall be taken to improve the health and vigour of the subject tree (s) in accordance with best practice arboricultural principles

12.8 Pavements

12.8.1 Pavements should be avoided within the Tree Protection Zone of trees to be retained where possible. Proposed paved areas within the Tree Protection Zone of trees to be retained should be placed above grade to minimise excavations within the root zone and avoid root severance and damage. Pavement sub-base material should be as per Section 12.8.

12.9 Fill Material

12.9.1 Placement of fill material within the Tree Protection Zone of trees to be retained should be avoided where possible. Where placement of fill cannot be avoided, the material should be a coarse, gap-graded material such as 20 – 50mm crushed basalt (Blue Metal) or equivalent to provide some aeration to the root zone. Note that Roadbase or crushed sandstone or other material containing a high percentage of fines is unacceptable for this purpose. The fill material should be consolidated with a non-vibrating roller to minimise compaction of the underlying soil. A permeable geotextile may be used beneath the sub-base to prevent migration of the stone into the sub-grade. No fill material should be placed in direct contact with the trunk.

12.10 Canopy & Root Pruning

12.10.1 All pruning work required shall be carried out in accordance with Australian Standard No 4373-1996 – Pruning of Amenity Trees. Written approval from Council may be required under the Tree Preservation Order prior to undertaking this work. All pruning work shall be carried out by a qualified and experienced arborist or tree surgeon in accordance with the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998).

12.10.2 Care shall be taken when operating cranes, drilling rigs and similar equipment near trees to avoid damage to tree canopies (foliage and branches). Under no circumstances shall branches be torn-off by construction equipment. Where there is potential conflict between tree canopy and construction activities, the advice of the Site Arborist must be sought.

12.10.3 Where root pruning is required, roots shall be severed with clean, sharp pruning implements and retained in a moist condition during the construction phase using Hessian material or mulch where practical. Severed roots shall be treated with a suitable root growth hormone containing the active constituents Indol-3-yl-Butric Acid (IBA) and 1-Naphthylacetic Acid (NAA) to stimulate rapid regeneration of the root system.

12.11 Tree Removal

12.11.1 The approval of Ashfield Council shall be obtained prior to the removal or pruning of any tree protected under the Tree Preservation Order.

12.11.2 Tree removal work shall be carried out by an experienced tree surgeon in accordance with the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998). Care shall be taken to avoid damage to other trees during the felling operation.

12.11.3 Stumps shall be grubbed-out where required using a mechanical stump grinder without damage to the root system of other trees. Where trees to be removed are in close proximity to trees to be retained, consideration should be given to cutting the stump close to ground level and retaining the root crown intact. Stumps within the Tree Protection Zone of other trees to be retained should **not** be removed using excavation equipment or similar.

13 APPENDIX THREE - METHODOLOGY FOR DETERMINING TREE PROTECTION ZONES

13.1.1 In order to provide adequate protection for trees nominated as suitable for preservation, Tree Protection Zones (TPZ) are required to provide adequate setbacks from buildings and other infrastructure to minimise adverse impact. The Tree Protection Zone is a radial distance measured from the centre of the trunk of the tree as specified in Appendix 5 (refer also Figure 4). The intention of the Tree Protection Zone is to minimise incursions to the root system and canopy to ensure the long-term health and stability of each tree to be retained. Incursions to the root zone may occur due to changes in ground levels, (either lowering or raising the grade), trenching or other forms or soil disturbance such as ripping, grading or inverting the soil profile.

13.1.2 A commonly used delineation for the Tree Protection Zone is the drip-line (extent of the crown spread projected to the ground plane). However, this may not provide adequate protection for trees that have prominent leans or distorted, imbalanced or narrow crowns. A more appropriate guideline is the trunk diameter.[6]

13.1.3 The TPZ has been determined from Table 3, based on guidelines prepared by the British Standards Institute (1991) using the following parameters:-

- The trunk diameter;
- The sensitivity/tolerance of the species to construction impacts;
- The level of maturity;
- The health, vigour and structural integrity of the tree (refer to Section 4); and
- The trees root and crown formation.

13.2 Trunk Diameter

13.2.1 The trunk diameter of each tree was measured at 1.4 metres from ground level using a metric diameter tape. For the purpose of calculating the tree protection zone, the diameter of twin-trunked trees has been added then multiplied by 75%. For multi-trunked trees, the diameter of each trunk has been added then multiplied by 60%. This gives a more realistic measurement for an equivalent sized single-trunked tree.

13.3 Construction Tolerance

13.3.1 The Construction Tolerance of each tree has been divided into the following categories:-

- **G** **Good –** good tolerance to construction impacts
- **M** **Moderate –** moderate tolerance to construction impacts
- **P** **Poor –** poor tolerance to construction impacts

13.3.2 As there is very little documentary record of the construction tolerance of species under Australian conditions, the trees have been categorized according to our field observation and experience. The above classifications are also used as criteria to determine appropriate setback distances to trenching (together with Maturity Class).

13.4 Maturity Class.

13.4.1 The Maturity Classification of each tree has been divided into the following categories:-

- **OM** **Overmature –** greater than 80% of the life expectancy for the species
- **M** **Mature –** 50-80% of the life expectancy for the species
- **SM** **Semi-mature –** 20-50% of the life expectancy for the species
- **Y** **Immature –** less than 20% of the life expectancy for the species

13.5 Root and Crown Formation

13.5.1 The distribution of the canopy and branches of each tree was recorded in the field from visual observation and is shown in **Appendix 4**. This is also reflected in the tree location plans in **Appendix 6**. Based on the information available, it has been assumed that the soil conditions are fairly uniform and therefore a uniform radial root system has also been assumed. Existing incursions (due to existing underground services, adjacent structures or grade differences) to the root zone were also noted in the field. Where appropriate the Tree Protection Zones take account of existing incursions and canopy distribution.

TABLE THREE – GUIDELINES FOR OPTIMUM TREE PROTECTION ZONES

Species Tolerance	Tree Maturity Class	Distance from Trunk (m) per Unit Trunk Diameter (cm)
Good	Young	0.06
	Mature	0.09
	Overmature	0.12
Moderate	Young	0.09
	Mature	0.12
	Overmature	0.15
Poor	Young	0.12
	Mature	0.15
	Overmature	0.18

KEY (Maturity Class)
Young (<20% Life Expectancy)
Mature (20-80% Life Expectancy)
Overmature (>80% Life Expectancy)

Modified from the British Standards Institute (1991)
Guidelines are for trees of average to excellent vigour

REF:- Harris, R.W., Clark, J.R. & Matheny, NP (1999)
Arboriculture - Integrated Management of Landscape Trees, Shrubs & Vines (Third Edition)
Prentice Hall, New Jersey, USA

13.6 Minimum Set-back Distance.

13.6.1 Where construction work within the TPZ is unavoidable, the proposed incursion should be limited to a radial offset equivalent to no greater than 20% of the TPZ, on one side only (refer to **Figure 4**). It is generally accepted that healthy, vigorous trees can withstand incursions of this amount without any significant adverse impact on their health and long-term preservation. Incursions of greater amounts are likely to result in an adverse impact and significant incursions may lead to the demise or destabilization of the tree. Minimum Setback Distances to construction have been specified in **Appendix 5**.

13.7 Critical Root Zone.

13.7.1 The diameter of the root plate, which provides the bulk of mechanical support and anchorage for a tree, is related to the distance from the trunk at which rapid taper of tree roots ceases. [7] This has been defined as the tree's "Critical Root Zone". Based on field studies of root plate sizes of windthrown (overturned) trees, it has been established that there is a relationship between the Critical Root Zone (Root Plate Diameter) and the trunk diameter.[11] The Critical Root Zone for each tree has been shown in **Appendix 5**. Incursions within the Critical Root Zone are not recommended as they are likely to result in the severance of woody roots which may lead to the destabilisation and/or demise of the tree.

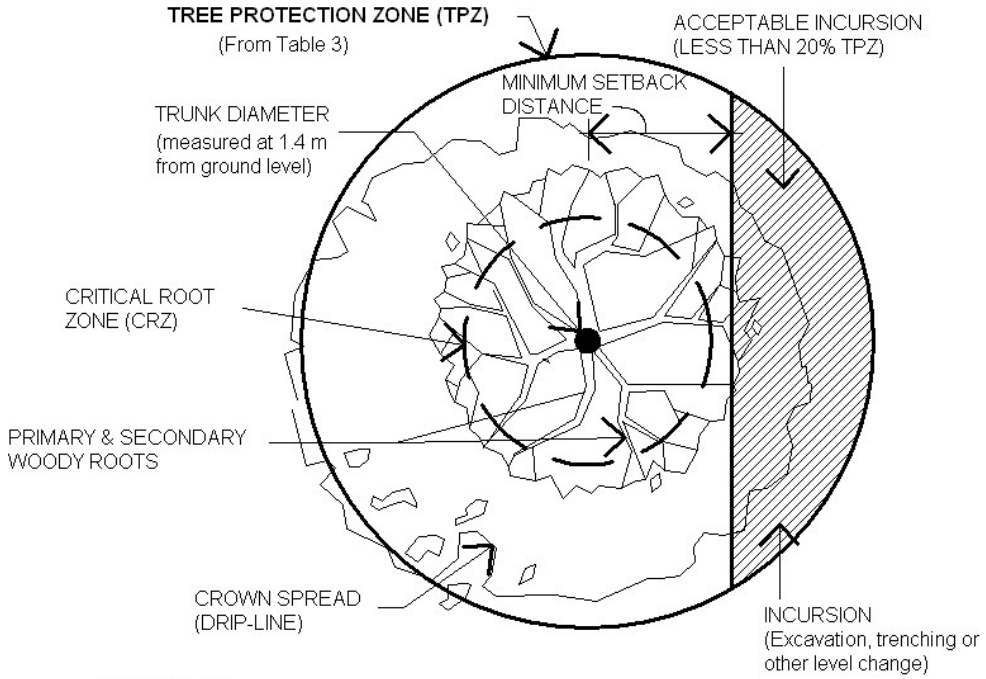

FIGURE 4

METHODOLOGY TO CALCULATE MINIMUM SETBACK DISTANCE

13.8 Acceptable Incursions to the Root Zone.

13.8.1 Incursions within the TPZ and CRZ may be acceptable only where special construction methods are adopted to avoid any adverse impact on the trees root system. Fully elevated construction methods incorporating suspended flooring, isolated piers or pier and beam type footing construction are generally acceptable within the TPZ / CRZ, provided all excavations are undertaken by hand and roots are adequately protected.

REFERENCES

[6] Harris, R.W., Clark, J.R. & Matheny, N.P. (2004)
Arboriculture – Integrated Management of Landscape Trees, Shrubs and Vines (4th Edition)
Prentice Hall, New Jersey, USA

[7] Culter, David F. (1995)
Interactions between Tree Roots and Buildings
Proceedings of and International Workshop on Trees and Buildings
International Society of Arboriculture, Illinois, USA

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
1	***Corymbia maculata*** (Spotted Gum)	18	13	560	156	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	**high**	On-site
2	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	7	8	360	44	M	Appears stable with fair branching structure.	Selectively pruned to clear powerlines	Fair with slight thinning crown	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
3	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	10	9	400	72	M	Appears stable with sound branching structure. Crown suppressed on north side due previous pruning.	Selectively pruned to clear powerlines	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
4	***Melaleuca sp.*** (Paperbark)	7	7	300	35	M	Appears stable with fair branching structure. 10% deadwood. Exhibits a prominent lean to the west.	Selectively pruned to clear powerlines	Fair with thinning crown	No Evidence	Short 5-15 Years	5	**low**	On-site
5	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	9	7	480	49	M	Appears stable with sound branching structure. Crown suppressed on north side due previous pruning.	Selectively pruned to clear powerlines	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
6	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	8	5	350	30	M	Appears stable with sound branching structure. Crown suppressed on west side due crowding	Selectively pruned to clear powerlines	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
7	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	6	6	300	24	M	Appears stable with fair branching structure. Upper crown suppressed due to overshadowing.	Selectively pruned to clear powerlines	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
8	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	8	5	320	30	M	Appears stable with fair branching structure.	Primary limbs lopped to clear powerlines	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
9	***Cinnamomum camphora*** (Camphor Laurel)	16	10	350 + 290 +240	140	M	Stability suspect with poor branching structure. Multiple moderate wounds to woody surface roots due previous mechanical injury. 20% deadwood	Lower limbs selectively pruned	Fair with thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
10	***Cinnamomum camphora*** (Camphor Laurel)	6	4	140x3 + 180	18	SM	Appears stable with poor branching structure. Upper crown suppressed due to overshadowing.	Primary limbs lopped to clear powerlines. Previously cut to GL.	Fair with thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
11	***Cinnamomum camphora*** (Camphor Laurel)	16	8	460 + 180 + 270	112	M	Appears stable with fair branching structure. Multiple moderate wounds due to previous pruning.	Previously cut to ground level	Fair with slight thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
12	***Cinnamomum camphora*** (Camphor Laurel)	16	7	290x3 +180	98	M	Appears stable with fair branching structure. Multiple moderate wounds due to previous pruning.	Previously cut to ground level	Fair with slight thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
13	***Cinnamomum camphora*** (Camphor Laurel)	10	7	150x2 + 240	56	M	Appears stable with poor branching structure. Multiple moderate wounds due to previous pruning. Exhibits a large basal cavity with decay	Previously cut to ground level	Fair with thinning crown	No Evidence	Transient (less than 5 years)	6	**very low**	On-site
14	***Cinnamomum camphora*** (Camphor Laurel)	15	7	400 + 150	91	M	Appears stable with poor branching structure. Multiple moderate wounds due to previous pruning. Exhibits a large basal cavity with decay	Previously cut to ground level	Fair with thinning crown	No Evidence	Transient (less than 5 years)	6	**very low**	On-site
15	***Cinnamomum camphora*** (Camphor Laurel)	15	8	300x5	104	M	Appears stable with poor branching structure. Multiple moderate wounds due to previous pruning. Exhibits a large basal cavity with decay	Previously cut to ground level	Fair with thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
16	***Cinnamomum camphora*** (Camphor Laurel)	6	4	300	16	SM	Appears stable with poor branching structure. Multiple moderate wounds due to previous pruning. Exhibits a large basal cavity with decay	Previously cut to ground level	Fair with thinning crown	No Evidence	Transient (less than 5 years)	6	**very low**	On-site
16a	***Cinnamomum camphora*** (Camphor Laurel)	14	6	450	72	M	Appears stable with poor branching structure. Multiple moderate wounds due to previous pruning. Exhibits a moderate basal cavity with decay	Previously cut to ground level	Fair	No Evidence	Short 5-15 Years	6	**very low**	On-site
16b	***Ligustrum lucidum*** (Large leaf Privet)	8	4	150x2	24	SM	Appears stable with poor branching structure. Previously ringbarked at 1 metres & severe bark inclusion at GL	selectively pruned	Fair	No Evidence	Transient (less than 5 years)	7	**very low**	On-site
16c	***Cinnamomum camphora*** (Camphor Laurel)	12	5	450	50	M	Appears stable with poor branching structure. Multiple moderate wounds due to previous pruning. Exhibits a large basal cavity with decay	Previously cut to ground level	Fair	No Evidence	Short 5-15 Years	6	**very low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
16d	***Cinnamomum camphora*** (Camphor Laurel)	10	6	600	48	M	Appears stable with poor branching structure. Multiple moderate wounds due to previous pruning. Exhibits a moderate basal cavity with decay	Previously cut to ground level	Fair with thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
16e	***Cinnamomum camphora*** (Camphor Laurel)	10	6	150x3	42	M	Appears stable with poor branching structure. Multiple moderate wounds due to previous pruning. Exhibits a small basal cavity with decay	Previously cut to ground level	Fair with thinning crown	No Evidence	Transient (less than 5 years)	6	**very low**	On-site
16f	***Cinnamomum camphora*** (Camphor Laurel)	9	5	160x3	35	M	Appears stable with poor branching structure. Multiple moderate wounds due to previous pruning. Exhibits a small basal cavity with decay	Previously cut to ground level	Fair with thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
16g	***Cinnamomum camphora*** (Camphor Laurel)	9	6	150x4 + 200	42	M	Appears stable with poor branching structure. Multiple moderate wounds due to previous pruning. Exhibits a small basal cavity with decay	Previously cut to ground level	Fair with thinning crown	No Evidence	Transient (less than 5 years)	6	**very low**	On-site
17	***Syragus romanzoffianum*** (Cocos Palm)	9	6	240	30	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
20	***Corymbia citriodora*** (Lemon-scented Gum)	16	12	490	144	M	Appears stable with sound branching structure. Crown suppressed on SE side due to crowding.	No Evidence	Good	No Evidence	Long - more than 40 years	3	**high**	On-site
21	***Corymbia citriodora*** (Lemon-scented Gum)	20	16	700	208	M	Appears stable with fair branching structure. Exhibits multiple moderate wounds due to previous branch loss (storm damage). Terminally loaded primary limbs.	No Evidence	Good	No Evidence	Medium 15-40 Years	2	**high**	On-site
23	***Corymbia maculata*** (Spotted Gum)	16	12	460	156	M	Appears stable with sound branching structure. Exhibits a large wound in lower trunk due to borer damage	No Evidence	Fair	Moderate borer infestation (Longicorn Beetle)	Medium 15-40 Years	3	**moderate**	On-site
24	***Archontophoenix alexandrae*** (Alexandra Palm)	7.5	4	170	10	SM	Appears stable with sound branching structure. Located close to existing building	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
25	***Melaleuca sp.*** (Paperbark)	7	5	170	10	M	Appears stable with sound branching structure. Exhibits some dieback with 10% deadwood.	No Evidence	Fair with thinning crown	No Evidence	Short 5-15 Years	5	**low**	On-site
26	***Pittosporum undulatum*** (Native Daphne)	6	5	150	20	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Very Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
27	***Cinnamomum camphora*** (Camphor Laurel)	8	7	500	45.5	M	Stability suspect with poor branching structure. Predominantly epicormic sprouts arising from original stump. Large basal cavity with decay.	Previously cut to ground level	Fair with slight thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
28	***Cinnamomum camphora*** (Camphor Laurel)	8	7	500	45.5	M	Stability suspect with poor branching structure. Predominantly epicormic sprouts arising from original stump. Large basal cavity with decay.	Previously cut to ground level	Fair with slight thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
29	***Cinnamomum camphora*** (Camphor Laurel)	8	7	240 + 150	45.5	M	Stability suspect with poor branching structure. Predominantly epicormic sprouts arising from original stump. Large basal cavity with decay.	Previously cut to ground level	Fair with slight thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
30	***Cinnamomum camphora*** (Camphor Laurel)	8	7	150x5	45.5	M	Appears stable with fair branching structure.	Previously cut to ground level	Fair with slight thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
31	***Cinnamomum camphora*** (Camphor Laurel)	8	7	180	45.5	M	Appears stable with fair branching structure.	Previously cut to ground level	Fair with slight thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
32	***Cinnamomum camphora*** (Camphor Laurel)	8	7	200x2	45.5	M	Appears stable with fair branching structure.	Previously cut to ground level	Fair with slight thinning crown	No Evidence	Short 5-15 Years	6	**very low**	On-site
33	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	12	9	800	90	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
34	***Lophostemon confertus*** (Brushbox)	11	8	420 + 240	72	M	Appears stable with sound branching structure. Basal sprout.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
35	***Cinnamomum camphora*** (Camphor Laurel)	7	6	200x5	36	M	Stability suspect with poor branching structure. Predominantly epicormic sprouts arising from original stump. Large basal cavity with decay.	Previously cut to ground level	Fair	No Evidence	Short 5-15 Years	6	**very low**	On-site
36	***Cinnamomum camphora*** (Camphor Laurel)	7	6	200x4	36	M	Stability suspect with poor branching structure. Predominantly epicormic sprouts arising from original stump. Large basal cavity with decay.	Previously cut to ground level	Fair	No Evidence	Short 5-15 Years	6	**very low**	On-site
37	***Cinnamomum camphora*** (Camphor Laurel)	7	6	150 + 220	36	M	Stability suspect with poor branching structure. Predominantly epicormic sprouts arising from original stump.	Previously cut to ground level	Fair	No Evidence	Short 5-15 Years	6	**very low**	On-site
38	***Casuarina cunninghamiana*** (River Oak)	9	4	220	28	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
39	***Ficus rubiginosa*** (Port Jackson Fig)	18	25	1100 + 550 + 650 + 500 + 1000	375	M	Appears stable with fair branching structure.	Selectively thinned & deadwooded	Fair with thinning crown	No Evidence	Short 5-15 Years	1	**high**	On-site
40	***Callistemon viminalis*** (Weeping Bottlebrush)	7	7	250 + 150	34.3	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
41	***Citharexylum spinosum*** (Fiddlewood)	11	9	280x4	81	M	Appears stable with fair branching structure. Exhibits a large basal cavity.	No Evidence	Very Good	No Evidence	Short 5-15 Years	3	**moderate**	On-site
42	***Ficus obliqua*** (Small-leaf Fig)	13	15	500x2	135	OM	Appears stable with fair branching structure. Exhibits a low bark inclusion at 0.5 & 1.5 metres. Multiple moderate wounds due to sunscald on primary limbs & previous pruning. Exhibits moderate dieback with 20% deadwood.	Selectively pruned & deadwooded	Fair with thinning crown	Moderate vine infestation (Wisteria)	Transient (less than 5 years)	1	**moderate**	On-site
43	***Pittosporum undulatum*** (Native Daphne)	8	6	300	30	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Medium 15-40 Years	5	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
44	***Phoenix canariensis*** (Canary Island Palm)	6	7	700	28	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	No Evidence	Long - more than 40 years	4	**low**	On-site
45	***Cinnamomum camphora*** (Camphor Laurel)	8	6	270	30	SM	Appears stable with sound branching structure.	No Evidence	Fair with thinning crown	No Evidence	Medium 15-40 Years	6	**low**	On-site
46	***Callistemon viminalis*** (Weeping Bottlebrush)	7	7	250	21	OM	Appears stable with fair branching structure. Upper crown suppressed due to overshadowing. Exhibits moderate dieback with 10% deadwood	No Evidence	Fair with thinning crown	No Evidence	Short 5-15 Years	5	**low**	On-site
47	***Harpephyllum caffrum*** (Kaffir Plum)	14	14	400 + 500 + 600	168	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at ground level. Moderate wound at ground level due previous branch loss.	No Evidence	Fair with slight thinning crown	Moderate termite infestation	Short 5-15 Years	3	**moderate**	On-site
48	***Callistemon viminalis*** (Weeping Bottlebrush)	7	7	150x6	38.5	M	Appears stable with sound branching structure.	Crown lifted to 1.5 metres	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
49	***Callistemon viminalis*** (Weeping Bottlebrush)	7	7	150x6	38.5	M	Appears stable with sound branching structure.	Crown lifted to 1.5 metres	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
50	***Morus nigra*** (Mulberry)	6	7	180 + 100	35	SM	Appears stable with fair branching structure. Located immediately adjacent building.	Previously topped at 2.5 metres	Good	No Evidence	Short 5-15 Years	6	**very low**	On-site
51	***Callistemon viminalis*** (Weeping Bottlebrush)	7	7	150x6	38.5	M	Appears stable with sound branching structure. Located close to existing building	Crown lifted to 1.5 metres	Good	No Evidence	Short 5-15 Years	4	**low**	On-site
52	***Callistemon viminalis*** (Weeping Bottlebrush)	7	7	270 + 170	35	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at 1.1 metres. Causung damage/blockage to sewer.	Crown lifted to 2 metres	Good	No Evidence	Short 5-15 Years	4	**low**	On-site
53	***Callistemon viminalis*** (Weeping Bottlebrush)	7	7	250x2	35	M	Appears stable with fair branching structure.	Crown lifted to 2 metres	Good	Low vine infestation (Parthenocissus)	Short 5-15 Years	4	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
54	***Taxodium distichum*** (Swamp Cypress)	15	9	800	117	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	**high**	On-site
54a	***Thuja plicata*** (Western Red Cedar)	7	4	280	16	M	Appears stable with fair branching structure. Exhibits a prominent lean to the NE. Moderate bark inclusion at 1 metre. Some dieback in lower crown with 10% deadwood.	Crown lifted to 3 metres	Fair with thinning crown	No Evidence	Short 5-15 Years	4	**low**	On-site
54b	***Pittosporum undulatum*** (Native Daphne)	9	6	200	42	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Very Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
54c	***Jacaranda mimosifolia*** (Jacaranda)	8	7	180	42	SM	Appears stable with fair branching structure. Exhibits some basal epicormic sprouts. Prominent lean to the SW. Upper crown suppressed due to overshadowing.	No Evidence	Fair	No Evidence	Medium 15-40 Years	5	**low**	On-site
55	***Callitris rhomboidea*** (Port Jackson Pine)	9	4	200x2	30	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at 0.5 metres. Located close to existing building	Crown lifted to 1.5 metres	Good	No Evidence	Short 5-15 Years	4	**low**	On-site
56	***Ficus rubiginosa*** (Port Jackson Fig)	18	25	2000	400	M	Appears stable with sound branching structure. Exhibits multiple moderate bark inclusions at ground level. Moderate wound due to previous branch loss.	No Evidence	Good	No Evidence	Medium 15-40 Years	1	**high**	On-site
57	***Phoenix canariensis*** (Canary Island Palm)	5.5	5	600	17.5	SM	Appears stable with sound branching structure. Insufficient space for future growth.	No Evidence	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
58	***Phoenix canariensis*** (Canary Island Palm)	7	8	600	40	SM	Appears stable with sound branching structure. Insufficient space for future growth.	No Evidence	Very Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
59	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	11	7	350	63	SM	Appears stable with sound branching structure. Crown suppressed on south side due to crowding	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
60	***Cinnamomum camphora*** (Camphor Laurel)	16	12	450x2 + 350	156	M	Appears stable with fair branching structure. Crown suppressed on east side due to crowding. Multiple low bark inclusions at 1.2 metres.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
61	***Washingtonia filifera*** (Cotton Palm)	15	5	380	15	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	2	**high**	On-site
62	***Acer negundo*** (Box Elder)	12	14	350	147	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
63	***Cyathea cooperi*** (Tree fern)	7	4	180	8	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Short 5-15 Years	5	**low**	On-site
64	***Jacaranda mimosifolia*** (Jacaranda)	11	10	340	95	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	**high**	On-site
65	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	14	8	650	80	M	Appears stable with fair branching structure. Exhibits multiple low bark inclusions at 2 metres	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
66	***Olea africana*** (African Olive)	8	7	330	45.5	M	Appears stable with sound branching structure. Root plate lifting & displacing spoon drain	Lower limbs selectively pruned	Very Good	No Evidence	Medium 15-40 Years	6	**low**	On-site
67	***Jacaranda mimosifolia*** (Jacaranda)	6	6	220	24	I	Appears stable with sound branching structure. Exhibits a very prominent lean to the north. Upper crown suppressed due to overshadowing	No Evidence	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
68	***Araucaria columnaris*** (Cook's Pine)	14	5	380	62.5	M	Appears stable with sound branching structure.	Crown lifted to 2 metres	Very Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
69	***Acer negundo*** (Box Elder)	12	13	320 + 360	136.5	M	Appears stable with sound branching structure.	Lower limbs selectively pruned	Good	No Evidence	Medium 15-40 Years	6	**low**	On-site
70	***Callistemon salignus*** (Willow Bottlebrush)	5.5	4	140	10	SM	Appears stable with fair branching structure. Exhibits minor dieback with 5% deadwood. Upper crown suppressed due to overshadowing	No Evidence	Fair with slight thinning crown	No Evidence	Short 5-15 Years	5	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
71	***Eucalyptus microcorys*** (Tallowwood)	14	7	400	77	M	Appears stable with fair branching structure. Exhibits moderate bark inclusion at 4 metres	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
72	***Eucalyptus microcorys*** (Tallowwood)	15	11	430	132	M	Appears stable with sound branching structure. Exhibits one extended primary lateral limb to west. Suppressed on south side due to crowding.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	**high**	On-site
73	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	7	5	180	27.5	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
74	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	6	6	180	27	SM	Appears stable with fair branching structure. Exhibits a low bark inclusion at 1 metre.	No Evidence	Fair	No Evidence	Medium 15-40 Years	5	**low**	On-site
75	***Erythrina crista-galli*** (Cockscomb Coral)	4.5	5	230	12.5	SM	Appears stable with fair branching structure.	Lower limbs selectively pruned	Fair	No Evidence	Short 5-15 Years	6	**very low**	On-site
76	***Acer negundo*** (Box Elder)	7	7	220	38.5	I	Appears stable with sound branching structure. Crown suppressed on south side due to crowding	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
77	***Jacaranda mimosifolia*** (Jacaranda)	6	4	130 + 80	12	I	Appears stable with sound branching structure. Upper crown suppressed due to overshadowing. Insufficient space for future growth.	No Evidence	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
78	***Melaleuca bracteata*** (Melaleuca)	8	3	150	12	SM	Appears stable with sound branching structure.	No Evidence	Fair with thinning crown	No Evidence	Short 5-15 Years	5	**low**	On-site
79	***Jacaranda mimosifolia*** (Jacaranda)	7	4	140	16	I	Appears stable with sound branching structure.	Lower limbs selectively pruned	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
80	***Harpephyllum caffrum*** (Kaffir Plum)	7	8	320	40	SM	Appears stable with fair branching structure. Exhibits multiple moderate bark inclusions at 1.2 metres.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
81	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	5.5	4	250	14	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
81a	***Callistemon salignus*** (Willow Bottlebrush)	7	3	120x2	18	SM	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at ground level. Crown suppressed on SW side due to crowding.	No Evidence	Fair	Moderate English Ivy infestation	Short 5-15 Years	5	**low**	On-site
82	***Gleditsia triacanthos*** (Honey Locust)	5	6	150	18	I	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
83	***Ulmus parvifolia*** (Chinese Elm)	7	7	150	42	I	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
84	***Prunus sp.*** (Ornamental Peach)	4	7	150 + 120 + 80	17.5	M	Appears stable with fair branching structure. Exhibits a low bark inclusion at 0.5 metres.	No Evidence	Fair with slight thinning crown	No Evidence	Short 5-15 Years	6	**low**	On-site
85	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	11	7	420	56	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at 1.3 metres	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
86	***Grevillea robusta*** (Silky Oak)	7	4	160	28	I	Appears stable with sound branching structure. Located close to existing building - insufficient space for future growth.	No Evidence	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
87	***Fraxinus* 'Raywood'** (Claret Ash)	8	7	260	45.5	M	Appears stable with sound branching structure. Exhibits moderate dieback with 15% deadwood.	No Evidence	Fair with thinning crown	Suspected Ash white Fly infestation	Short 5-15 Years	4	**low**	On-site
88	***Jacaranda mimosifolia*** (Jacaranda)	8	9	300	36	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
88b	***Gleditsia triacanthos*** (Honey Locust)	7	7	180	35	I	Appears stable with sound branching structure.	Crown lifted to 1.5metres	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
89	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	9	5	350	37.5	M	Appears stable with sound branching structure. Located in narrow traffic island - uplifting & displacing kerb	No Evidence	Very Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
90	***Acer negundo*** (Box Elder)	7	8	280	44	M	Appears stable with sound branching structure.	No Evidence	Fair	No Evidence	Medium 15-40 Years	6	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
91	***Quercus palustris*** (Pin Oak)	16	16	700	224	M	Appears stable with sound branching structure. Exhibits a large primary lateral lim to south	Lower limbs selectively pruned	Very Good	Moderate Climbing Cactus infestation	Medium 15-40 Years	2	**high**	On-site
92	***Phoenix canariensis*** (Canary Island Palm)	6	3	600	12	SM	Appears stable with sound branching structure.Insufficient space for future growth.	Crown lifted to 2 metres	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
93	***Prunus sp.*** (Ornamental Peach)	4.5	6	230	18	M	Appears stable with sound branching structure. Crown supressed on NW side due to overshadowing.	No Evidence	Good	Low borer infestation	Short 5-15 Years	6	**low**	On-site
94	***Prunus cerasifera*** **'Nigra'** (Ornamental Plum)	5	5	160	20	M	Appears stable with fair branching structure. Exhibits multiple small wounds due to borer damage.	No Evidence	Good	Low borer infestation	Short 5-15 Years	5	**low**	On-site
95	***Prunus cerasifera*** **'Nigra'** (Ornamental Plum)	4	4	150	12	M	Appears stable with fair branching structure. Exhibits multiple small wounds due to borer damage.	No Evidence	Good	Low borer infestation	Short 5-15 Years	6	**low**	On-site
96	***Prunus cerasifera*** **'Nigra'** (Ornamental Plum)	5	5	160	20	M	Appears stable with fair branching structure. Exhibits multiple small wounds due to borer damage.	No Evidence	Good	Low borer infestation	Short 5-15 Years	5	**low**	On-site
97	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	11	11	550	88	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at 1.8 metres. Small wound at 2 metres with evidence of decay (superficial)	Lower limbs selectively pruned	Good	No Evidence	Long - more than 40 years	3	**high**	On-site
97a	***Pittosporum undulatum*** (Native Daphne)	7	6	250	36	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
97b	***Olea africana*** (African Olive)	7	6	160x2	36	SM	Appears stable with fair branching structure. Crown suppressed on south side due to overshadowing.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
97c	***Pittosporum undulatum*** (Native Daphne)	6	4	160	16	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Short 5-15 Years	5	**low**	On-site
98	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	14	12	900	144	M	Appears stable with fair branching structure. Exhibits multiple co-dominant primary limbs from 1.8 metres	Lower limbs selectively pruned	Good	No Evidence	Long - more than 40 years	3	**high**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
99	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	14	12	800	132	M	Appears stable with fair branching structure. Exhibits a multiple low bark inclusions at 2 metres.	Lower limbs selectively pruned	Good	No Evidence	Long - more than 40 years	3	**high**	On-site
100	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	13	11	820	88	M	Appears stable with fair branching structure. Exhibits a multiple low bark inclusions at 1.5 metres.	Lower limbs selectively pruned	Good	No Evidence	Long - more than 40 years	3	**high**	On-site
101	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	7	6	270	30	SM	Appears stable with sound branching structure. Crown suppressed on west side due to building	No Evidence	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
102	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	9	5	320	25	SM	Appears stable with sound branching structure. Crown suppressed on west side due to building	No Evidence	Fair	No Evidence	Medium 15-40 Years	5	**moderate**	On-site
103	***Callistemon viminalis*** (Weeping Bottlebrush)	7	3	120	18	SM	Stability suspect with sound branching structure. Located immediately adjacent building.	No Evidence	Fair	No Evidence	Short 5-15 Years	5	**low**	On-site
103a	***Murraya paniculata*** (Murraya)	7	6	240	30	M	Appears stable with sound branching structure.	Crown lifted to 2 metres	Very Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
104	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	10	6	400	36	M	Appears stable with fair branching structure. Exhibits a multiple low bark inclusions at 1.2 metres.	Lower limbs selectively pruned	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
105	***Ulmus glabra*** **'Lutescens'** (Golden Elm)	7	8	220	40	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
106	***Callistemon viminalis*** (Weeping Bottlebrush)	6	5	220	22.5	M	Appears stable with sound branching structure. Located close to existing building.	Lower limbs selectively pruned	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
107	***Callistemon viminalis*** (Weeping Bottlebrush)	7	6	200	30	M	Appears stable with sound branching structure. Exhibits a prominent lean to the NE. Suppressed on south side due to crowding	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
108	***Callistemon viminalis*** (Weeping Bottlebrush)	7	4	170	14	M	Appears stable with sound branching structure. Located close to existing building.	Lower limbs selectively pruned	Fair	No Evidence	Short 5-15 Years	5	**low**	On-site
108a	***Callistemon viminalis*** (Weeping Bottlebrush)	5	4	140 + 120	12	SM	Appears stable with fair branching structure. Exhibits A moderate bark inclusion at ground level	Crown lifted to 1.5 metres	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
109	***Ulmus glabra* 'Lutescens'** (Golden Elm)	7	8	300	40	M	Appears stable with fair branching structure. Exhibits a low bark inclusion at 1.2 metres	No Evidence	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
110	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	5	5	200	20	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
111	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	8	6	320	36	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
112	***Jacaranda mimosifolia*** (Jacaranda)	11	8	330	72	M	Appears stable with sound branching structure. Exhibits moderate wound in secondary limb to the north with suspected fracture.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
113	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	8	5	400	32.5	M	Appears stable with fair branching structure. Exhibits a moderate wound at ground level due to branch loss. Multiple moderate bark inclusions at 1 metre	No Evidence	Fair	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
114	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	7	7	450	35	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at 1.2 metres.	No Evidence	Fair	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
115	***Schinus areira*** (Peppercorn Tree)	9	8	310 + 230	72	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
115a	***Callistemon viminalis*** (Weeping Bottlebrush)	6	6	150 + 100x2	24	M	Appears stable with sound branching structure.	Crown lifted to 2 metres	Fair with thinning crown	No Evidence	Short 5-15 Years	5	**low**	On-site
115b	***Callistemon viminalis*** (Weeping Bottlebrush)	6	6	150x2	24	M	Appears stable with poor branching structure. Crown suppressed on south side due to branch loss (storm damage)	No Evidence	Fair with thinning crown	No Evidence	Transient (less than 5 years)	5	**very low**	On-site
115c	***Callistemon viminalis*** (Weeping Bottlebrush)	6	6	200	24	M	Appears stable with fair branching structure. Crown suppressed on west side due to crowding.	No Evidence	Fair with thinning crown	No Evidence	Short 5-15 Years	5	**low**	On-site
115d	***Callistemon viminalis*** (Weeping Bottlebrush)	6	8	180x2	32	M	Appears stable with poor branching structure. Exhibits a severe bark inclusion at GL with fracture.	No Evidence	Fair with thinning crown	No Evidence	Short 5-15 Years	5	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
115e	***Callistemon viminalis*** (Weeping Bottlebrush)	5	6	150x2	24	SM	Appears stable with fair branching structure. Crown suppressed on east side due to overshadowing. Very prominent lean to the west.	No Evidence	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
116	***Liquidambar styraciflua*** (Liquidamber)	12	9	370	90	SM	Appears stable with sound branching structure. Suppressed on north-east side due to crowding. Exhibits slight thinning in upper crown.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
116a	***Pittosporum undulatum*** (Native Daphne)	6	6	200	27	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
117	***Eucalyptus microcorys*** (Tallowwood)	16	14	700	196	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	**high**	On-site
118	***Araucaria columnaris*** (Cook's Pine)	8	3	200	22.5	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
119	***Liquidambar styraciflua*** (Liquidamber)	7	5	200	35	I	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
120	***Hakea salicifolia*** (Willow leaved Hakea)	5.5	4	220	18	M	Appears stable with sound branching structure.	No Evidence	Fair with thinning crown	Moderate borer infestation	Short 5-15 Years	5	**low**	On-site
121	***Acer negundo*** (Box Elder)	5	4	180	14	SM	Appears stable with sound branching structure. Exhibits a small wound at 0.5 metres due to mechanical injury.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
122	***Jacaranda mimosifolia*** (Jacaranda)	12	11	250x2 + 300	99	M	Appears stable with fair branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	3	**moderate**	On-site
123	***Pinus radiata*** (Monterey Pine)	13	12	670	138	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	3	**moderate**	On-site
124	***Acmena sp.*** (Lillypilly)	4.5	6	200	21	I	Appears stable with sound branching structure. Suppressed on north side due to crowding.	No Evidence	Fair	Moderate vine infestation	Short 5-15 Years	5	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
125	***Liquidambar styraciflua*** (Liquidamber)	10	9	360	76.5	SM	Appears stable with sound branching structure.	Crown-lifted to 1.5 metres	Very Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
126	***Photinia x fraseri* 'Robusta'** (Chinese Hawthorn)	5	6	170 + 150x3	21	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
127	***Morus nigra*** (Mulberry)	6	10	300	45	M	Appears stable with poor branching structure. Exhibits a large wound at 0.5 to 1.3 metres due to sunscald. Severe bark inclusion at 0.5 metres with fracture.	No Evidence	Fair	No Evidence	Short 5-15 Years	6	**very low**	On-site
128	***Harpephyllum caffrum*** (Kaffir Plum)	8	7	470	42	M	Appears stable with poor branching structure. Exhibits multiple high bark inclusions at 1 metre.	No Evidence	Fair	No Evidence	Short 5-15 Years	4	**low**	On-site
129	***Callistemon viminalis*** (Weeping Bottlebrush)	8	7	430	45.5	M	Appears stable with fair branching structure. Multiple moderate bark inclusions at 0.5 metres	Selectively pruned	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
130	***Callistemon viminalis*** (Weeping Bottlebrush)	4	6	230	12	M	Appears stable with sound branching structure. Exhibits a low bark inclusion at 0.8 metres	Crown-lifted to 1.5 metres	Very Good	No Evidence	Medium 15-40 Years	6	**low**	On-site
131	***Plumeria acutifolia*** (Frangipani)	4	4	200	10	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the south-east	Crown-lifted to 1.5 metres	Dead	No Evidence	Nil	6	**very low**	On-site
131a	***Callistemon viminalis*** (Weeping Bottlebrush)	5	4	170	20	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
132	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	8	5	300	30	SM	Appears stable with sound branching structure. Exhibits a small wound at 1.5 metres.	No Evidence	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
133	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	9	6	440	42	M	Appears stable with fair branching structure. Exhibits a low bark inclusion at 1.3 metres. Suppressed on western side due to crowding.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
134	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	10	6	420	42	M	Appears stable with sound branching structure. Exhibits a low bark inclusion at 1.2 metres. Suppressed on eastern side due to crowding.	Lower limbs selectively pruned	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
135	***Phoenix canariensis*** (Canary Island Palm)	6	6	600	24	SM	Appears stable with sound branching structure. Located immediately adjacent building.	No Evidence	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
136	***Corymbia maculata*** (Spotted Gum)	18	10	350	150	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	3	**high**	On-site
137	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	8	12	550	78	M	Appears stable with fair branching structure.	Selectively pruned to clear powerlines	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
138	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	10	8	400+500	56	M	Appears stable with fair branching structure.	Selectively pruned to clear powerlines	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
139	***Corymbia maculata*** (Spotted Gum)	10	4	200	32	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
140	***Corymbia maculata*** (Spotted Gum)	16	5	300	70	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	3	**high**	On-site
141	***Corymbia maculata*** (Spotted Gum)	18	6	300	96	SM	Appears stable with poor branching structure. Twin trunked at 4 metres with adaptive growth due internal stress.	No Evidence	Good	No Evidence	Short 5-15 Years	3	**low**	On-site
142	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	10	7	360	56	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
143	***Cupressocyparis x leylandii*** (Leyland Cypress) (Row of 11 trees)	6 to 8	3 to 4	250	20	I	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	6	**low**	On-site
143a	***Ulmus glabra*** **'Lutescens'** (Golden Elm)	7	6	100x2	36	SM	Appears stable with fair branching structure. Crown suppressed on east side due to crowding.	Crown lifted to 1.5 metres	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
144	***Jacaranda mimosifolia*** (Jacaranda)	6	5	180 + 120	25	I	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at ground level.	No Evidence	Good	No Evidence	Long - more than 40 years	5	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
145	***Tibouchina granulosa*** (Lasiandra)	6	6	200	24	M	Appears stable with sound branching structure. Crown suppressed on west side due to building	Crown lifted to 2 metres	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
145a	***Prunus cerasifera* 'Nigra'** (Ornamental Plum)	7	6	160	30	M	Appears stable with sound branching structure. Exhibits some basal epicormic sprouts.	Crown lifted to 3 metres	Fair with thinning crown	Moderate borer infestation	Short 5-15 Years	5	**low**	On-site
146	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	11	8	450	72	M	Appears stable with fair branching structure. Exhibits multiple moderate bark inclusions at 1.5-2 metres. Roots lifting path.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
146a	***Callistemon citrinus*** (Bottlebrush)	5.5	5	100x10	17.5	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Very Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
147	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	8	4	200	24	SM	Appears stable with sound branching structure. Located close to existing retaining wall.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
148	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	6	6	200	24	SM	Appears stable with sound branching structure. Located close to existing retaining wall.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
149	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	6	4	200	16	SM	Appears stable with sound branching structure. Located close to existing retaining wall.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
150	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	8	5	200x2	30	SM	Appears stable with sound branching structure. Located close to existing retaining wall.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
151	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	7	3	200	15	SM	Appears stable with sound branching structure. Located close to existing retaining wall.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
152	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	8	7	430	45.5	M	Appears stable with fair branching structure. Exhibits moderate bark inclusions at 1.2 metres	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
153	***Jacaranda mimosifolia*** (Jacaranda)	7	6	200	12	I	Appears stable with sound branching structure. Crown suppressed on east side due to crowding. Close to existing road & path.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
154	***Jacaranda mimosifolia*** (Jacaranda)	7	6	220	12	I	Appears stable with sound branching structure. Crown suppressed on west side due to crowding. Close to existing road & path.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
155	***Archontophoenix alexandrae*** (Alexandra Palm)	8	4	230	12	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
155a	***Archontophoenix alexandrae*** (Alexandra Palm)	5	3	170	6	I	Appears stable with sound branching structure.	No Evidence	Fair	No Evidence	Medium 15-40 Years	5	**low**	On-site
155b	***Archontophoenix alexandrae*** (Alexandra Palm)	6	3	230	6	I	Appears stable with sound branching structure.	No Evidence	Fair	No Evidence	Medium 15-40 Years	5	**low**	On-site
156	***Gleditsia triacanthos*** (Honey Locust)	7	8	230	40	SM	Appears stable with sound branching structure. Close to existing path & wall.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
156a	***Gleditsia triacanthos*** (Honey Locust)	4	6	130	18	I	Appears stable with fair branching structure. Crown suppressed on SW side due to overshadowing.	Crown lifted to 1.5 metres	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
157	***Photinia x fraseri* 'Robusta'** (Chinese Hawthorn)	5	5	250	17.5	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
157a	***Archontophoenix alexandrae*** (Alexandra Palm)	7	4	200 + 160	20	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
158	***Archontophoenix alexandrae*** (Alexandra Palm)	7	3	180	9	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
159	***Gleditsia triacanthos*** (Honey Locust)	5	5	120	15	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
160	***Gleditsia triacanthos*** (Honey Locust)	8	9	200	54	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
161	***Jacaranda mimosifolia*** (Jacaranda)	10	8	290	64	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
162	***Sapium sebiferum*** (Chinese Tallow tree)	7	6	220	30	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
163	***Sapium sebiferum*** (Chinese Tallow tree)	6	6	220	24	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
164	***Eucalyptus microcorys*** (Tallowwood)	17	10	460	150	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at 4 metres & multiple severe inclusions at 7 metres (primary limbs)	No Evidence	Good	No Evidence	Short 5-15 Years	3	**moderate**	On-site
165	***Eucalyptus microcorys*** (Tallowwood)	18	9	530	144	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	3	**high**	On-site
166	***Ulmus glabra*** **'Lutescens'** (Golden Elm)	6	6	220+160	30	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	6	**low**	On-site
167	***Ulmus glabra*** **'Lutescens'** (Golden Elm)	5	5	200	20	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	6	**low**	On-site
167a	***Ulmus glabra*** **'Lutescens'** (Golden Elm)	6	7	250	28	OM	Stability suspect with poor branching structure. Exhibits a severe bark inclusion at GL. Crown suppressed on east side due to previous branch loss. Moderate multiple wounds due to borer damage. 70% deadwood	No Evidence	Poor with spare crown	No Evidence	Transient (less than 5 years)	5	**very low**	On-site
168	***Ulmus glabra*** **'Lutescens'** (Golden Elm)	4	4	200	12	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	6	**low**	On-site
169	***Ulmus glabra*** **'Lutescens'** (Golden Elm)	4	4	200	12	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	6	**low**	On-site
170	***Fraxinus sp.*** (Ash)	9	6	250x2	36	M	Appears stable with fair branching structure. Exhibits a high bark inclusion at ground level.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
171	***Ulmus glabra*** **'Lutescens'** (Golden Elm)	7	9	300	45	M	Appears stable with fair branching structure. Exhibits a high bark inclusion at 0.5 metres.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
171a	***Callistemon viminalis*** (Weeping Bottlebrush)	7	5	150 + 130	25	SM	Appears stable with fair branching structure. Crown suppressed on east side due to building. Low bark inclusion at GL	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
171b	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	6	3	160	9	SM	Appears stable with fair branching structure. Exhibits substantial dieback with 50% deadwood.	No Evidence	Poor with spare crown	No Evidence	Transient (less than 5 years)	5	**very low**	On-site
171c	***Callistemon viminalis*** (Weeping Bottlebrush)	5	4	150 + 100	10	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
172	***Archontophoenix alexandrae*** (Alexandra Palm)	9	5	240	20	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
173	***Syragus romanzoffianum*** (Cocos Palm)	7	4	200	12	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
174	***Syragus romanzoffianum*** (Cocos Palm)	7	4	160	12	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
175	***Ficus microcarpa var. hillii*** (Hill's Weeping Fig)	13	20	700	230	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	2	**high**	On-site
176	***Acmena smithii*** (Lillypilly)	7	8	270x2	40	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at 0.5 metres. Small wound at 2 metres due to branch loss	No Evidence	Fair	No Evidence	Medium 15-40 Years	5	**low**	On-site
177	***Ulmus glabra* 'Lutescens'** (Golden Elm)	5	5	180	17.5	SM	Appears stable with fair branching structure. Exhibits multiple epicormic sprouts from previous pruning points	Previously lopped at 1.5 metres	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
178	***Ulmus glabra* 'Lutescens'** (Golden Elm)	5	5	180	17.5	SM	Appears stable with fair branching structure. Exhibits multiple epicormic sprouts from previous pruning points	Previously lopped at 1.5 metres	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
179	***Ulmus glabra* 'Lutescens'** (Golden Elm)	5	5	180	17.5	SM	Appears stable with fair branching structure. Exhibits multiple epicormic sprouts from previous pruning points	Previously lopped at 1.5 metres	Good	No Evidence	Short 5-15 Years	5	**low**	On-site

APPENDIX 4 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
180	***Ulmus glabra* 'Lutescens'** (Golden Elm)	6	10	300	50	M	Appears stable with sound branching structure.	No Evidence	Very Good	Low borer infestation	Medium 15-40 Years	4	**moderate**	On-site
181	***Sapium sebiferum*** (Chinese Tallow tree)	5.5	7	280	28	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
181a	***Syragus romanzoffianum*** (Cocos Palm)	9	5	250	15	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
181b	***Syragus romanzoffianum*** (Cocos Palm)	11	5	250	20	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
182	***Gleditsia triacanthos*** (Honey Locust)	7	7	270	38.5	SM	Appears stable with poor branching structure. Exhibits a high bark inclusion at 0.7 metres	Crown-lifted to 1.5 metres	Good	No Evidence	Short 5-15 Years	4	**low**	On-site
183	***Gleditsia triacanthos*** (Honey Locust)	7	7	270	38.5	SM	Appears stable with sound branching structure.	Crown-lifted to 1.5 metres	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
184	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	7	5	330	27.5	M	Appears stable with sound branching structure. Exhibits a very prominent lean to the north-west	No Evidence	Good	No Evidence	Long - more than 40 years	5	**low**	On-site
185	***Gleditsia triacanthos*** (Honey Locust)	5	6	270	21	SM	Appears stable with sound branching structure.	Crown-lifted to 1.5 metres	Good	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
186	***Callistemon viminalis*** (Weeping Bottlebrush)	5	5	120x4	17.5	M	Appears stable with sound branching structure.	Crown-lifted to 1.5 metres	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
187	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	8	7	350	35	M	Appears stable with sound branching structure. Exhibits a prominent lean to the south. Located close to existing dwelling (offset 0.5 metres)	No Evidence	Good	No Evidence	Long - more than 40 years	4	**low**	On-site
187a	***Syragus romanzoffianum*** (Cocos Palm)	9	5	250	15	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
187b	***Syragus romanzoffianum*** (Cocos Palm)	13	4	250	28	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site

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Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
187c	***Syragus romanzoffianum*** (Cocos Palm)	8	5	250	10	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	6	**low**	On-site
188	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	9	8	320	40	M	Appears stable with fair branching structure. Exhibits a low bark inclusion at 2 metres.	Lower limbs selectively pruned	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
189	***Plumeria acutifolia*** (Frangipani)	3.5	5	170	10	SM	Appears stable with sound branching structure.	Crown-lifted to 1.5 metres	Very Good	No Evidence	Long - more than 40 years	5	**low**	On-site
190	***Eucalyptus nicholii*** (New England Peppermint)	15	12	600	144	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	3	**moderate**	On-site
191	***Phoenix canariensis*** (Canary Island Palm)	8	8	600	48	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
192	***Corymbia maculata*** (Spotted Gum)	11	7	280	42	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
193	***Tibouchina urvilleana*** (Lasiandra)	6	8	200	36	M	Appears stable with sound branching structure. Suppressed on north -side due to crowding	Crown-lifted to 1.5 metres	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
194	***Tibouchina urvilleana*** (Lasiandra)	6	8	200	36	M	Appears stable with sound branching structure. Suppressed on east & west side due crowding	Crown-lifted to 1.5 metres	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
195	***Tibouchina urvilleana*** (Lasiandra)	6	8	200	36	M	Appears stable with sound branching structure. Suppressed on south side due to crowding.	Crown-lifted to 1.5 metres	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site
196	***Butia capitata*** (Jelly Palm)	5	4	350	14	SM	Appears stable with sound branching structure.	No Evidence	Very Good	Moderate Fishbone Fern infestation	Long - more than 40 years	4	**moderate**	On-site
197	***Brachychiton acerifolius*** (Illawarra Flame Tree)	11	8	360	72	M	Appears stable with sound branching structure. Upper crown suppressed due to overshadowing.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
198	***Jacaranda mimosifolia*** (Jacaranda)	15	16	600 + 250	160	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	3	**high**	On-site

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Id. No.	Species	Height	Spread	DBH (mm)	Live Crown Size (m^2)	Maturity Class	Condition	Previous Pruning	Health		Remaining Life Expectancy	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
199	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	10	6	350x2	48	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at ground level	Previously lopped at 5 metres	Fair	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
200	***Phoenix canariensis*** (Canary Island Palm)	7	8	600	24	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
201	***Phoenix canariensis*** (Canary Island Palm)	6	7	600	28	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Very Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
202	***Callistemon viminalis*** (Weeping Bottlebrush)	6	6	170x2	24	M	Appears stable with sound branching structure.	Crown-lifted to 2metres	Good	No Evidence	Medium 15-40 Years	5	**moderate**	On-site
203	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	9	6	380 + 350	42	M	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at 1 metre.	No Evidence	Fair	No Evidence	Medium 15-40 Years	4	**moderate**	On-site
204	***Cinnamomum camphora*** (Camphor Laurel)	8	5	180	30	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	6	**very low**	On-site
205	***Cinnamomum camphora*** (Camphor Laurel)	8	6	180	36	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	6	**very low**	On-site
206	***Cinnamomum camphora*** (Camphor Laurel)	9	6	300	42	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	6	**very low**	On-site
207	***Olea africana*** (African Olive)	8	8	200	48	M	Appears stable with sound branching structure. Suppressed on west side due to crowding	No Evidence	Good	No Evidence	Long - more than 40 years	6	**very low**	On-site
208	***Washingtonia robusta*** (Washington Palm)	8	2	250	2	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
209	***Phoenix canariensis*** (Canary Island Palm)	7	8	600	24	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site

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									Vigour	Pest & Disease				
210	***Ficus rubiginosa*** (Port Jackson Fig)	13	14	600x4	112	OM	Appears stable with fair branching structure. Multiple moderate wounds due to previous pruning with evidence of decay in old branch stubs & epicormic sprouts arising from old wound sites.	Previously lopped at 6 metres	Fair with thinning crown	No Evidence	Short 5-15 Years	1	**moderate**	On-site
211	***Harpephyllum caffrum*** (Kaffir Plum)	11	12	600	108	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	3	**moderate**	On-site
212	***Phoenix canariensis*** (Canary Island Palm)	4	5	600	15	I	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	6	**low**	On-site
213	***Phoenix canariensis*** (Canary Island Palm)	5	8	600	24	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
214	***Phoenix canariensis*** (Canary Island Palm)	8	7	600	28	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	**moderate**	On-site
215	***Jacaranda mimosifolia*** (Jacaranda)	6	8	200x3	32	SM	Appears stable with fair branching structure. Exhibits multiple moderate bark inclusions at ground level	No Evidence	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
216	***Jacaranda mimosifolia*** (Jacaranda)	6	7	200	21	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	No Evidence	Long - more than 40 years	5	**moderate**	On-site
217	***Jacaranda mimosifolia*** (Jacaranda)	7	4	150	24	I	Appears stable with sound branching structure. Exhibits a very prominent lean to the north.	Lower limbs selectively pruned	Good	No Evidence	Short 5-15 Years	5	**low**	On-site
218	***Callistemon viminalis*** (Weeping Bottlebrush)	7	6	150x2	30	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	**low**	On-site

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
1	***Corymbia maculata*** (Spotted Gum)	P	6.7	Proposed to be retained
2	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.3	Proposed to be retained
3	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.8	Proposed to be retained
4	***Melaleuca sp.*** (Paperbark)	M	3.6	Proposed to be retained
5	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	5.8	Proposed to be retained
6	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.2	Proposed to be retained
7	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.6	Proposed to be retained
8	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.8	Proposed to be retained
9	***Cinnamomum camphora*** (Camphor Laurel)	M	7.2	Proposed to be retained
10	***Cinnamomum camphora*** (Camphor Laurel)	M	3.8	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
11	***Cinnamomum camphora*** (Camphor Laurel)	M	7.2	Proposed to be retained
12	***Cinnamomum camphora*** (Camphor Laurel)	M	7.0	Proposed to be retained
13	***Cinnamomum camphora*** (Camphor Laurel)	M	6.5	Proposed to be retained
14	***Cinnamomum camphora*** (Camphor Laurel)	M	5.7	Proposed to be retained
15	***Cinnamomum camphora*** (Camphor Laurel)	M	7.2	Proposed to be retained
16	***Cinnamomum camphora*** (Camphor Laurel)	M	3.6	Proposed to be retained
16a	***Cinnamomum camphora*** (Camphor Laurel)	M	5.4	Proposed to be retained
16b	***Ligustrum lucidum*** (Large leaf Privet)	M	2.7	To be removed (Noxious Weed)
16c	***Cinnamomum camphora*** (Camphor Laurel)	M	5.4	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
16d	***Cinnamomum camphora*** (Camphor Laurel)	M	7.2	Proposed to be retained
16e	***Cinnamomum camphora*** (Camphor Laurel)	M	3.6	Proposed to be retained
16f	***Cinnamomum camphora*** (Camphor Laurel)	M	3.8	Proposed to be retained
16g	***Cinnamomum camphora*** (Camphor Laurel)	M	6.0	Proposed to be retained
17	***Syragus romanzoffianum*** (Cocos Palm)	G	2.2	Proposed works will necessitate removal
20	***Corymbia citriodora*** (Lemon-scented Gum)	P	7.4	Proposed to be retained
21	***Corymbia citriodora*** (Lemon-scented Gum)	P	8.4	Proposed to be retained
23	***Corymbia maculata*** (Spotted Gum)	P	6.9	Proposed works will necessitate removal
24	***Archontophoenix alexandrae*** (Alexandra Palm)	G	1.5	Proposed works will necessitate removal

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
25	***Melaleuca sp.*** (Paperbark)	M	2.6	Proposed works will necessitate removal
26	***Pittosporum undulatum*** (Native Daphne)	M	2.3	Proposed works will necessitate removal
27	***Cinnamomum camphora*** (Camphor Laurel)	M	6.0	Proposed to be retained
28	***Cinnamomum camphora*** (Camphor Laurel)	M	6.0	Proposed to be retained
29	***Cinnamomum camphora*** (Camphor Laurel)	M	3.4	Proposed to be retained
30	***Cinnamomum camphora*** (Camphor Laurel)	M	4.5	Proposed to be retained
31	***Cinnamomum camphora*** (Camphor Laurel)	M	2.2	Proposed to be retained
32	***Cinnamomum camphora*** (Camphor Laurel)	M	3.6	Proposed to be retained
33	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	6.0	Proposed works will necessitate removal
34	***Lophostemon confertus*** (Brushbox)	M	5.9	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
35	***Cinnamomum camphora*** (Camphor Laurel)	M	3.4	Proposed works will necessitate removal
36	***Cinnamomum camphora*** (Camphor Laurel)	M	3.4	Proposed works will necessitate removal
37	***Cinnamomum camphora*** (Camphor Laurel)	M	3.4	Proposed works will necessitate removal
38	***Casuarina cunninghamiana*** (River Oak)	M	3.3	Proposed to be retained
39	***Ficus rubiginosa*** (Port Jackson Fig)	M	12.5	Proposed to be retained
40	***Callistemon viminalis*** (Weeping Bottlebrush)	M	4.5	Proposed works will necessitate removal
41	***Citharexylum spinosum*** (Fiddlewood)	M	6.7	Proposed to be retained
42	***Ficus obliqua*** (Small-leaf Fig)	M	9.0	Proposed works will necessitate removal
43	***Pittosporum undulatum*** (Native Daphne)	M	3.6	Proposed works will necessitate removal

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
44	***Phoenix canariensis*** (Canary Island Palm)	G	5.6	Proposed to be retained
45	***Cinnamomum camphora*** (Camphor Laurel)	M	3.2	Proposed works will necessitate removal
46	***Callistemon viminalis*** (Weeping Bottlebrush)	M	3.8	Proposed to be retained
47	***Harpephyllum caffrum*** (Kaffir Plum)	M	7.0	Proposed to be retained
48	***Callistemon viminalis*** (Weeping Bottlebrush)	M	4.8	Proposed works will necessitate removal
49	***Callistemon viminalis*** (Weeping Bottlebrush)	M	4.8	Proposed works will necessitate removal
50	***Morus nigra*** (Mulberry)	M	3.2	Proposed works will necessitate removal
51	***Callistemon viminalis*** (Weeping Bottlebrush)	M	4.8	Proposed works will necessitate removal
52	***Callistemon viminalis*** (Weeping Bottlebrush)	M	4.0	Proposed works will necessitate removal
53	***Callistemon viminalis*** (Weeping Bottlebrush)	M	4.5	Proposed works will necessitate removal

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
54	***Taxodium distichum*** (Swamp Cypress)	M	6.0	Proposed to be retained
54a	***Thuja plicata*** (Western Red Cedar)	M	3.4	Proposed works will necessitate removal
54b	***Pittosporum undulatum*** (Native Daphne)	M	3.0	Proposed works will necessitate removal
54c	***Jacaranda mimosifolia*** (Jacaranda)	M	2.7	Proposed works will necessitate removal
55	***Callitris rhomboidea*** (Port Jackson Pine)	M	3.6	Proposed works will necessitate removal
56	***Ficus rubiginosa*** (Port Jackson Fig)	M	12.5	Proposed to be retained
57	***Phoenix canariensis*** (Canary Island Palm)	G	4.8	Proposed works will necessitate removal
58	***Phoenix canariensis*** (Canary Island Palm)	G	4.8	Proposed works will necessitate removal
59	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.2	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
60	***Cinnamomum camphora*** (Camphor Laurel)	M	9.0	Proposed works will necessitate removal
61	***Washingtonia filifera*** (Cotton Palm)	G	3.4	Proposed to be retained
62	***Acer negundo*** (Box Elder)	M	5.3	Proposed works will necessitate removal
63	***Cyathea cooperi*** (Tree fern)	G	2.7	Proposed works will necessitate removal
64	***Jacaranda mimosifolia*** (Jacaranda)	M	5.1	Proposed to be retained
65	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	7.8	Proposed to be retained
66	***Olea africana*** (African Olive)	M	4.0	Proposed works will necessitate removal
67	***Jacaranda mimosifolia*** (Jacaranda)	M	3.3	Proposed works will necessitate removal
68	***Araucaria columnaris*** (Cook's Pine)	M	5.7	Proposed works will necessitate removal
69	***Acer negundo*** (Box Elder)	M	7.7	Proposed to be retained
70	***Callistemon salignus*** (Willow Bottlebrush)	M	2.1	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
71	***Eucalyptus microcorys*** (Tallowwood)	P	6.0	Proposed to be retained
72	***Eucalyptus microcorys*** (Tallowwood)	P	6.5	Proposed to be retained
73	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	2.7	Proposed to be retained
74	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	2.7	Proposed to be retained
75	***Erythrina crista-galli*** (Cockscomb Coral)	M	3.5	Proposed works will necessitate removal
76	***Acer negundo*** (Box Elder)	M	3.3	Proposed works will necessitate removal
77	***Jacaranda mimosifolia*** (Jacaranda)	M	2.4	Proposed to be retained
78	***Melaleuca bracteata*** (Melaleuca)	M	2.3	Proposed works will necessitate removal
79	***Jacaranda mimosifolia*** (Jacaranda)	M	2.1	Proposed works will necessitate removal
80	***Harpephyllum caffrum*** (Kaffir Plum)	M	4.8	Proposed works will necessitate removal
81	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.8	Proposed works will necessitate removal

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
81a	***Callistemon salignus*** (Willow Bottlebrush)	M	2.2	Proposed works will necessitate removal
82	***Gleditsia triacanthos*** (Honey Locust)	M	2.3	Proposed works will necessitate removal
83	***Ulmus parvifolia*** (Chinese Elm)	M	3.5	Proposed works will necessitate removal
84	***Prunus sp.*** (Ornamental Peach)	M	3.2	Proposed works will necessitate removal
85	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	5.0	Proposed works will necessitate removal
86	***Grevillea robusta*** (Silky Oak)	M	2.4	Proposed works will necessitate removal
87	***Fraxinus*** **'Raywood'** (Claret Ash)	M	3.9	Proposed works will necessitate removal
88	***Jacaranda mimosifolia*** (Jacaranda)	M	4.5	Proposed works will necessitate removal
88b	***Gleditsia triacanthos*** (Honey Locust)	M	3.5	Proposed works will necessitate removal
89	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.2	Proposed works will necessitate removal
90	***Acer negundo*** (Box Elder)	M	4.2	Proposed works will necessitate removal

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
91	***Quercus palustris*** (Pin Oak)	M	8.4	Proposed works will necessitate removal
92	***Phoenix canariensis*** (Canary Island Palm)	G	4.8	Proposed works will necessitate removal
93	***Prunus sp.*** (Ornamental Peach)	M	3.5	Proposed works will necessitate removal
94	***Prunus cerasifera*** **'Nigra'** (Ornamental Plum)	M	2.4	Proposed works will necessitate removal
95	***Prunus cerasifera*** **'Nigra'** (Ornamental Plum)	M	2.3	Proposed works will necessitate removal
96	***Prunus cerasifera*** **'Nigra'** (Ornamental Plum)	M	2.4	Proposed works will necessitate removal
97	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	6.6	Proposed to be retained
97a	***Pittosporum undulatum*** (Native Daphne)	M	3.8	Proposed works will necessitate removal
97b	***Olea africana*** (African Olive)	M	3.6	Proposed works will necessitate removal
97c	***Pittosporum undulatum*** (Native Daphne)	M	2.4	Proposed works will necessitate removal
98	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	7.0	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
99	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	7.0	Proposed to be retained
100	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	7.0	Proposed to be retained
101	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.2	Proposed works will necessitate removal
102	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.8	Proposed works will necessitate removal
103	***Callistemon viminalis*** (Weeping Bottlebrush)	M	1.8	Proposed works will necessitate removal
103a	***Murraya paniculata*** (Murraya)	M	3.6	Proposed works will necessitate removal
104	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.8	Proposed works will necessitate removal
105	***Ulmus glabra*** **'Lutescens'** (Golden Elm)	M	3.3	Proposed works will necessitate removal
106	***Callistemon viminalis*** (Weeping Bottlebrush)	M	2.6	Proposed works will necessitate removal
107	***Callistemon viminalis*** (Weeping Bottlebrush)	M	3.0	Proposed works will necessitate removal
108	***Callistemon viminalis*** (Weeping Bottlebrush)	M	2.6	Proposed works will necessitate removal
108a	***Callistemon viminalis*** (Weeping Bottlebrush)	M	3.0	Proposed works will necessitate removal

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
109	***Ulmus glabra* 'Lutescens'** (Golden Elm)	M	4.5	Proposed works will necessitate removal
110	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.0	Proposed works will necessitate removal
111	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.8	Proposed works will necessitate removal
112	***Jacaranda mimosifolia*** (Jacaranda)	M	5.0	Proposed works will necessitate removal
113	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.8	Proposed works will necessitate removal
114	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	5.4	Proposed works will necessitate removal
115	***Schinus areira*** (Peppercorn Tree)	M	4.9	Proposed works will necessitate removal
115a	***Callistemon viminalis*** (Weeping Bottlebrush)	M	3.8	Proposed works will necessitate removal
115b	***Callistemon viminalis*** (Weeping Bottlebrush)	M	3.4	Proposed works will necessitate removal
115c	***Callistemon viminalis*** (Weeping Bottlebrush)	M	3.0	Proposed works will necessitate removal
115d	***Callistemon viminalis*** (Weeping Bottlebrush)	M	4.1	Proposed works will necessitate removal

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
115e	***Callistemon viminalis*** (Weeping Bottlebrush)	M	3.4	Proposed works will necessitate removal
116	***Liquidambar styraciflua*** (Liquidamber)	M	5.6	Proposed works will necessitate removal
116a	***Pittosporum undulatum*** (Native Daphne)	M	3.0	Proposed works will necessitate removal
117	***Eucalyptus microcorys*** (Tallowwood)	P	8.4	Proposed works will necessitate removal
118	***Araucaria columnaris*** (Cook's Pine)	M	3.0	Proposed works will necessitate removal
119	***Liquidambar styraciflua*** (Liquidamber)	M	3.0	Proposed works will necessitate removal
120	***Hakea salicifolia*** (Willow leaved Hakea)	M	3.3	Proposed works will necessitate removal
121	***Acer negundo*** (Box Elder)	M	2.7	Proposed works will necessitate removal
122	***Jacaranda mimosifolia*** (Jacaranda)	M	7.2	Proposed works will necessitate removal
123	***Pinus radiata*** (Monterey Pine)	M	8.0	Proposed works will necessitate removal
124	***Acmena sp.*** (Lillypilly)	M	3.0	Proposed works will necessitate removal

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
125	***Liquidambar styraciflua*** (Liquidamber)	M	5.4	Proposed works will necessitate removal
126	***Photinia x fraseri*** **'Robusta'** (Chinese Hawthorn)	M	4.4	Proposed works will necessitate removal
127	***Morus nigra*** (Mulberry)	M	4.5	Proposed works will necessitate removal
128	***Harpephyllum caffrum*** (Kaffir Plum)	M	5.6	Proposed works will necessitate removal
129	***Callistemon viminalis*** (Weeping Bottlebrush)	M	5.2	Proposed works will necessitate removal
130	***Callistemon viminalis*** (Weeping Bottlebrush)	M	3.5	Proposed works will necessitate removal
131	***Plumeria acutifolia*** (Frangipani)	M	3.0	Proposed works will necessitate removal
131a	***Callistemon viminalis*** (Weeping Bottlebrush)	M	2.6	Proposed works will necessitate removal
132	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.6	Proposed works will necessitate removal
133	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	5.3	Proposed works will necessitate removal
134	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	5.0	Proposed works will necessitate removal

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
135	***Phoenix canariensis*** (Canary Island Palm)	G	4.8	Proposed works will necessitate removal
136	***Corymbia maculata*** (Spotted Gum)	M	5.3	Proposed to be retained
137	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	6.6	Proposed works will necessitate removal
138	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	6.0	Proposed to be retained
139	***Corymbia maculata*** (Spotted Gum)	M	3.0	Proposed to be retained
140	***Corymbia maculata*** (Spotted Gum)	M	4.5	Proposed to be retained
141	***Corymbia maculata*** (Spotted Gum)	M	4.5	Proposed to be retained
142	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.3	Proposed works will necessitate removal
143	***Cupressocyparis x leylandii*** (Leyland Cypress) (Row of 11 trees)	M	3.8	Proposed works will necessitate removal
143a	***Ulmus glabra*** **'Lutescens'** (Golden Elm)	M	2.3	Proposed works will necessitate removal
144	***Jacaranda mimosifolia*** (Jacaranda)	M	3.4	Proposed works will necessitate removal

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
145	***Tibouchina granulosa*** (Lasiandra)	M	3.0	Proposed to be retained
145a	***Prunus cerasifera*** **'Nigra'** (Ornamental Plum)	M	2.4	Proposed works will necessitate removal
146	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	5.4	Proposed to be retained
146a	***Callistemon citrinus*** (Bottlebrush)	M	3.6	Proposed to be retained
147	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.0	Proposed to be retained
148	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.0	Proposed to be retained
149	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.0	Proposed to be retained
150	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.5	Proposed to be retained
151	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	3.0	Proposed to be retained
152	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	5.2	Proposed works will necessitate removal
153	***Jacaranda mimosifolia*** (Jacaranda)	M	3.0	Proposed works will necessitate removal

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
154	***Jacaranda mimosifolia*** (Jacaranda)	M	3.3	Proposed works will necessitate removal
155	***Archontophoenix alexandrae*** (Alexandra Palm)	M	3.5	Proposed to be retained
155a	***Archontophoenix alexandrae*** (Alexandra Palm)	G	2.0	Proposed to be retained
155b	***Archontophoenix alexandrae*** (Alexandra Palm)	G	2.8	Proposed to be retained
156	***Gleditsia triacanthos*** (Honey Locust)	M	3.5	Proposed works will necessitate removal
156a	***Gleditsia triacanthos*** (Honey Locust)	M	3.0	Proposed works will necessitate removal
157	***Photinia x fraseri* 'Robusta'** (Chinese Hawthorn)	M	3.8	Proposed works will necessitate removal
157a	***Archontophoenix alexandrae*** (Alexandra Palm)	G	3.4	Proposed to be retained
158	***Archontophoenix alexandrae*** (Alexandra Palm)	M	2.7	Proposed to be retained
159	***Gleditsia triacanthos*** (Honey Locust)	M	2.5	Proposed to be retained
160	***Gleditsia triacanthos*** (Honey Locust)	M	4.5	Proposed to be retained
161	***Jacaranda mimosifolia*** (Jacaranda)	M	4.4	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
162	***Sapium sebiferum*** (Chinese Tallow tree)	M	3.3	Proposed to be retained
163	***Sapium sebiferum*** (Chinese Tallow tree)	M	3.3	Proposed to be retained
164	***Eucalyptus microcorys*** (Tallowwood)	P	5.5	Proposed to be retained
165	***Eucalyptus microcorys*** (Tallowwood)	P	6.4	Proposed to be retained
166	***Ulmus glabra* 'Lutescens'** (Golden Elm)	M	4.3	Proposed to be retained
167	***Ulmus glabra* 'Lutescens'** (Golden Elm)	M	3.0	Proposed to be retained
167a	***Ulmus glabra* 'Lutescens'** (Golden Elm)	M	3.8	Proposed to be retained
168	***Ulmus glabra* 'Lutescens'** (Golden Elm)	M	3.0	Proposed to be retained
169	***Ulmus glabra* 'Lutescens'** (Golden Elm)	M	3.0	Proposed to be retained
170	***Fraxinus sp.*** (Ash)	M	4.5	Proposed to be retained
171	***Ulmus glabra* 'Lutescens'** (Golden Elm)	M	4.5	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
171a	***Callistemon viminalis*** (Weeping Bottlebrush)	M	2.6	Proposed to be retained
171b	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	2.4	Proposed to be retained
171c	***Callistemon viminalis*** (Weeping Bottlebrush)	M	2.4	Proposed to be retained
172	***Archontophoenix alexandrae*** (Alexandra Palm)	G	2.4	Proposed to be retained
173	***Syragus romanzoffianum*** (Cocos Palm)	G	3.0	Proposed to be retained
174	***Syragus romanzoffianum*** (Cocos Palm)	G	2.4	Proposed to be retained
175	***Ficus microcarpa var. hillii*** (Hill's Weeping Fig)	M	10.5	Proposed to be retained
176	***Acmena smithii*** (Lillypilly)	M	4.9	Proposed to be retained
177	***Ulmus glabra* 'Lutescens'** (Golden Elm)	M	2.7	Proposed to be retained
178	***Ulmus glabra* 'Lutescens'** (Golden Elm)	M	2.7	Proposed to be retained
179	***Ulmus glabra* 'Lutescens'** (Golden Elm)	M	2.7	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
180	***Ulmus glabra* 'Lutescens'** (Golden Elm)	M	4.5	Proposed to be retained
181	***Sapium sebiferum*** (Chinese Tallow tree)	M	4.2	Proposed to be retained
181a	***Syragus romanzoffianum*** (Cocos Palm)	G	3.0	Proposed to be retained
181b	***Syragus romanzoffianum*** (Cocos Palm)	G	3.0	Proposed to be retained
182	***Gleditsia triacanthos*** (Honey Locust)	M	4.1	Proposed to be retained
183	***Gleditsia triacanthos*** (Honey Locust)	M	3.3	Proposed to be retained
184	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.0	Proposed to be retained
185	***Gleditsia triacanthos*** (Honey Locust)	M	2.7	Proposed to be retained
186	***Callistemon viminalis*** (Weeping Bottlebrush)	M	3.6	Proposed to be retained
187	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.2	Proposed to be retained
187a	***Syragus romanzoffianum*** (Cocos Palm)	G	3.0	Proposed to be retained
187b	***Syragus romanzoffianum*** (Cocos Palm)	G	3.0	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

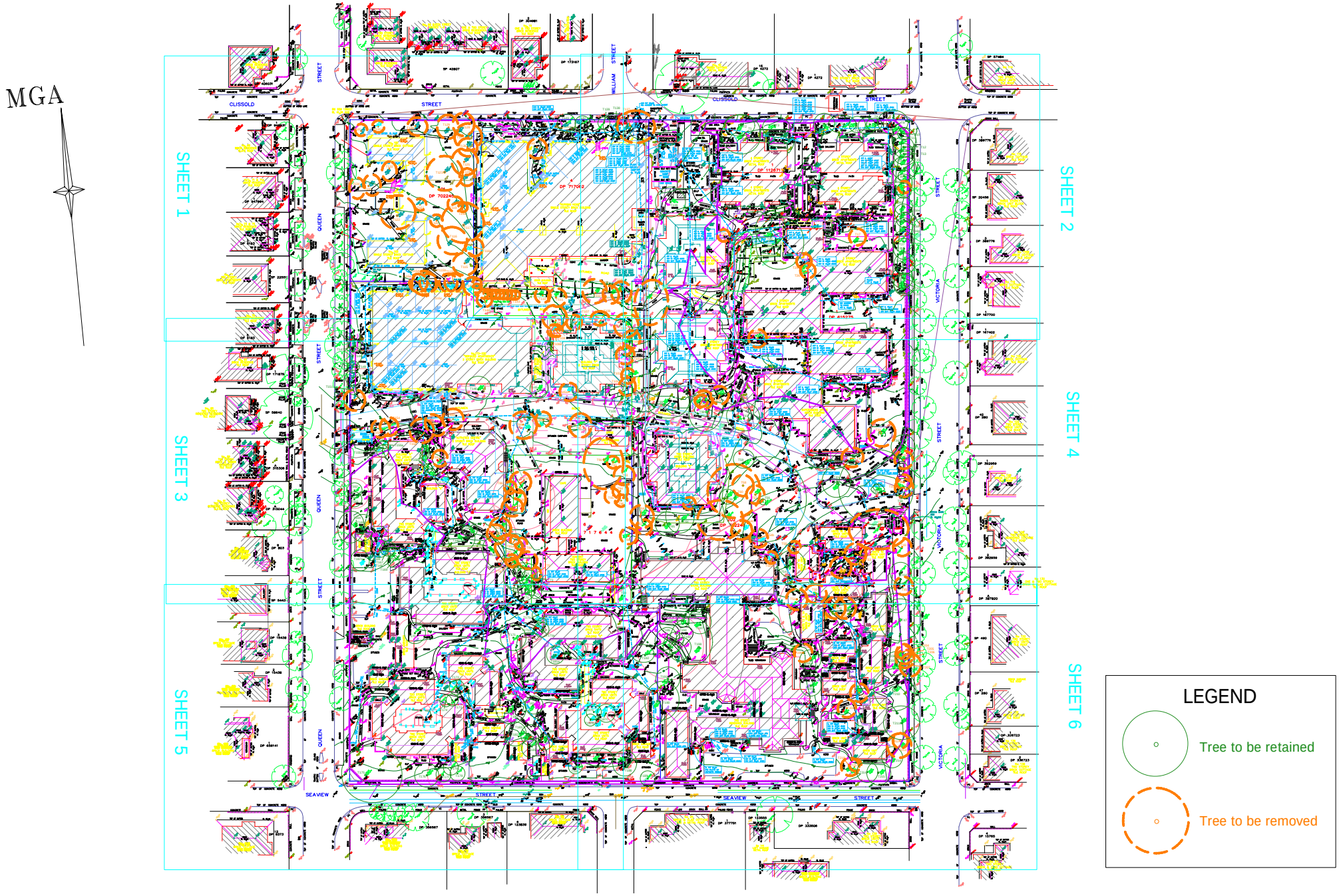
Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
187c	***Syragus romanzoffianum*** (Cocos Palm)	G	3.0	Proposed to be retained
188	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	4.8	Proposed to be retained
189	***Plumeria acutifolia*** (Frangipani)	M	2.6	Proposed to be retained
190	***Eucalyptus nicholii*** (New England Peppermint)	P	7.2	Proposed to be retained
191	***Phoenix canariensis*** (Canary Island Palm)	G	4.8	Proposed to be retained
192	***Corymbia maculata*** (Spotted Gum)	P	4.2	Proposed to be retained
193	***Tibouchina urvilleana*** (Lasiandra)	M	3.0	Proposed to be retained
194	***Tibouchina urvilleana*** (Lasiandra)	M	3.0	Proposed to be retained
195	***Tibouchina urvilleana*** (Lasiandra)	M	3.0	Proposed to be retained
196	***Butia capitata*** (Jelly Palm)	G	3.2	Proposed to be retained
197	***Brachychiton acerifolius*** (Illawarra Flame Tree)	M	5.4	Proposed to be retained
198	***Jacaranda mimosifolia*** (Jacaranda)	M	9.8	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
199	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	6.3	Proposed works will necessitate removal
200	***Phoenix canariensis*** (Canary Island Palm)	G	4.8	Proposed to be retained
201	***Phoenix canariensis*** (Canary Island Palm)	M	4.8	Proposed to be retained
202	***Callistemon viminalis*** (Weeping Bottlebrush)	M	3.1	Proposed works will necessitate removal
203	***Melaleuca quinquenervia*** (Broad-leaved Paperbark)	M	6.6	Proposed works will necessitate removal
204	***Cinnamomum camphora*** (Camphor Laurel)	M	2.7	Proposed works will necessitate removal
205	***Cinnamomum camphora*** (Camphor Laurel)	M	2.7	Proposed works will necessitate removal
206	***Cinnamomum camphora*** (Camphor Laurel)	M	3.6	Proposed works will necessitate removal
207	***Olea africana*** (African Olive)	M	3.0	Proposed works will necessitate removal
208	***Washingtonia robusta*** (Washington Palm)	G	2.3	Proposed to be retained
209	***Phoenix canariensis*** (Canary Island Palm)	G	4.8	Proposed to be retained

APPENDIX 5 - IMPACT ASSESSMENT SCHEDULE

Id. No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Implications of Master Plan Development
210	***Ficus rubiginosa*** (Port Jackson Fig)	M	8.0	Proposed to be retained
211	***Harpephyllum caffrum*** (Kaffir Plum)	M	7.2	Proposed to be retained
212	***Phoenix canariensis*** (Canary Island Palm)	G	4.8	Proposed works will necessitate removal
213	***Phoenix canariensis*** (Canary Island Palm)	G	4.8	Proposed works will necessitate removal
214	***Phoenix canariensis*** (Canary Island Palm)	G	4.8	Proposed to be retained
215	***Jacaranda mimosifolia*** (Jacaranda)	M	5.4	Proposed to be retained
216	***Jacaranda mimosifolia*** (Jacaranda)	M	3.0	Proposed to be retained
217	***Jacaranda mimosifolia*** (Jacaranda)	M	2.3	Proposed works will necessitate removal
218	***Callistemon viminalis*** (Weeping Bottlebrush)	M	3.4	Proposed works will necessitate removal



APPENDIX 6
TREE LOCATION PLAN

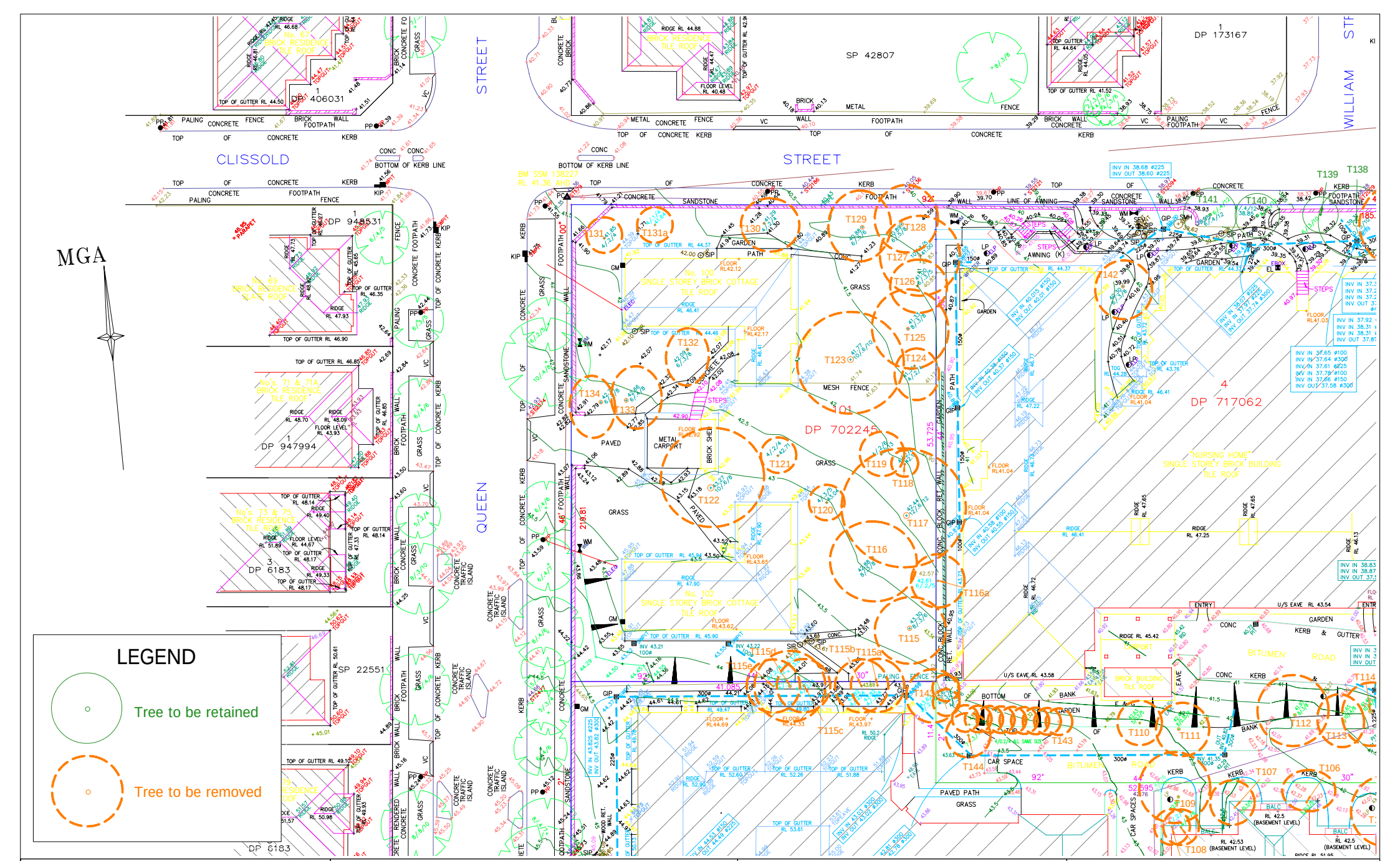
CARDINAL FREEMAN VILLAGE
137 Victoria Street, ASHFIELD

Earthscape Horticultural Services
Arboricultural and Horticultural Consultants
PO Box 364
BEROWRA NSW 2081
Ph: 02 9456 4787
Fax: 02 9456 5757 e: earthscape@iinet.net.au

Based on the Survey Drawing
prepared by Lockley Land Title Solutions
Dwg Ref No. 29838DT-D
Dated 18/02/2010

DWG No. TLP 4265 KEY PLAN

DATE: 04/03/2010



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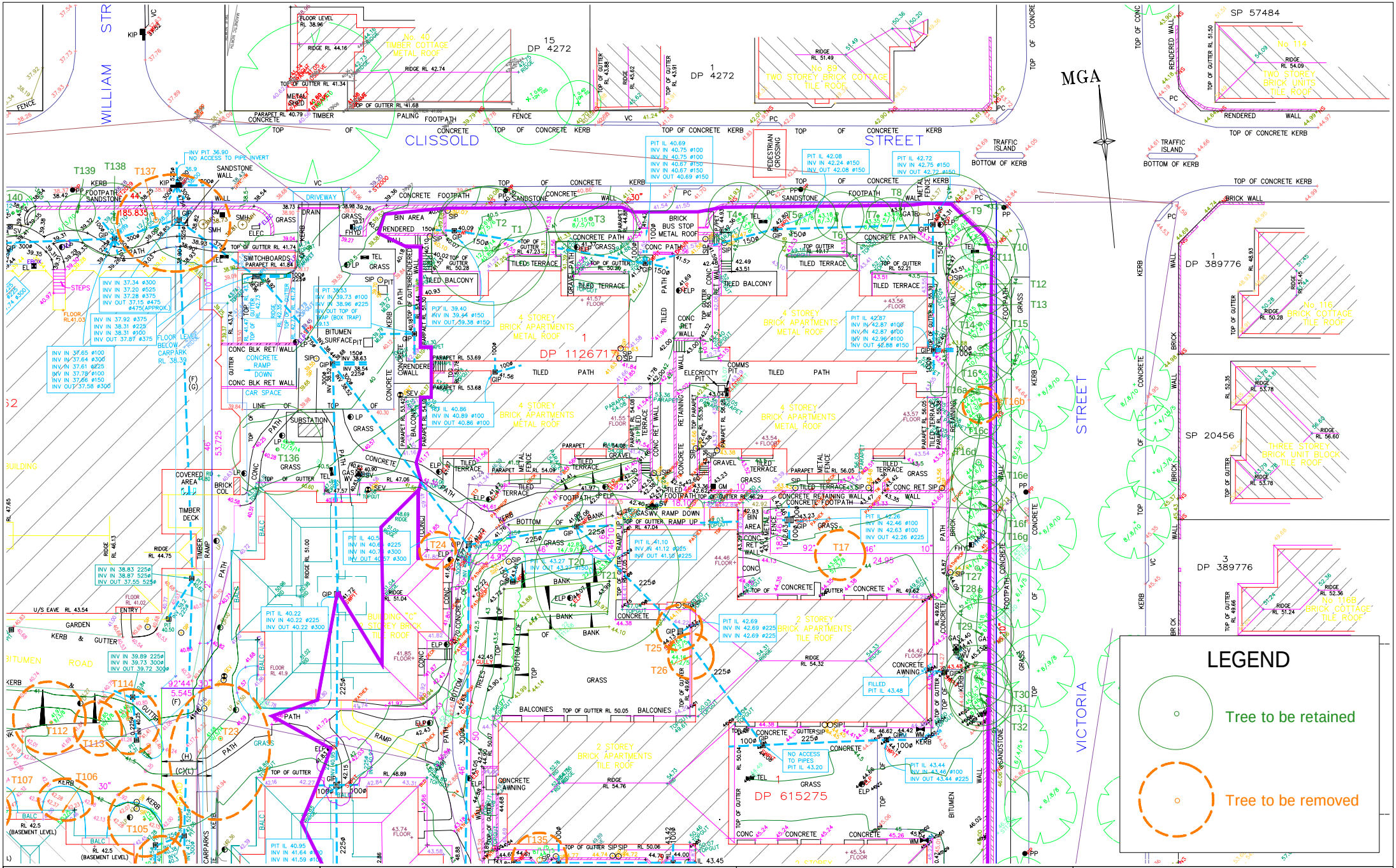

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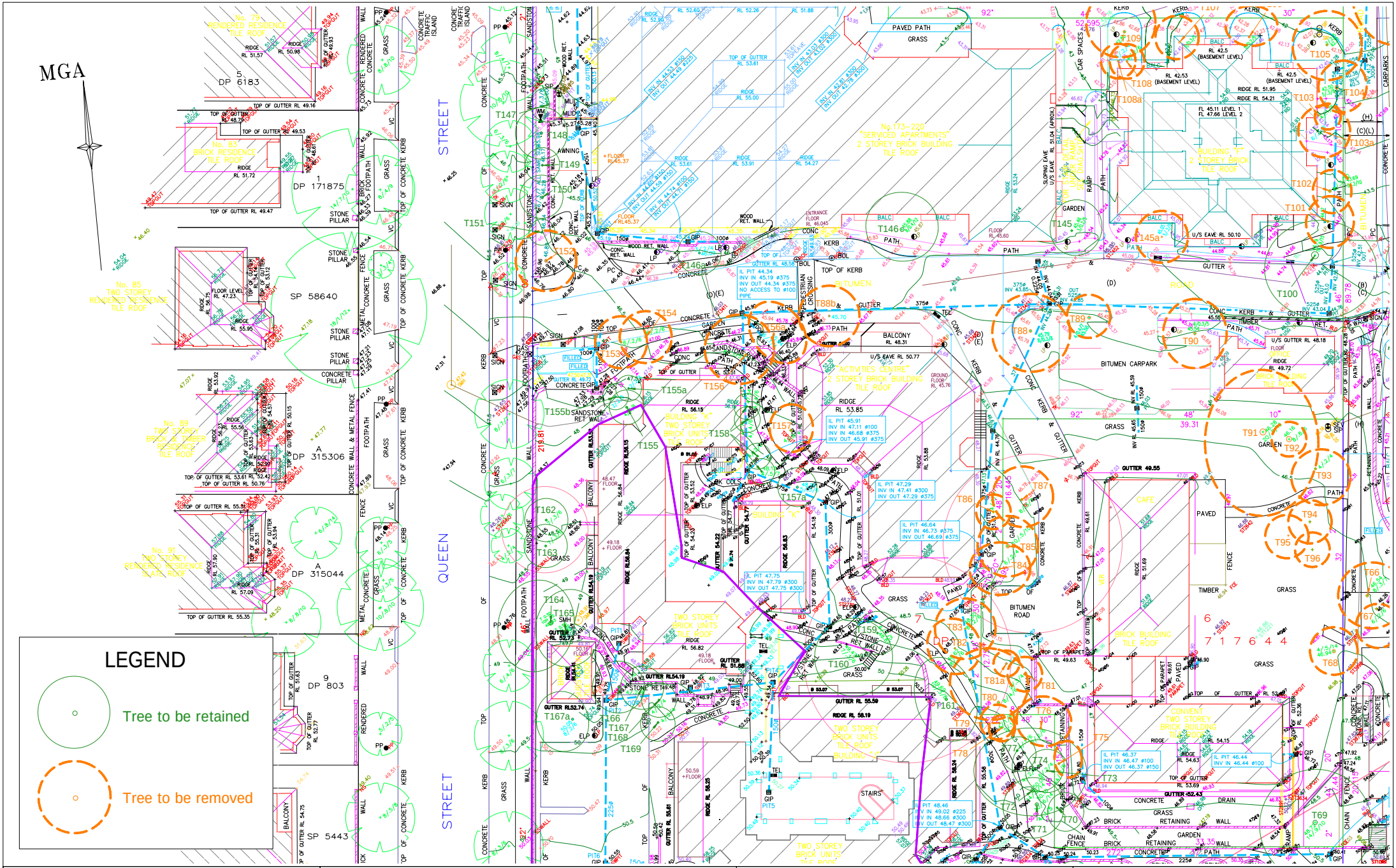
DATE: 04/03/2010



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DWG No. TLP 4265 SHEET 3

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